

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

### 4.7 HAZARDS AND HAZARDOUS MATERIALS

This section presents the environmental setting and impact analysis for hazards and hazardous materials in the vicinity of the Revised Project components and the alternatives.

#### 4.7.1 Consideration of Scoping Comments

The public expressed concerns regarding hazards and hazardous materials during public scoping for this Subsequent EIR. Table 4.7-1 summarizes the scoping comments received regarding hazards and hazardous materials and identifies how and/or where these comments are addressed.

**Table 4.7-1 Scoping Comments Related to Hazards and Hazardous Materials Impacts**

Summary of Comment	Location Comment is Addressed
Concerns regarding environmental health risk/general safety.	This Subsequent EIR hazards and hazardous materials analysis considers the risk of releasing hazardous materials into the environment as well as the risk of shock hazards to humans. Refer to Section 4.7.8: Revised Project Impact Analysis, Impacts Hazards-b, Hazards-c, and Hazards-i; and Impact Air-d in Section 4.3: Air Quality and Greenhouse Gas Emissions.
Power lines are dangerous.	This Subsequent EIR hazards and hazardous materials analysis considers the risk of shock hazards. Refer to Section 4.7.8: Revised Project Impact Analysis, Impact Hazards-i.
Concerns about exposure to chemicals used during project construction and to contaminated soils unearthed during construction.	This Subsequent EIR hazards and hazardous materials analysis considers the risk of releasing hazardous materials into the environment. Refer to Section 4.7.8: Revised Project Impact Analysis, Impact Hazards-b.
The project is hazardous to aircraft.	The 2013 RTRP EIR evaluated whether the project would result in a safety hazard within the vicinity of a public airport, public use airport, or private airstrip. The Initial Study Checklist (Appendix B) determined that the Revised Project would not result in any new or increased hazards from air traffic.
Concerns about falling power lines and towers.	Impacts from falling power lines and towers are discussed in Section 4.7.8: Revised Project Impact Analysis, Impact Hazards-i.
Danger to the lines from fires leading to further damage to the surrounding area.	The danger of fires in proximity to the transmission lines is addressed through fire prevention measures and response plans described in this Subsequent EIR. Refer to section 4.7.4 Environmental Setting (Emergency Services) and section 4.7.5 Regulatory Setting (California Public Resources Code).

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### 4.7.2 Definitions

#### Hazards

Hazards include physical hazards that could affect public health and safety. Existing physical hazards include proximity to airports, wildland fire hazards, and objects that could induce current and voltage, and result in shock hazards.

#### Hazardous Material

Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if misused or released. Hazardous materials occur in various forms and can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazardous materials are used in industry, agriculture, medicine, research, and consumer goods. Hazardous materials can include explosives, flammable and combustible substances, poisons, radioactive materials, pesticides, petroleum products, and other materials defined as hazardous under the Resource Conservation and Recovery Act (RCRA) in 40 CFR 261. These substances are most often released as a result of motor vehicle or equipment accidents, or by chemical accidents during industrial use. Hazardous substances have the potential to leach into soils, surface water, and groundwater if they are not properly contained.

### 4.7.3 Approach to Data Collection

An environmental database search was conducted in 2015 to identify existing hazardous sites within 0.25 mile<sup>1</sup> of the Revised Project segments that overlap with the Proposed Project alignment (EDR, 2015). The search drew from federal and state environmental data tracking sites that provide site records of hazardous material handling or releases to the environment. Information provided in the database search was reviewed. In addition, the following federal and state databases were reviewed in March 2018 to identify if any new hazardous sites were added:

- USEPA National Priorities List (USEPA, 2018)
- California Department of Toxic Substances Control (DTSC) sites (Envirostor and Hazardous Waste and Substances Site List) (DTSC, 2018b) (DTSC, 2018a)
- Leaking Underground Storage Tank, Department of Defense, and Site Cleanup Program sites (GeoTracker database) (SWRCB, 2018).

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<sup>1</sup> Analysis under CEQA requires assessment of whether a project would be located on a hazardous materials site, as defined under the California Government Code § 65962.5. A 0.25-mile buffer is a typical distance used to identify the presence of contaminants in off-site groundwater that may have the potential to migrate to a given site. Off-site properties with groundwater contamination further than 0.25 mile away are assessed to not have the potential to impact a given site. Off-site properties with only soil contamination are generally dismissed from further consideration because soil contamination remains in place.

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Updated regional and local policies, plans, and documents for the County of Riverside and the Cities of Jurupa Valley and Riverside were reviewed to identify goals, objectives, and policies relevant to hazards, hazardous materials, and emergency planning and response for the Revised Project area. Existing and proposed schools within 0.25 mile of the Revised Project were identified and considered in the analysis.

### 4.7.4 Environmental Setting

#### Emergency Services

Two agencies are responsible for providing emergency medical, fire protection, and hazardous materials services throughout the Revised Project work areas:

- County of Riverside Emergency Management Department
- City of Riverside Office of Emergency Management

The County of Riverside Emergency Management Department is a single, comprehensive, all-hazard emergency management service provider that protects and supports residents before, during, and after an emergency. The Board of Supervisors approved the creation of the Emergency Management Department on May 12, 2015, which combines Riverside County Fire Office of Emergency Services, Public Health Emergency Preparedness and Response, and Riverside County Emergency Medical Services Agency (County of Riverside, 2017). The Emergency Preparedness Division develops and maintains plans and conducts exercises. The Operations Division supports the Emergency Management Department to respond and support all-risk/all-hazard events. The Emergency Medical Services Division provides regulatory oversight of prehospital care by ambulance providers, first responder agencies, and hospitals.

The City of Riverside's Office of Emergency Management, also known as the City of Riverside Fire Department's Emergency Services Division, administers a comprehensive all-hazards community-based emergency management program. The Office of Emergency Management plans and prepares for emergencies, incidents, and events that will have an impact on the City of Riverside. The Office of Emergency Management maintains a robust preparedness effort through their Community Emergency Response Team training, and resident and city employee public education events. The Office of Emergency Management also coordinates the response and recovery efforts through the activation of their Emergency Operation Center (City of Riverside, n.d.). Van Buren Boulevard is the only designated emergency evacuation route within the vicinity of the Revised Project (City of Riverside, 2012b).

#### Existing Hazardous Materials

There are no existing hazardous sites within 0.25 mile of the Revised Project components (USEPA, 2018; DTSC, 2018a; DTSC, 2018b; SWRCB, 2018).

#### Existing Gas Pipelines

Natural gas transmission lines of metallic or unknown material exist along Limonite Avenue and cross the underground transmission alignment of the Revised Project (SoCal Gas, 2017). Table

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4.11-2 in Section 4.11: Public Services and Utilities, lists known ~~underground~~-utilities that cross or run parallel to the Revised Project.

### Shock Hazards

Alternating current overhead and underground electric transmission lines produce electric and magnetic fields (i.e., electromagnetic fields or EMFs) that have the potential to create induced voltages and currents in nearby conductive objects. Nearby conductive objects could include buildings, roofs, fences, railroads, communication lines, pipelines, farm equipment, and vehicles. Induced voltages and currents can result in a number of potential hazards<sup>2</sup> including electrical shock. Regulations and industry standards for safe construction and operation of transmission lines minimize the potential for the public to be exposed to hazards resulting from induced current and voltage (Oregon Department of Energy, 2013).

An electric current can flow when there is an induced charge and a path is presented from one point to another. Electrical currents require a complete path, or circuit, from one voltage source to another. The potential for induced current and voltage impacts is typically avoided when the conductive objects are grounded or connected to the earth. Multiple grounding points provide redundant protection. Unlike fences or buildings, mobile objects such as vehicles and farm machinery cannot be grounded permanently (Oregon Department of Energy, 2013).

A person receiving an electrical shock must have at least two contact points to a voltage source, one of which might be the earth. An electric shock is received if a body completes an electrical circuit by touching an energized object and an electrical ground or touching both an energized conductor and another conductor at a different voltage. Without two contact points on the body for current to enter and exit, respectively, there is no hazard of shock. For example, birds can safely rest on transmission lines without getting shocked because they make contact at only one point. Avian electrocution occurs if a bird completes an electric circuit by simultaneously touching two separately energized parts, or an energized part and a grounded part of the electrical equipment. Unlike birds, people are usually standing on the ground when they contact a conductive object. The person touching a conductive object is actually making contact between two points (the energized object and the ground) (Kuphaldt, 2016).

Even if a long linear parallel conductive object is grounded at two distant points, a hazardous situation can occur if a person touches the object somewhere between the two points, creating a different grounding point to complete the circuit (Oregon Department of Energy, 2013). Perpendicular linear structures have significantly less potential for induced currents and voltages. Based on historical information and industry standards, a 230-kV transmission line would need to be significantly parallel to an existing linear metallic pipeline, or a long wire

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<sup>2</sup> Other potential hazards include: (1) ignition of flammable materials from induced current and voltage; and (2) the potential for interference and/or corrosion of nearby infrastructure (e.g., pipelines) resulting from alternating current interference, which is discussed in Section 4.11: Public Services and Utilities.

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fence, for induced currents and voltages to be of concern (Interstate Natural Gas Association of America Foundation, 2015).

### **Ground Faults**

An accidental connection between an electrical system conductor and the earth is called a ground fault. Ground faults may be caused by many things, including dirt buildup on conductor insulators (creating a dirty-water path for current from the conductor to the pole and to the ground when it rains), ground water infiltration in buried lines, or fallen tree branches. A tree branch touching an energized overhead line would provide an accidental path for current to flow through the tree. A ground fault could result in induced current and voltage with potentially hazardous impacts.

### **Electric Arcs**

Electric arcs may form across small gaps between conductive surfaces. Arcing also can occur if a conductive object is raised such that it is too close to a transmission, power, or distribution line. Even excessive smoke can potentially provide a pathway to ground. More commonly, lightning strikes on overhead lines can create an ionized air path from the line to the tower during fault conditions. These arcs can have secondary effects, such as ignition of flammable materials in the vicinity of the arc. It is theoretically possible for a spark discharge from the induced voltage on a large vehicle to ignite gasoline vapor during refueling; however, the likelihood of ignition is very low. Vehicles should not be refueled under energized lines unless specific precautions are taken to ground the vehicle and the fueling source.

### **Schools**

Louis Vandermolen Elementary School is located approximately 0.01 mile (50 feet) from the underground transmission segment. Jurupa Valley High School is situated approximately 0.08 mile (420 feet) from the Etiwanda Marshalling Yard.

## 4.7.5 Regulatory Setting

### **Federal**

#### **United States Environmental Protection Agency**

USEPA was established in 1970 in response to the growing public demand for cleaner water, air, and land. USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress.

#### ***Federal Toxic Substances Control Act and Resource Conservation and Recovery Act***

The Federal Toxic Substances Control Act and RCRA of 1976 established a program administered by USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous wastes.

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### *Comprehensive Environmental Response, Compensation, and Liability Act*

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law (USC Title 42, Chapter 103) provides broad federal authority to respond directly to releases, or threatened releases, of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enables the revision of the National Contingency Plan. The National Contingency Plan (40 CFR Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The National Contingency Plan also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

### *Clean Water Act*

USEPA oversees and enforces the Oil Pollution Prevention regulation (40 CFR Part 112) as part of the Clean Water Act. The regulations describe the requirements for facilities to prepare, amend, and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans. SPCC Plans are designed to complement existing laws, regulations, rules, standards, policies, and procedures pertaining to safety standards, fire prevention, and pollution prevention rules. The purpose of a SPCC Plan is to have a comprehensive spill prevention program that minimizes the potential for discharges from specific sources, such as oil-containing transformers. The SPCC Plan must address all relevant spill prevention, control, and countermeasures required to be implemented at the facility.

A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, the total aboveground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the “Navigable Waters” of the U.S.

Other federal regulations relevant to hazardous materials and environmental contamination overseen by USEPA include designation of hazardous substances under the Federal Water Pollution Control Act (40 CFR, Chapter I, Subchapter D Parts 116 and 117) and determination of quantities of designated hazardous substances that must be reported (40 CFR Part 116), or that may be discharged into waters of the U.S. (40 CFR Part 117).

### **Occupational Safety and Health Administration**

The Occupational Safety and Health Administration (OSHA) regulations contained in 29 CFR contain employee safety provisions that are designed to minimize the hazards for employees who may encounter hazardous materials in the workplace. The regulations require training, operating procedures, and protective equipment to be used at work sites where hazardous materials could be encountered. The purpose of 29 CFR Part 1910, Hazard Communication Standard, is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees.

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Information is to be communicated through comprehensive hazard communication programs, which are required to include container labeling and other forms of warning, Material Safety Data Sheets, and employee training.

OSHA regulations require employers to take precautions when cranes and boomed vehicles are operated near overhead lines. Any overhead line shall be considered energized unless the owner of the line or the electric utility company indicates that it has been de-energized and it is visibly grounded (29 CFR 1926.550 [a][15][vi]).

### **Pipeline and Hazardous Materials Safety Administration**

The Pipeline and Hazardous Materials Safety Administration develops and enforces national policies for the safe, reliable, and environmentally sound operation of U.S. pipelines and transport of hazardous materials. 49 CFR 192.467 (External corrosion control: Electrical isolation, part [f]) states: “Where a pipeline is located in close proximity to electrical transmission tower footings, ground cables or counterpoise, or in other areas where fault currents or unusual risk of lightning may be anticipated, it must be provided with protection against damage due to fault currents or lightning, and protective measures must also be taken at insulating devices.”

### **Institute of Electrical and Electronics Engineers**

To ensure public safety, the National Electrical Safety Code (NESC) requires induced current to be limited to less than 5 milliamperes (mA) for the largest anticipated truck, vehicle, or equipment under an energized line. This requirement is often referred to as the “5 mA Rule”. The NESC is a voluntary standard adopted by most electric utilities in the U.S. The NESC is published and maintained by the Institute of Electrical and Electronics Engineers (IEEE).

IEEE Standard 80, “Guide for Safety in AC Substation Grounding” covers grounding methods at outdoor AC substations, both conventional and gas-insulated, and distribution, transmission, and generating plant substations.

IEEE Standard 1119, “IEEE Guide for Fence Safety Clearances in Electric-Supply Stations” provides recommended clearance practices to protect persons outside the electric-supply stations from electric shock.

### **American National Standards Institute**

The American National Standards Institute (ANSI) has published a standard for mobile and locomotive cranes that includes operation near overhead lines. Standard B30.5 contains guidelines for preventing contact between cranes and electrical energy.

### **Federal Aviation Administration**

Navigable airspace regulations at 14 CFR Part 77 establish standards for determining obstructions in navigable airspace. The FAA issues the airspace hazard determinations. FAA helicopter loading regulations are found in 14 CFR Part 133.

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### State

#### **California Environmental Protection Agency**

The California Environmental Protection Agency (Cal-EPA) was created in 1991 to centralize California's environmental authority, consolidating the California Air Resources Board, State Water Resources Control Board (SWRCB), Integrated Waste Management Board (IWMB), DTSC, Office of Environmental Health Hazard Assessment, and California Department of Pesticide Regulation (CDPR) under one agency. These agencies were placed within Cal-EPA to create a cabinet-level advocate for the protection of human health and the environment, and to ensure the coordinated deployment of state resources. CDPR, DTSC, IWMB, and SWRCB regulate hazardous materials and hazardous waste that have the potential to cause soil, water, and groundwater contamination.

Requirements for hazardous waste management in California implemented by DTSC are contained in both the California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control Law and 22 CCR. Under Government Code § 65962.5, the DTSC provides information to Cal-EPA on the lists of hazardous waste facilities, land designated as hazardous waste property, hazardous waste disposal sites and others, and the information in the Hazardous Waste and Substances Statement required under subdivision (f) of that section.

#### **California Government Code**

CGC Title 1, Division 5, Chapter 3.1 Protection of Underground Infrastructure § 4216 requires excavators to delineate an excavation area and notify appropriate regional notification centers at least 2 working days, and no more than 14 calendar days, prior to excavations, if the excavation will be conducted in an area that is known, or reasonably should be known, to contain subsurface installations<sup>3</sup> other than the underground facilities owned or operated by the excavator. If an excavation is proposed within 10 feet of a high priority subsurface installation<sup>4</sup>, the excavator will be notified by the operator of the high priority subsurface installation of its existence. The excavator and operator must discuss excavation methods and determine actions required to verify the location and prevent damage to high priority subsurface installation prior to excavation. The number of subsurface installations would be located and field marked by a qualified person. Excavation would begin only after the excavator receives a response from all known operators of subsurface installations within the delineated boundaries of the proposed excavation area. Any excavation within 24 inches on either side of the field marking requires the excavator to use hand tools to determine the exact location of subsurface installations to prevent damages.

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<sup>3</sup> Subsurface installations include any underground pipeline, conduit, duct, wire, or other structure, except nonpressurized sewer lines, nonpressurized storm drains, or other nonpressurized drain lines.

<sup>4</sup> High priority subsurface installations include high-pressure natural gas pipelines, petroleum pipelines, pressurized sewage pipelines, high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to 60-kv, or hazardous materials pipelines that are potentially hazardous to workers or the public if damaged.



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### **Hazardous Materials Transportation**

California has adopted U.S. DOT regulations for the intrastate movement of hazardous materials (26 CCR). The two state agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the CHP and the Caltrans. CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of material in transit, and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are the responsibility of CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the state that can respond quickly in the event of a spill.

### **Hazardous Materials Emergency Response**

Pursuant to the Emergency Services Act, California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services. The Office of Emergency Services coordinates the responses of other agencies, including the USEPA, CHP, CDFW, RWQCBs, the local air districts (i.e., SCAQMD), and local agencies.

### **California Occupational Safety and Health Administration**

In California, California Occupational Safety and Health Administration (Cal/OSHA) regulates worker safety, similar to OSHA. Cal/OSHA assumes primary responsibility for developing and enforcing state regulations related to workplace safety. Because California has a federal OSHA program, it is required to adopt regulations that are at least as stringent as those found in 29 CFR. Cal/OSHA standards codified in 8 CCR are generally more stringent than federal regulations.

Title 8 CCR § 2700 et. seq. “High Voltage Safety Orders” specifies requirements and minimum standards for safely installing, operating, working around, and maintaining electrical installations and equipment. Section 2946 identifies clearances for lines developed by the California Department of Industrial Relations, Division of Safety and Health through Cal/OSHA, and contains provisions for preventing accidents due to proximity to overhead lines.

### **California Water Code**

The California Water Code includes provisions of the federal CWA and water quality programs specific to California. The California Water Code requires reporting, investigation, and cleanup of hazardous materials releases that could affect waters of the state, including stormwater.

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### California Public Resources Code

The PRC includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors<sup>5</sup> on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas. These regulations include the following measures:

- Earth-moving and portable equipment with internal combustion engines shall be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442)
- Appropriate fire suppression equipment shall be maintained during the highest fire danger period from April 1 to December 1 (PRC § 4428)
- On days when a burning permit is required, flammable materials shall be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor shall maintain the appropriate fire suppression equipment (PRC § 4427)
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines shall not be used within 25 feet of any flammable materials (PRC § 4431)

The PRC presents the following guidelines for minimum clearance requirements around utility poles and transmission lines (PRC § 4296):

- Create and/or maintain a 10-foot clearance of any tree branches or ground vegetation from around the base of power poles carrying more than 110-kV
- Clear 10-foot by 8-foot cylinders around the base of subject poles and transmission structures
- Remove dead, diseased, or dying vegetation that could fall into lines, and dead, diseased, or dying vegetation up through the primary conductor level on poles
- Maintain 10-foot clearance between trees and all transmission lines carrying 115-kV and above

The required firebreak clearances are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer, or lightning arrester is attached, and surrounding each dead-end or corner pole.

### California Public Utilities Commission

CPUC GO 95, *Rules for Overhead Electric Line Construction*, Section 35, covers all aspects of design, construction, operation, and maintenance of overhead electrical lines and safety hazards.

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<sup>5</sup> A spark arrestor is a device that prevents the emission of flammable debris from the exhaust of an internal combustion engine where they could cause a spark.

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CPUC GO 128, *Rules for Construction of Underground Electric Supply and Communication Systems*, specifies the construction materials, clearances, and depths for communication and supply lines, including power and transmission lines.

### Local

#### **County of Riverside**

##### *County of Riverside General Plan*

The County of Riverside prepared a General Plan in 2008. General plan amendments were adopted for several General Plan Elements in December 2015. The following policies outlined in Chapter 6: Safety Element are applicable to the Revised Project (County of Riverside, 2015).

The policies below have been identified to reduce impacts on disaster preparedness, response and recovery.

Policy S 7.3                      Require commercial businesses, utilities, and industrial facilities that handle hazardous materials to: install automatic fire and hazardous materials detection, reporting and shut-off devices; and install an alternative communication system in the event power is out or telephone service is saturated following an earthquake.

##### *County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan*

The County of Riverside developed the Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP) in June 2012. The MJLHMP identifies the County's hazards, reviews and assesses past disaster occurrences, estimates the probability of future occurrences, and sets goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The MJLHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs. The MJLHMP references the County's General Plan Safety Element for wildlife hazard mitigation goals (County of Riverside, 2012).

#### **City of Jurupa Valley**

##### *2017 Draft General Plan*

The City of Jurupa Valley adopted the 2017 Draft General Plan on August 17, 2017. The Community Safety, Services, and Facilities Element of the General Plan identify goals and policies pertaining to hazards and hazardous materials (City of Jurupa Valley, 2017). The following measures are applicable to the Revised Project.

Goal CSSF 1                      Minimize risks resulting from natural and manmade hazards to its residents and businesses.

Policy CSSF 1.31                **Federal/State Laws.** Comply with federal and State laws regarding the management of hazardous waste and materials.

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- Policy CSSF 1.32      **Hazardous Waste Storage/Disposal.** Identify, assess, and mitigate safety hazards from the storage, use, and disposal of hazardous materials through the development review process.
- Policy CSSF 1.37      **Hazardous Waste Handling.** Require businesses, utilities, and industrial facilities that handle hazardous materials to:
- a. Install automatic fire and hazardous materials detection, reporting, and shut-off devices.
- Policy CSSF 1.38      **Self-Sufficiency.** Use incentives and disincentives to persuade private businesses, consortiums, and neighborhoods to be self-sufficient in an emergency by:
- b. Maintaining a fire control plan, including an on-site firefighting capability and volunteer fire response teams to respond to and extinguish small fires; and
- Policy CSSF 1.39      **Critical Facilities.** Ensure that critical facilities such as City Hall, Sheriff's Substations, City Fire Stations, electrical substations, and community-service district offices, water and sewer facilities are subject to the following design considerations:
- a. Require that special development standards, designs and construction practices be implemented to reduce risk to of compromise in a disaster to acceptable levels for capital improvements, utility projects, and development projects involving critical facilities, large-scale residential development, and major commercial or industrial development. Special standards should be applied through conditional use permits and the subdivision review process and, where appropriate, impact fees should be assessed to finance required actions.
  - b. Require mitigation measures to reduce potential damage caused by ground failure for sites determined to have potential for liquefaction. Such measures shall apply to critical facilities, utilities, and large commercial and industrial projects as a condition of project approval.
  - c. Require that planned lifeline utilities, as a condition of project approval, be designed, located, structurally upgraded, fit with safety shutoff valves; be designed for easy maintenance, and have redundant back up lines where unstable slopes, earth cracks, active faults, or areas of liquefaction cannot be avoided.
  - d. Review proposed uses of fault setback areas closely to ensure that City infrastructure (roads, utilities, sanitary and storm sewers) are not unduly placed at risk by the developer. Insurance, bonding, or

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compensation plans should be used to compensate the City for the potential costs of repair.

- Policy CSSF 1.40      **Strengthen Utilities/Lifelines.** Encourage the strengthening of planned and existing utilities and lifelines, the retrofit and rehabilitation of structurally unsound utility structures and public facilities, and the relocation of certain critical facilities where appropriate.
- Policy CSSF 1.41      **Alternative Facilities.** Encourage alternatives that improve site safety for the protection of critical facilities, including property acquisition for open space, change in building use or occupancy, or other appropriate measures that can reduce risks posed by hazards.
- Policy CSSF 1.42      **Critical Facilities in Inundation Areas.** Discourage development of critical facilities that are proposed in dam failure inundation areas, and apply hazardous materials safety guidelines within such zones.

### City of Riverside

#### *City of Riverside General Plan 2025*

The City of Riverside has prepared the 2025 General Plan, which was adopted in November 2007 and amended in November 2012. The following policies outlined in the Public Services Element are applicable to the Proposed Project (City of Riverside, 2012b).

The policies below have been identified to meet the objective of minimizing risks associated with the storage, transport and disposal of hazardous materials.

- Policy PS-3.1            Ensure that hazardous materials used in business and industries are handled properly.
- Policy PS-3.4            Reduce the risks associated with ground transportation hazards, where feasible.
- Objective PS-9            Minimize the effects from natural and urban disasters by providing adequate levels of emergency response services to all residents in Riverside.
- Policy PS-9.7            Identify actions to reduce the severity and probability of hazardous occurrences.
- Policy PS-9.8            Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding and structural and wildland fires by requiring feasible mitigation of such impacts on discretionary development projects.
- Objective PS-10            Improve the community's ability to respond effectively to emergencies.

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- Policy PS-10.3      Ensure that public safety infrastructure and staff resources keep pace with new development planned or proposed in Riverside and the Sphere of Influence.
- Policy PS-10.4      Continue to ensure that each development or neighborhood in the City has adequate emergency ingress and egress, and review neighborhood access needs to solve problems, if possible.

### *City of Riverside Municipal Code*

The City of Riverside Municipal Code consolidates the administrative requirements, permits, inspections and enforcement activities of the hazardous waste and hazardous materials management regulatory programs in the City of Riverside. The Riverside Fire Department is responsible for implementing and enforcing the California Accidental Release Prevention Program; California Accidental Release Prevention Program; Aboveground Petroleum Storage Act compliance; and Hazardous Material Management Plans and Hazardous Material Inventory Statements.

### *Emergency Operations Plan*

The City Council of the City of Riverside adopted the Emergency Operations Plan as the official emergency plan by resolution No. 22151. The Emergency Operations Plan provides guidance to prevent, mitigate, prepare, protect, respond, and recover from natural, technological, and man-made emergencies or disasters (Office of Emergency Management, 2011).

### *Local Hazard Mitigation Plan Annex*

The City of Riverside adopted a Local Hazard Mitigation Plan Annex in August 2012. This Local Hazard Mitigation Plan integrates with the Riverside County MJLHMP and provides a uniform approach to community mitigation efforts from natural, man-made, and technological hazards. The following goals, objectives and policies outlined in the Local Hazard Mitigation Plan are applicable to the Revised Project (City of Riverside, 2012a).

- Goal 6                      Protect the community from hazards related to wildland fires.
- Objective 6.2              Evaluate all new development to be located in or adjacent to wildland areas to assess its vulnerability to fire and its potential as a source of fire.
- Objective 6.3              Integrate fire safety considerations in the planning process.
- Objective 6.4              Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.

### **4.7.6 Applicant's Environmental Protection Elements**

SCE has proposed EPEs to reduce environmental impacts. EPEs that avoid or reduce potentially significant impacts of the Revised Project will be incorporated as part of any CPUC project approval, and SCE will be required to adhere to the EPEs as well as any identified mitigation measures. The EPEs are included in the MMRP for the Revised Project (refer to Chapter 9: Mitigation Monitoring and Reporting Plan of this Subsequent EIR), and the

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implementation of the EPEs will be monitored and documented in the same manner as mitigation measures. The EPEs that are applicable to the hazards and hazardous materials analysis are provided in Table 4.7-2.

**Table 4.7-2 Environmental Protection Elements for Hazards and Hazardous Materials**

Environmental Protection Element	Requirements
<b>EPE HAZ-01: Health, Safety, and Emergency Response Procedures</b>	<p><i>Health and Safety Plan.</i> A health and safety plan to address site-specific health and safety issues would be prepared and implemented. The plan would address emergency medical services and procedures, including specific emergency response and evacuation measures for project personnel.</p> <p><i>Hazardous Materials and Hazardous Waste Handling.</i> A project-specific Hazardous Materials Management and Hazardous Waste Management Program would be developed prior to initiation of the project. Material Safety Data Sheets would be made available to all project workers.</p> <ul style="list-style-type: none"> <li>• Transport of Hazardous Materials: Transport of hazardous materials would be in compliance with U.S. DOT, Caltrans and CHP regulations (Title 22 CCR, Division 4.5 and 49 CFR 261-263). Transporters of hazardous materials and waste are responsible for complying with all applicable laws, rules and regulations, including the acquisition of required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations.</li> <li>• Refueling stations would be located in designated areas where absorbent pads and trays would be available. The fuel tanks would also contain a lined area to ensure that accidental spillage does not occur. Hazardous materials, such as paints, solvents, and penetrants, would be kept in an approved locker or storage cabinet.</li> </ul> <p><i>Emergency Release Response Procedures.</i> An Emergency Response Plan detailing responses to releases of hazardous materials would be developed prior to construction activities. All construction personnel, including environmental monitors, would be aware of state and federal emergency response reporting guidelines.</p>
<b>EPE HAZ-03: Environmental Management Program</b>	<ul style="list-style-type: none"> <li>• Spill Prevention, Control, and Countermeasure Plan (SPCC Plan): In accordance with Title 40 of the CRF, Part 112, an SPCC for proposed and/or expanded substations would be prepared. The plan would include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for safe cleanup and reporting.</li> <li>• Hazardous Materials Business Plans (HMBPs): Prior to operation of new or expanded substations, an HMBP would be prepared or updated and submitted, in accordance with Chapter 6.95 of the CHSD, and Title 22 CCR.</li> <li>• Storm Water Pollution Prevention Plan (SWPPP): A project-specific construction SWPPP would be prepared and implemented prior to the start of construction of the transmission lines and substations.</li> </ul>
<b>EPE HAZ-04: Worker Environmental Awareness Program</b>	<p>A WEAP would be prepared. All construction crews and contractors would be required to participate in WEAP training prior to starting work on the project. The WEAP would serve as a training program to provide workers with an overview of general environmental protection measures as dictated by current law and permits. It would clearly establish for construction workers the conditions they need to follow to keep the project in compliance with applicable laws.</p>

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Environmental Protection Element	Requirements
EPE AQ-01: Air Quality Management District Compliance	The construction activities shall comply with the SCAQMD requirements, as applicable to the project.
EPE AQ-02: Worker Environmental Awareness Program	A general Air Quality WEAP would be prepared. All construction crews and contractors would be required to participate in this WEAP training prior to starting work on the project. The air quality WEAP may be combined with the general WEAP for sensitive species as described under mitigation measure BIO-05.
EPE TRANS-03: Traffic Management Plans	Traffic control and other management plans would be prepared to minimize project impacts on local streets.  Traffic control and other management plans would be prepared to minimize Proposed Project impacts on local streets and bike lanes, railroad operations (Union Pacific, Metrolink), emergency services, transit bus operations, recreation facilities, school bus operations and other planned roadway projects. The plans would be developed in collaboration with the responsible agencies of these transportation modes, programs, and projects. The plans will include provisions to accommodate emergency response vehicles at all times, such as immediately stopping work for emergency vehicle passage, short detours, and alternate routes.

### 4.7.7 CEQA Significance Criteria

Appendix G of CEQA Guidelines (14 CCR 15000 *et seq.*) provides guidance on assessing whether a project would have significant impacts on the environment. Changes to the Proposed Project or changes in baseline conditions that were not analyzed in the 2013 RTRP EIR require additional analysis to fully disclose potential impacts of the Revised Project. The CPUC prepared an Initial Study Checklist (refer to Appendix B of this Subsequent EIR) to identify the new potentially significant or increased impacts that may occur as a result of the Revised Project elements or changes in baseline conditions. The Initial Study Checklist indicated that the project has the potential for new or increased impacts under the significance criteria included below. CEQA significance criteria are lettered below to match the criteria lettering in the 2013 RTRP EIR. Consistent with Appendix G, the Revised Project would have significant impacts from hazards and hazardous materials if it would:

- 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 0.25 mile of an existing or proposed school
- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

Given the specific location and design of the Revised Project, impacts are analyzed in this section relative to an additional threshold, which is not listed in Appendix G. The Revised Project would have significant impacts from hazards and hazardous materials if it would:

- i. Expose workers or the public to excessive shock hazards



## 4.7 HAZARDS AND HAZARDOUS MATERIALS

### 4.7.8 Revised Project Impact Analysis

#### Approach to Impact Analysis

This impact analysis considers whether implementation of the Revised Project would result in significant impacts from hazards and hazardous materials and focuses on reasonably foreseeable effects of the Revised Project as compared with baseline conditions. The analysis uses significance criteria based on the CEQA Appendix G Guidelines. These criteria may be modified to address project impacts. The potential direct and indirect effects of the Revised Project are addressed below, and the cumulative effects are addressed in Chapter 5: Cumulative Impacts. Refer to the 2013 RTRP EIR for analysis of other elements of the Proposed Project.

Applicable EPEs are identified and mitigation is defined to avoid or reduce significant impacts from hazards and hazardous materials. The significance of the impact is first considered prior to application of EPEs and a significance determination is made. The implementation of EPEs is then considered when determining whether impacts would be significant and thus would require mitigation. Mitigation measures included in the 2013 RTRP EIR, with modifications when appropriate, and/or additional new mitigation measures are identified to reduce significant impacts of the Revised Project.

#### Summary of Impacts

Table 4.7-3 presents a summary of the CEQA significance criteria and impacts from hazards and hazardous materials that would occur during construction, operation, and maintenance of the Revised Project.

**Table 4.7-3 Summary of Revised Project Impacts from Hazards and Hazardous Materials**

Significance Criterion	Project Phase	Significance before EPEs	Significance after EPEs and before Mitigation	Significance after Mitigation
<b>Impact Hazards-b:</b> Would the Revised Project 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?	Construction	Significant	Significant EPE HAZ-01 EPE HAZ-03 EPE HAZ-04	Less than Significant MM HAZ-04 MM UTIL-01
	Operation and Maintenance	Significant	Less than Significant EPE HAZ-03	---
<b>Impact Hazards-c:</b> Would the Revised Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Construction	Significant	Significant EPE AQ-01 EPE AQ-02 EPE HAZ-01 EPE HAZ-04	Less than Significant MM HAZ-04 MM AQ-01 MM AQ-02 MM AQ-04 MM UTIL-01

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Significance Criterion	Project Phase	Significance before EPEs	Significance after EPEs and before Mitigation	Significance after Mitigation
	Operation and Maintenance	Less than Significant	---	---
<b>Impact Hazards-g:</b> Would the Revised Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Construction	No Impact	---	---
	Operation and Maintenance	No Impact	---	---
<b>Impact Hazards-i:</b> Would the Revised Project expose workers or the public to excessive shock hazards?	Construction	Less than Significant	---	---
	Operation and Maintenance	Significant	Significant	Less than Significant MM HAZ-05

### Impact Discussion

<b>Impact Hazards-b:</b> Would the Revised Project 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?	<b>Significance Determination</b>
	<i>Construction: Less than Significant with Mitigation</i>
	<i>Operation &amp; Maintenance: Less than Significant</i>

### Construction

#### Potential Damage to Underground Utilities

Excavation for the underground alignment and related ground-disturbing activities could potentially damage or rupture buried utility lines carrying hazardous materials that could be released into the environment and/or result in a fire or explosion. Utility lines carrying hazardous materials (e.g., natural gas) are located along Limonite Avenue and cross the proposed excavation area for the underground alignment (SoCal Gas, 2017). Below-grade activities could damage, or rupture buried utility lines, resulting in a significant impact, even with the implementation of SCE’s standard construction procedures.

CGC § 4216 requires SCE to delineate an excavation area and inform appropriate regional notification centers at least 2 working days, and no more than 14 calendar days, prior to excavations to verify the existence of any subsurface installation near proposed excavations. For high priority subsurface installations, SCE and the operator of the high priority subsurface installation would discuss excavation methods and actions to verify the location of and prevent damage to high priority subsurface installation prior to excavation. A qualified person would locate and field mark all subsurface installations, which would reduce the potential to damage underground utility pipelines in the Revised Project area. Section 4216 further requires contractors to hand excavate 24 inches on either side of an underground utility line prior to

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using power equipment. Compliance with CGC § 4216 would ensure that existing subsurface installations are avoided.

Other underground utilities exist in the Revised Project alignment in addition to subsurface installations subject to CGC § 4216, including buried sewer and storm drain pipes, and buried communication lines. Project excavations could damage or rupture these buried utility lines, resulting in a significant impact. MM UTIL-01 requires SCE to notify appropriate utility companies along the Revised Project underground alignment at least 30 days prior to construction. In addition, MM HAZ-04 requires SCE to conduct exploratory excavations (i.e., potholing) to verify the locations of existing facilities marked out in the field prior to excavating to avoid damaging underground utilities. Prior to trenching in city streets, SCE would coordinate with local jurisdictions to secure excavation and encroachment permits, as required. MM HAZ-04 also requires SCE to adjust the project work area to avoid buried pipelines, when necessary, to avoid existing underground utilities. *Impacts associated with damages to buried utilities would be less than significant with mitigation.*

### Accidental Release of Hazardous Materials

Limited quantities of hazardous materials, including fuel and other hazardous materials, would be used within the Revised Project area and stored at the marshalling yard. SCE has proposed equipment maintenance and refueling at all locations within the Revised Project alignment. There is the potential for an accidental release of hazardous materials during site grading, pole and tower installation, and during conductor pulling, splicing, and tensioning. A hazardous materials release could also occur during equipment and vehicle services and refueling. Although accidental spills would be unlikely, spilled or leaking hazardous materials would create a significant hazard to the public or the environment, and would be a significant impact. EPEs HAZ-01, HAZ-03, and HAZ-04 would be implemented by SCE to address spilled and leaking hazardous materials. EPEs HAZ-01 and HAZ-03 include preparation of the following plans and programs to avoid or contain accidental releases of hazardous materials:

- Health and Safety Plan
- Hazardous Materials Management and Hazardous Waste Management Program
- Emergency Release Response Plan
- Environmental Management Program, including the preparation of a SWPPP

EPE HAZ-04 states that SCE would train construction workers through administering a WEAP prior to construction. The WEAP would ensure that construction personnel are adequately trained in implementing the plans and programs prepared under EPEs HAZ-01 and HAZ-03. Implementation of the EPEs proposed by SCE would adequately contain and dispose of an accidental release. *The impact from accidental spills of hazardous materials would be less than significant. No mitigation is required.*

### Operation and Maintenance

The Revised Project would not require SCE personnel to be present during operation of the new transmission facilities. Maintenance of the Revised Project overhead alignment would involve periodic inspections by SCE personnel as described in the 2013 RTRP EIR. Maintenance of the

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overhead alignment would be performed on an as-needed basis, and could include maintenance of vegetation clearances, access roads, and erosion control measures.

The underground vaults would be routinely inspected to ensure structural integrity. Qualified electricians would periodically perform routine testing and check on the condition of the voltage-limiting arresters, grounding connection, splices, terminations, lightning arrestors, and conductor. Some maintenance activities could require the periodic use, transport, and disposal of hazardous materials similar to those used during project construction. Materials would not be stored along the transmission alignment. Maintenance would not require use of hazardous materials such as herbicides; vegetation within the new utility ROW would be mechanically trimmed or removed as described in Section 2.5.1: Vegetation Management of this Subsequent EIR. The largest volume of hazardous materials that would be used during operation and maintenance of the transmission line would consist of the fuel contained within vehicles used during inspections and maintenance activities. Equipment used to maintain vegetation clearances may require fueling on site. A significant impact would occur if released hazardous materials contaminate water quality, groundwater or cause a health risk. EPE HAZ-03 requires SCE to prepare and implement spill prevention and spill control plans, including a SPCC and SWPPP. *The impact would be less than significant. No mitigation is required.*

**Mitigation Measures:** MM HAZ-04 and MM UTIL-01 (refer to Section 4.11: Public Services and Utilities)

**Significance after Mitigation:** Less than Significant

<p><b>Impact Hazards-c: Would the Revised Project emit hazardous emissions or handle hazardous or acutely hazardous materials, or substances, or waste within 0.25 mile of an existing or proposed school?</b></p>	<b>Significance Determination</b>
	<i>Construction: Less than Significant with Mitigation</i>
	<i>Operation &amp; Maintenance: Less than Significant</i>

### Construction

#### Overview

The construction of the underground transmission line would require excavation within paved roadways as described above in Impact Hazards-b. The Revised Project would result in greater pollutant emissions from construction of the underground transmission line because localized emissions would be greater than those analyzed in the 2013 RTRP EIR (refer to Section 4.3: Air Quality and Greenhouse Gas Emissions of this Subsequent EIR).

Buried utility lines carrying hazardous materials (e.g., natural gas) located within or adjacent to the proposed excavation area for the underground transmission line could be damaged or ruptured, causing the release of hazardous materials into the environment and/or a fire or explosion. The potential impact on schools from releasing hazardous materials as a result of rupturing buried utility lines during excavation was not analyzed in the 2013 RTRP EIR and is a new, potentially significant impact.

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### Emissions

Impact Air-d in Section 4.3: Air Quality and Greenhouse Gas Emissions, analyzes the potential impacts on sensitive receptors (refer to Table 4.3-5) from air pollutant concentrations and TAC emissions due to Revised Project construction activities. TAC emissions and carbon monoxide concentrations would not significantly impact sensitive receptors. Ambient concentrations of several air pollutants would exceed SCAQMD significance thresholds at the maximally exposed sensitive receptor. Louis Vandermolen Fundamental Elementary School is directly adjacent to construction areas and would experience similar elevated concentrations of air pollutants. The impact on the school due to ambient concentrations of air pollutants would be potentially significant. SCE would implement EPE AQ-01 and EPE AQ-02, which ensures compliance with applicable SCAQMD requirements during construction, and requires preparation of an Air Quality WEAP prior to starting project work. However, the impact on sensitive receptors from concentrations of air pollutants at the adjacent school would remain potentially significant because specific engine and fugitive dust controls are not identified. MM AQ-01 requires SCE to develop and implement a Fugitive Dust Control Plan in compliance with SCAQMD, which includes short- and long-term dust control measures to reduce particulate matter emissions generated during project construction. MM AQ-02 specifies exhaust emissions control requirements for worker vehicles and construction equipment. MM AQ-04 requires preparation and implementation of an ambient particulate matter monitoring plan. *Impacts on sensitive receptors from ambient concentrations of air pollutants would be less than significant with mitigation.*

### Hazardous Emissions from Potential Damage to Underground Utilities

As discussed in Impact Hazards-b, SCE is required under CGC § 4216 to: (1) inform regional notification centers at least 2 working days prior to excavations, (2) verify locations of existing subsurface near a proposed excavation, and (3) coordinate with the operator of any high priority subsurface installation to avoid any potential damage. Other subsurface utilities (e.g., sewer, storm drain, communication lines) could be damaged if the locations are not properly marked, resulting in a significant impact. MM UTIL-01 requires SCE to notify appropriate utility companies along the Revised Project underground alignment at least 30 days prior to construction. MM HAZ-04 requires SCE to conduct exploratory excavations (i.e., potholing) and adjust project work areas to avoid existing utilities. MM HAZ-04 would reduce the risk of potentially damaging buried underground utilities during construction. *Impacts to existing underground utilities would be less than significant with mitigation.*

### Hazardous Materials and Waste Handling

The Revised Project would transport and use similar and limited amounts of hazardous substances within 0.25 mile of schools as described in the 2013 RTRP EIR. Hazardous materials including gasoline, diesel, antifreeze, and lubricants would be stored at the Etiwanda Marshalling Yard, located approximately 0.08 mile from Jurupa Valley High School. Equipment maintenance and refueling, as well as use of hazardous materials, could occur anywhere along the Revised Project alignment and may occur as close as 50 feet away from Luis Vandermolen Fundamental Elementary School. With the exception of equipment fuel, which would likely be

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stored in a large-capacity fuel truck, the quantities of hazardous materials that could be spilled would be small. This would limit their ability to be transported to a school site because small quantities would be quickly absorbed into the soil and would cease to have an effect. Large-quantity hazardous materials spills (e.g., resulting from fuel truck or storage tank fuel transfer incidents) and subsequent transport of spilled materials by wind or water to a school would be a significant impact. SCE would follow all applicable federal, state, and local requirements for handling and disposing of hazardous materials and waste (Riverside Public Utilities, 2012); however, a significant impact would still occur if a spill occurred because workers may not have received training on proper handling and clean-up of hazardous materials. SCE would implement EPEs HAZ-01 and HAZ-04. EPE HAZ-01 includes development and implementation of a Health and Safety Plan and an Emergency Release Response Plan, as well as detailed information related to the proper transport of materials, containment of materials, and fueling/maintenance of construction equipment. EPE HAZ-04 involves worker training to ensure that all construction workers know how to properly implement spill prevention and emergency containment techniques identified in the plans. *The impact from hazardous materials and waste handling near schools would be less than significant. No mitigation is required.*

### Operation and Maintenance

As discussed in Impact Hazards-b, the Revised Project would not require SCE personnel to be present during project operation. Maintenance of the Revised Project overhead alignment would involve periodic inspections by SCE personnel. Routine inspections of the underground vaults and conductors by qualified electricians would not result in hazardous emissions, or involve any handling of hazardous or acutely hazardous material, substances, or waste, within 0.25 mile of an existing or proposed school. Substantial increases in ambient air pollutant concentrations (including carbon monoxide) or TAC emissions from periodic truck use for maintenance activities are not anticipated, as described in Impact Air-4. *Operation and maintenance impacts on existing and proposed schools within 0.25 mile of the Revised Project resulting from hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste, would be less than significant.*

Mitigation Measures: MM HAZ-04, MM AQ-01, MM AQ-02, MM AQ-04 (refer to Section 4.3: Air Quality and Greenhouse Gas Emissions), and MM UTIL-01 (refer to Section 4.11: Public Services and Utilities)

Significance after Mitigation: Less than Significant

Impact Hazards-g: Would the Revised Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<b>Significance Determination</b>
	Construction: <i>No Impact</i>
	Operation & Maintenance: <i>No Impact</i>

### Construction, Operation, and Maintenance

No emergency response or evacuation plans have been adopted for the roads in the Revised Project area (Refer to Section 4.7.4: Environmental Setting). The Revised Project would not affect implementation of an adopted emergency response plan or emergency evacuation plan. No

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impact would occur. Impacts on emergency access are analyzed in Section 4.13: Transportation and Traffic, under Impact Traffic-e.

**Mitigation Measures: None Required**

Impact Hazards-i: Would the Revised Project expose workers or the public to excessive shock hazards?	<b>Significance Determination</b>
	Construction: <i>Less than Significant</i>
	Operation & Maintenance: <i>Less than Significant with Mitigation</i>

### Construction

Construction of the Revised Project would involve relocating, burying, and transpositioning existing energized lines. The existing transmission, power, and distribution lines would not be electrified during construction. SCE would utilize safety devices such as traveling grounds, guard structures, and radio-equipped public safety roving vehicles and linemen prior to the initiation of wire-stringing activities to ensure the safety of workers and the public (SCE, 2015). There is a low potential for shock hazards from induced ~~current~~ **voltage**. Voltage impacts could occur during construction due to the incorrect closure of switches or circuit breakers at associated substations, or during accident scenarios such as existing energized overhead lines falling or coming in contact with a de-energized line. Atmospheric conditions such as lightning could also potentially induce current during construction; however, these situations rarely occur. As described in the 2013 RTRP EIR, SCE would use overhead ground wires along the transmission lines to provide lightning protection (refer to 2013 RTRP EIR Section 2.6.3: Safety). Electrical equipment and fencing at the substations and metal fencing and gates within the transmission line ROWs would be grounded to prevent shock (Riverside Public Utilities, 2012).

Project construction would meet or exceed ~~IEEE, ANSI~~, CPUC GO 95 and GO 128 safety standards, and OSHA and Cal/OSHA safety regulations; therefore, impacts resulting from induced current and voltage during construction of the Revised Project would be less than significant.

Although unlikely, it is possible that the conductor could fall during installation; however, the conductor would not be energized and there would be no energized lines within the Revised Project alignment that the falling conductor could contact. Temporary guard structures would be installed to protect infrastructure (e.g., roads) that exists under the transmission line. *The potential to create a shock hazard from falling transmission lines during construction would be less than significant.*

### Operation and Maintenance

#### Conductive Objects

Power would be conducted from Mira Loma Substation to the proposed Wildlife Substation, and then via the same transmission corridor to the Vista Substation. Primary shocks can occur from direct contact with an energized conductor, which has the potential to be hazardous. Safety standards for operation of the Revised Projects components include precautions for avoiding

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direct contact with conductive objects in the project vicinity, including vehicles. The implementation of standard operating procedures would minimize the exposure of workers and the public to excessive shock hazards from direct contact with conductive objects. Operation of the Revised Project would not require SCE personnel to be present and would not expose any workers to excessive shock hazards.

Inductive and conductive interference could occur between the Revised Project components and existing conductive objects within or in close proximity to the Revised Project transmission corridor. Potential conductive objects include steel structures supporting the existing overhead lines; street light poles; and steel gas, potable, or recycled water mains near Revised Project components.

Shocks resulting from induced current and voltage could occur if a person or animal touches an ungrounded conductive object near the Revised Project transmission line during operation. Impacts on workers and the public could be potentially significant if the touch voltage exceeds safety thresholds. ~~A maximum touch voltage of 15 volts is the generally accepted standard throughout North America for structures that may be inadvertently touched by unprotected workers and the general public (Safe Engineering Services & Consulting, Inc., 1995). The threshold for fault conditions varies based on the type of conductive object and is specified in ANSI/IEEE Standard 80.~~

MM HAZ-05 requires SCE to identify the location and type of existing conducting objects near the transmission line corridor and evaluate and document their proximity. SCE would model the induced ~~current touch~~ voltages from the Revised Project's transmission line on the identified conductive object under both steady-state and fault conditions. In the event that the modeled induced ~~current~~ voltage of a conductive objective exceeds maximum touch voltage thresholds, SCE would be required to incorporate grounding ~~or other~~ measures into the design features in order to reduce the touch voltage under steady-state and fault conditions to below threshold levels. *Impacts resulting from excessive shock hazard would be less than significant with mitigation.*

### Downed Structures

Transmission lines are designed to withstand high winds. Conductor phases are spaced to allow adequate "blow out" room to ensure that the conductors do not make contact with each other or surrounding trees and infrastructure. If a transmission structure were to be blown over, the protection system of the line would shut off power flow in a fraction of a second. The risk of shock hazard or wildfire would therefore be very low. Regular maintenance inspections would allow for identification of corrosion, equipment misalignment, loose fittings, and other mechanical problems that may contribute to increased risk of downed conductor or structures. *The impact from downed structures would be less than significant.*

Mitigation Measures: MM HAZ-05

Significance after Mitigation: Less than Significant



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### 4.7.9 Revised Project Mitigation Measures

#### MM HAZ-04: Uncover Existing Utility Pipelines

SCE shall excavate "potholes" over the top of any buried existing utilities, including pipelines, that are located within 10 feet of a proposed excavation (e.g., pole foundation, retaining wall footing, duct bank, or vault structure) to verify the location of the existing utility prior to initiating excavation work. Potholing work shall be performed using a non-destructive method (e.g., air vacuum extraction) that will not damage an existing pipeline once it is encountered. Potholing work shall be conducted under the oversight of a representative of the appropriate utility company. Potholing shall reveal the top of the pipeline only and shall not go any deeper than the top of the pipe so as to not damage the pipe in any way. More than one pothole may be excavated where necessary to verify the orientation of the existing pipeline relative to the proposed excavation. Potholes shall be backfilled with removed stockpiled soil once the location and orientation of the pipeline has been verified and marked. The utility company representative shall verify and approve that backfill and compaction of the potholes has been performed adequately. If the pipeline is located within the footprint of a proposed pole foundation, no pole foundation excavation work shall commence until CPUC has been notified and the pole location has been relocated sufficiently far away from the buried pipeline.

**Applicable Locations:** All Revised Project work areas where excavations and trenching would occur

**Performance Standards and Timing:**

- **Prior to Construction:** (1) Verify and mark location of buried existing utilities located within 10 feet of excavation area, (2) Receive verification from utility company, (3) Excavate potholes to confirm existing underground utility location, (4) Relocate pole location away from buried pipeline when necessary
- **During Construction:** N/A
- **Following Construction:** N/A

#### MM HAZ-05: Induced ~~Current-Voltage~~ Touch Study

SCE shall identify both aboveground and underground objects (e.g., metal fences or buried metal utility lines such as pipelines or metallic communication conductors, etc.) in the vicinity of the Proposed Project that may potentially present a shock hazard to the public or workers of any adjacent metallic utility lines, due to induced currents or voltages. The owner of any adjacent metallic utility lines shall be identified and notified about the Proposed Project. SCE shall acquire as-built documents or other facility location information from adjacent utility owners to evaluate the location and specifics of nearby metallic objects. SCE shall also obtain information/documentation from adjacent utility owners defining any quantitative hazardous shock thresholds for both public and worker exposures applicable to their facilities.

In the absence of more stringent hazardous shock thresholds from adjacent utility owners, SCE shall ensure that induced voltage does not exceed 25 volts to ground under normal and emergency operating conditions in accordance, or in accordance with any other quantitative SCE public and worker safety standards.

SCE shall prepare an Induced ~~Current-Voltage~~ Touch study that evaluates the conductive and inductive interference effects of the Proposed Project components on the identified objects. The Induced ~~Current-Voltage~~ Touch study shall model the conductive objects using the maximum anticipated voltage and/or current for the proposed 230-kV line under normal and emergency operating conditions and shall consider the construction details for the transmission line. The study shall also construct a model using fault conditions if such faults would result in higher voltages or currents on the Proposed Project facilities and higher induced voltages on adjacent metallic utilities. The maximum acceptable touch voltage under steady-state conditions is 15 volts and the threshold for fault conditions is specified in ANSI/IEEE Standard 80. In the event that the modeled induced ~~current~~ voltage of a conductive objective exceeds maximum touch voltage thresholds hazardous shock thresholds, SCE shall install grounding or other appropriate measures to protect the public and workers of any adjacent metallic utility lines from hazardous shocks.

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The Induced ~~Current-Voltage~~ Touch study shall include the model voltage results of conductive objects prior to implementation of grounding or other measures and after implementation of grounding or other measures. SCE shall coordinate with the owners of any potentially affected adjacent utilities to ensure that the adjacent utilities are correctly represented in the model. SCE shall give any affected utility owner a copy of the Induced Voltage Touch study within 30 days of study completion. SCE shall provide any adjacent utility owner concerns regarding the study validity and results to the CPUC.

Sixty days prior to commencing construction, SCE shall provide the Induced ~~Current-Voltage~~ Touch study to the CPUC for approval. The Induced ~~Current-Voltage~~ Touch study shall include the criteria and approach that was used to determine what facilities could present a shock hazard, the results of the model prior to implementation of grounding or other measures, details of the grounding or other measures to be installed, and the results of the model after implementation of the grounding or other measures.

If safety hazards are identified during operation, SCE shall take appropriate corrective action and document the response in accordance with CPUC General Order 95. Safety devices such as traveling grounds, guard structures, and radio-equipped public safety roving vehicles and linemen shall be in place prior to the initiation of wire-stringing activities.

**Applicable Locations:** The entire proposed 230-kV transmission alignment

### Performance Standards and Timing:

- **Prior to Construction:** (1) Induced ~~Current-Voltage~~ Touch study and model are submitted to CPUC at least 60 days prior to start of construction for approval, (2) Safety devices (i.e., traveling grounds, guard structures, and radio-equipped public safety roving vehicles and linemen) are in place prior to initiation of wire-stringing activities
- **During Construction:** Ensure that all required grounding or other appropriate measures are implemented
- **Following Construction:** Address any safety concerns and document corrective action N/A

### 4.7.10 Alternatives Setting

#### Environmental Setting

#### Emergency Services

The emergency services and emergency evacuation routes applicable to Revised Project are also applicable to the alternatives.

#### Existing Hazardous Materials

There are no existing hazardous sites within 0.25 mile of the alternatives (USEPA, 2018; DTSC, 2018a; DTSC, 2018b; SWRCB, 2018).

#### Gas Pipelines and Metallic Utility Lines

~~Two~~ Three known natural gas transmission lines are located parallel to the Alternative 2 alignment. Several metallic utility pipelines and telecommunication lines would be located parallel to or crossing the Alternative 1, 2, and 4 underground transmission alignments, as provided in Table 4.7-4. No natural gas pipelines or metallic utility lines are located in proximity to Alternative 3.

#### Schools

The Del Sol Academy, located on Forsythia Avenue, is approximately 0.25 mile from Alternatives 1, 2, and 4. The Little Steps Montessori Preschool on Wineville Avenue is

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approximately 1,150 feet from Alternative 1 and 600 feet from Alternative 2. No schools are located within 0.25 mile of Alternative 3.

### Regulatory Setting

The regulatory setting for hazards and hazardous materials under Alternatives 1 through 4 includes the federal, state, and Jurupa Valley policies and regulations identified for the Revised Project (refer to Section 4.7: Hazards and Hazardous Materials). Regulations that pertain to the City or County of Riverside are not applicable because none of the alternatives considered in this analysis occur in the City or unincorporated County of Riverside.

**Table 4.7-4 ~~Known Underground~~ Utilities Near Alternatives 1 through 4**

Type	Location	Approximate Number of Lines <del>Along Road</del>	Diameter (inches)	Pipeline/ <del>Utility</del> Material(s)	<del>Alternative</del>
<b>Alternative 1</b>					
Potable water main	Wineville Avenue (north of Landon Drive)	1 <del>parallel</del> 3 <del>crossing</del>	<del>12 to 30</del> 18	Cement mortar lined/cement mortar coated (CML/CMC) and welded steel	<a href="#">Alternative 1</a> <a href="#">Alternative 2</a> <a href="#">Alternative 4</a>
	Wineville Avenue (Cantu-Galleano Ranch Road to Bellegrave Avenue)	1	30	CML/CMC and welded steel	<a href="#">Alternative 1</a> <a href="#">Alternative 2</a> <a href="#">Alternative 4</a>
	Wineville Avenue (south of Park Center Drive)	1	16	Polyvinyl chloride (PVC)	<a href="#">Alternative 2</a>
	Landon Drive	1	16	CML/CMC and welded steel	<a href="#">Alternative 1</a> <a href="#">Alternative 2</a> <a href="#">Alternative 4</a>
	Bellegrave Avenue	1 <del>parallel</del>	30	CML/CMC and welded steel	<a href="#">Alternative 1</a> <a href="#">Alternative 2</a>
	Limonite Avenue	1	30	CML/CMC	<a href="#">Alternative 2</a>
Raw water line	Bellegrave Avenue	1 <del>parallel</del>	30	PVC	<a href="#">Alternative 1</a> <a href="#">Alternative 2</a>

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

Type	Location	Approximate Number of Lines <u>Along Road</u>	Diameter (inches)	Pipeline / Utility Material(s)	<u>Alternative</u>
	<u>Wineville Avenue (south of Bellegrave Avenue)</u>	<u>1</u>	<u>24</u>	<u>PVC</u>	<u>Alternative 2</u>
Sewer and operational mains	<u>Wineville Avenue (Cantu-Galleano Ranch Road to Landon Drive)</u>	<u>2 parallel 5 crossing</u>	<u>18, 8 to 24</u>	<u>Vitrified clay; PVC</u>	<u>Alternative 1 Alternative 2 Alternative 4</u>
	<u>Wineville Avenue (Landon Drive to Bellegrave Avenue)</u>	<u>1</u>	<u>24</u>	<u>Vitrified clay</u>	<u>Alternative 1 Alternative 2</u>
	<u>Landon Drive</u>	<u>1</u>	<u>8</u>	<u>Vitrified clay</u>	<u>Alternative 4</u>
	<u>Bellegrave Avenue</u>	<u>1, 2 parallel</u>	<u>8 and 18</u>	<u>Vitrified clay; PVC</u>	<u>Alternative 1 Alternative 2</u>
	<u>Pats Ranch Road (Limonite Avenue to Boca Place)</u>	<u>1</u>	<u>12</u>	<u>PVC</u>	<u>Alternative 1</u>
	<u>Pats Ranch Road (Boca Place to Bellegrave Avenue)</u>	<u>1 parallel</u>	<u>10 12</u>	<u>PVC</u>	<u>Alternative 1</u>
<u>Gas transmission line</u>	<u>Limonite Avenue</u>	<u>2</u>	<u>27 to 32</u>	<u>Unknown</u>	<u>Alternative 2</u>
	<u>Wineville Avenue</u>	<u>1</u>	<u>4</u>	<u>Unknown</u>	<u>Alternative 1 Alternative 2 Alternative 4</u>
<u>Telecommunications</u>	<u>Wineville Avenue</u>	<u>1</u>	<u>Not applicable</u>	<u>Copper; Fiber</u>	<u>Alternative 1 Alternative 2 Alternative 4</u>
	<u>Landon Drive</u>	<u>1</u>	<u>Not applicable</u>	<u>Copper; Fiber</u>	<u>Alternative 4</u>
	<u>Bellegrave Avenue</u>	<u>3 (overhead)</u>	<u>Not applicable</u>	<u>Copper; Fiber</u>	<u>Alternative 1 Alternative 2</u>

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

Type	Location	Approximate Number of Lines <u>Along Road</u> <sup>a</sup>	Diameter (inches)	Pipeline/Utility Material(s)	Alternative
<b>Alternative 2</b>					
Potable water main	Wineville Avenue	2 parallel 4 crossing	12 to 30	CML/CMC and welded steel; CML/CMC	
	Bellegrave Avenue	1 parallel	30	CML/CMC and welded steel	
	Limonite Avenue	1 parallel	30	CML/CMC	
Raw water line	Bellegrave Avenue	1 parallel	30	PVC	
	Wineville Avenue	1 parallel	24	PVC	
Sewer main	Wineville Avenue	3 parallel 6 crossing	8 to 24	Vitrified clay	
	Limonite Avenue	1 crossing	8	Vitrified clay	
Gas transmission line	Limonite Avenue	2 parallel	27 to 32	Unknown	
<b>Alternative 4</b>					
Potable water main	Wineville Avenue	1 parallel 2 crossing	16 and 18	CML/CMC and welded steel	
	Landon Drive	1 parallel	16	CML/CMC and welded steel	
Sewer main	Wineville Avenue	1 parallel 2 crossing	8 and 18	Vitrified clay	
	Landon Drive	1 parallel	8	Vitrified clay	

**Note:**

<sup>a</sup> Unless designated, utilities are underground.

Sources: ([Johnson, 2018](#); [Jurupa Community Services District, 2012](#); [Jurupa Community Services District, 2013](#); [Jurupa Community Services District, 2016](#); [Jurupa Community Services District, 2018](#); [Riverside County Flood Control and Water Conservation District, 2018](#); [SoCal Gas, 2017](#))

### 4.7.11 Alternatives Impact Analysis

#### Alternatives Analysis Scope

The following analysis considers only the environmental impacts resulting from construction and operation of each alternative alignment segment. Any specific alternative replaces only a portion of the Revised Project and would require combination with the remaining unaffected segments of the Revised Project to form a complete alternative route through Jurupa Valley.

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

Impacts resulting from construction and operation of the additional Revised Project elements necessary to form a complete alternative route are not considered in this section. A discussion of the environmental impacts resulting from construction and operation of the complete alternative route, comprised of each alternative alignment plus the unaffected Revised Project elements, is provided in Chapter 6: Comparison of Alternatives.

### Impacts Avoided by the Alternatives

Alternatives 1 through 4 would be constructed in the same general project area as the revised project and would have no impact on the following four CEQA Appendix G significance criteria:

- 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, would create a significant hazard to the public or the environment
- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area
- f. For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area
- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

Alternatives 1 through 4 would not involve construction within a known hazardous materials site, nor would they be located within the vicinity of a public airport, private airport, or private airstrip. Alternatives 1 through 4 would either be constructed within city streets in suburban Jurupa Valley (Alternatives 1, 2 and 4), or within active agricultural fields (Alternative 3), and would not be constructed near wildlands. Impacts associated with these significance criteria are not discussed further.

Alternative 3 would have no impact on the following CEQA Appendix G significance criteria:

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- d. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

Alternative 3 involves construction within an active agriculture field. There are no schools within 0.25 mile of Alternative 3. Alternative 3 does not involve construction within roadways, therefore impacts to emergency response and evacuation plans due to roadway hazards would not occur. Impacts associated with these significance criteria are not discussed under Alternative 3.

### Alternative 1 and 4 Environmental Impacts and Mitigation Measures

Alternative 1 would install the Proposed Project transmission line underground within Wineville Avenue, Bellegrave Avenue, and Pats Ranch Road. The Alternative 1 underground transmission line would connect with the Revised Project underground transmission line within Pats Ranch

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

Road. Alternative 4 involves construction of a segment of underground transmission line that follows Wineville Avenue and Landon Drive. Two riser poles would be constructed at either end of the underground segment.

<b>Impact Hazards-a: Would Alternative 1 or 4 create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</b>	<b>Significance Determination</b>
	<b>Construction: <i>Less than Significant</i></b>
	<b>Operation &amp; Maintenance: <i>Less than Significant</i></b>

### Construction

Construction of Alternatives 1 and 4 would involve limited transport, use, and disposal of hazardous materials. Hazardous materials required to fuel and lubricate construction vehicles and heavy motorized equipment would include gasoline, diesel fuel, transmission fluid, brake fluid, hydraulic fluid, solvents, motor oils, and lubricating grease. Impacts related to the use of hazardous materials would be associated with the unintentional release or spill of hazardous materials, which could compromise water quality or groundwater, or present hazardous health conditions for workers and the public. While hazardous materials used during construction would only be present on site in relatively small quantities, the potential still exists for a small spill of these materials to occur. A hazardous materials spill would be a significant impact.

EPE HAZ-01 (Health and safety, hazardous materials handling, and emergency response plans), EPE HAZ-03 (SPCC, SWPPP, and Hazardous Materials Business Plan), and EPE HAZ-04 (worker training) would be implemented by SCE to train workers and address the use, transport, storage, and potential accidental releases of hazardous materials. *The impact would be less than significant.*

### Operation and Maintenance

Operation, maintenance and inspections of Alternatives 1 and 4 transmission lines would require the periodic use, transport, and disposal of the same hazardous materials required for construction. Materials would not be stored along the transmission alignment. The largest volume of hazardous materials that would be used during operation and maintenance of the transmission line would consist of the fuel contained within vehicles that would be accessing the transmission corridor during inspections and maintenance activities. It would be very unlikely that a vehicle would leak or spill of hazardous material during construction and the potential quantity that could be spilled would be so small that it would not create a significant hazard to the public. *Impacts would be less than significant.*

**Mitigation Measures: None Required**

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

<p>Impact Hazards-b: Would Alternative 1 or 4 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?</p>	<b>Significance Determination</b>
	Construction: <i>Less than Significant with Mitigation</i>
	Operation & Maintenance: <i>Less than Significant</i>

### Construction

#### *Potential Damage to Underground Utilities and Release Hazardous Materials*

Buried pipelines containing raw sewage run parallel to or cross the Alternative 1 alignment within Wineville Avenue, Bellegrave Avenue, and parts of Pats Ranch Road. Alternative 4 involves underground construction within Wineville Avenue and Landon Drive where underground sewer lines may be present. Excavation and related ground-disturbing activities could potentially damage or rupture buried utility lines that could be released into the environment, resulting in a significant impact. Section 4216 of the California Government Code requires SCE to delineate an excavation area and inform appropriate regional notification centers, which would ensure that utility providers identify underground utilities, including pressurized sewage pipelines, present in the alternative alignment. Section 4216 further requires SCE to hand excavate 24 inches on either side of pressurized sewer pipelines prior to using power equipment. Non-pressurized sewer pipelines are not subject to CGC § 4216. The Jurupa Valley sewer system is not pressurized in all locations (Jurupa Community Services District, n.d.). Non-pressurized pipelines may be impacted, and raw sewage released, during underground construction if additional avoidance measures are not implemented.

Implementation of MM HAZ-04 and MM UTIL-01 would reduce impacts associated with damage or rupture to buried utilities by requiring SCE to notify utility companies, adjust underground work locations, and uncover existing utility pipelines through potholing. *The impact would be less than significant with mitigation.*

#### *Accidental Release of Hazardous Materials*

Impacts associated with the accidental release of hazardous materials used for construction are discussed under Impact Hazards-a for Alternative 1 and 4, above. *The impact would be less than significant.*

### Operation and Maintenance

Alternatives 1 and 4 operation and maintenance activities would have a very minor potential to leak any hazardous material, as described under Impact Hazard-a, above. No excavation near utility lines containing hazardous materials would occur during operation and maintenance. *The impact would be less than significant.*

Mitigation Measures: MM HAZ-04 (refer to Section 4.7.9: Revised Project Mitigation Measures) and MM UTIL-01 (refer to Section 4.11.8: Revised Project Mitigation Measures)

Significance after Mitigation: Less than Significant



## 4.7 HAZARDS AND HAZARDOUS MATERIALS

<p>Impact Hazards-c: Would Alternative 1 or 4 emit hazardous emissions or handle hazardous or acutely hazardous materials, or substances, or waste within 0.25 mile of an existing or proposed school?</p>	<b>Significance Determination</b>
	<p>Construction: <i>Less than Significant</i></p> <p>Operation &amp; Maintenance: <i>Less than Significant</i></p>

### Construction

#### *Emissions*

Two schools are located within 0.25 mile of Alternative 1, and one school is located within 0.25 mile of Alternative 4. Construction emissions from Alternatives 1 and 4 would include diesel emissions and fugitive dust due to the use of diesel-powered equipment and grading activities during construction. Concentrations of air pollutants would increase and could pose a threat to sensitive receptors located within 1,000 feet (less than 0.19 mile) from work areas. There are no schools located within 1,000 feet of Alternatives 1 or 4. Alternative 1 and Alternative 4 would not cause air quality to exceed air quality standards at a school. *The impact would be less than significant.*

#### *Hazardous Emissions from Potential Damage to Underground Utilities*

~~Natural gas pipelines would be the only hazardous materials likely to occur in the Alternative 1 alignment. Alternatives 1 and 4 are located along a known natural gas pipeline in Wineville Avenue and several sewer lines.~~ Natural gas or sewage may be released as a result of accidental rupture to an underground pipeline; however, a release concentrations of the gas would become diluted over distance, and would not be hazardous at the nearest school, due to the distance of 1,150 feet a distance of 1,150 feet from the pipeline. Any gas would dissipate prior to reaching the school. *The impact would be less than significant.*

#### *Hazardous Materials and Waste Handling*

Alternatives 1 and 4 would transport and use limited amounts of hazardous substances within 0.25 mile of schools along the Alternative 1 and 4 alignments as discussed under Impact Hazards-a, above. Any spill would be absorbed by soils within a short distance and would not be transported to the nearest school, approximately 1,150 feet away from Alternative 1. *The impact would be less than significant.*

### Operation and Maintenance

Alternatives 1 and 4 would require routine inspections of the underground vaults and conductors by qualified electricians, similar to the underground segment of the Revised Project. Maintenance of Alternatives 1 and 4 may require handling and/or use of small quantities of hazardous or acutely hazardous material, or substances, or waste within 0.25 mile of an existing or proposed school; however, quantities of hazardous substances would be limited to the amount contained in fuel tanks of equipment conducting maintenance and inspections on site. Operation and maintenance of Alternatives 1 and 4 would not emit or handle hazardous materials that could transport to a school site. *The impact would be less than significant.*

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measures: None Required

<p><b>Impact Hazards-g: Would Alternative 1 or 4 impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</b></p>	<b>Significance Determination</b>
	Construction: <i>Less than Significant with Mitigation</i>
	Operation & Maintenance: <i>Less than Significant</i>

### Construction

Construction of Alternative 1 would require temporary full or partial closure of segments of Wineville Avenue, Bellegrave Avenue, and Pats Ranch Road during project construction to ensure the safety of the public and construction workers. Full road closures may last up to 7 work days at each vault location (SCE, 2017). Alternative 1 includes the installation of 17 vaults on city streets. Installation of vaults could result in 6 months of closures along the Alternative 2 alignment. Duct bank installation would take up to 6 months and may require lane closures.

Construction of Alternative 4 would require full or partial road closure of segments of Wineville Avenue and Landon Drive, which could significantly impact available emergency routes and potentially interfere with emergency response. Similar to Alternative 1, temporary full or partial road closure would be scheduled for up to 7 work days at each vault location (SCE, 2017). Eight vaults would be constructed within Wineville Avenue and Landon Drive. Temporary road or lane closures along this segment of Wineville Avenue could last up to 5 weeks. Closures on Landon Drive may last an additional 5 weeks. Duct bank installation would take an additional 2 months. Temporary road or lane closures could impair implementation of an emergency response plan or evacuation plan, or disrupt emergency vehicle traffic and access, resulting in a significant impact.

SCE would implement EPE TRANS-03 (traffic control plans); however, impacts could still be significant because the EPE TRANS-03 does not require that emergency access is maintained at all times and the road closure could result in delays to emergency response times, which could interfere with an adopted emergency response plan. MM TRANS-06 would reduce impacts by requiring notification of emergency personnel and accommodation of emergency vehicles by maintaining a minimum of one lane clear or easily cleared on urban arterials and secondary roadways at all times. *Impacts would be less than significant with mitigation.*

### Operation and Maintenance

Operation and maintenance of Alternatives 1 and 4 would not require SCE personnel to conduct periodic maintenance of the line by accessing underground vaults. Vault inspections would require lane closures for less than 1 day during annual inspections or emergency maintenance, and the lane closure would be limited to the area immediately surrounding the vault. Operation and maintenance would not impair or physically interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. *The impact would be less than significant.*

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measures: MM TRANS-06 (refer to Section 4.13.8: Revised Project Mitigation Measures)  
 Significance after Mitigation: Less than Significant

Impact Hazards-i: Would Alternative 1 or 4 expose workers or the public to excessive shock hazards?	Significance Determination
	Construction: <i>Less than Significant</i>
	Operation & Maintenance: <i>Less than Significant with Mitigation</i>

### Construction

The proposed power line would not be electrified during project construction. Construction activities would involve connecting into the Mira Loma – Vista #1 230-kV Transmission Line. Construction of Alternatives 1 and 4 would meet or exceed ~~IEEE, ANSI~~, CPUC GO 95 and GO 128 safety standards, and OSHA and Cal/OSHA safety regulations. *Impacts would be less than significant.*

### Operation and Maintenance

There is the potential for inductive and conductive interference between the Alternative 1 and 4 underground transmission line and existing conductive objects (e.g., metallic utility lines) within or in close proximity to the Alternatives 1 and 4 underground transmission lines. Impacts to workers and the public could be potentially significant if the touch voltage exceeds safety thresholds. Implementation of MM HAZ-05 would reduce the touch voltage under steady-state and fault conditions to below threshold levels. SCE would prepare an Induced ~~Current Voltage~~ Touch study and install protection measures. *Impacts would be less than significant with mitigation.*

Mitigation Measures: MM HAZ-05 (refer to Section 4.7.9: Revised Project Mitigation Measures)  
 Significance after Mitigation: Less than Significant

### Alternative 2 Environmental Impacts and Mitigation Measures

Alternative 2 involves construction of an underground transmission line between Limonite Avenue and the Mira Loma – Vista #1 230-kV Transmission Line. Alternative 2 would extend the Revised Project underground route north to the tie-in location at the intersection of Wineville Avenue and Cantu-Galleano Ranch Road. The underground transmission line would be constructed in Wineville Avenue and Limonite Avenue and would meet the Revised Project underground alignment at the intersection of Limonite Avenue and Pats Ranch Road.

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

<p><b>Impact Hazards-a:</b> Would Alternative 2 create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</p> <p><b>Impact Hazards-j i:</b> Would Alternative 2 expose workers or the public to excessive shock hazards?</p>	<b>Significance Determination</b>
	<p>Construction: <i>Less than Significant with Mitigation</i></p>
	<p>Operation &amp; Maintenance: <i>Less than Significant</i></p>

Alternative 2 would have the same impacts as described for Alternatives 1 and 4 under Impact Hazards-a, and ~~j~~ i because Alternative 2 would require the same hazardous materials to construct and operate as Alternatives 1, 4, and the Revised Project and Alternative 2 would be located in proximity to metallic pipelines, similar to Alternatives 1 and 4. Refer to the impact discussion under Alternatives ~~1~~ 1 and 4, above.

**Mitigation Measures:** ~~None~~ MM HAZ-05 (refer to Section 4.7.9: Revised Project Mitigation Measures)

**Significance after Mitigation:** Less than Significant

<p><b>Impact Hazards-b:</b> Would Alternative 2 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?</p>	<b>Significance Determination</b>
	<p>Construction: <i>Less than Significant with Mitigation</i></p>
	<p>Operation &amp; Maintenance: <i>Less than Significant</i></p>

### Construction

#### *Potential Damage to Underground Utilities and Release Hazardous Materials*

Alternative 2 involves underground construction within Wineville Avenue and Limonite Avenue. Buried pipelines containing raw sewage exist within Wineville Avenue. Two buried natural gas pipelines exist within Limonite Avenue. Alternative 2 trench and vault excavation activities have the potential to damage or rupture buried pipelines, releasing hazardous materials into the environment. The release of hazardous materials would be a significant impact.

Adherence to Section 4216 of the California Government Code would ensure that utility providers identify gas and pressurized sewer mains present within the alignment. Section 4216 further requires SCE to hand excavate 24 inches on either side of gas and pressurized sewer mains prior to using power equipment. Non-pressurized sewer lines are not subject to CGC § 4216. The Jurupa Valley sewer system is not pressurized in all locations. Non-pressurized sewer lines may be impacted during underground construction if additional avoidance measures are not implemented. SCE has not identified EPEs to reduce impacts to non-pressurized sewer lines. MM HAZ-04 and MM UTIL-01 would reduce impacts associated with damage or rupture of buried sewer lines by requiring SCE to notify utility companies of construction, adjust underground work locations, and uncover existing utility pipelines through potholing. *The impact would be less than significant with mitigation.*

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### *Accidental Release of Hazardous Materials*

The risk and impacts associated with the accidental release of hazardous materials used for construction of Alternative 2 would be identical to Alternatives 1 and 4 and are discussed under Impact Hazards-a for Alternative 1 and 4, above. *The impact would be less than significant.*

### **Operation and Maintenance**

Operation and maintenance activities of Alternative 2 would be identical to operation and maintenance of Alternatives 1 and 4 and would have a very minor potential to leak any hazardous material. This impact is described under Alternatives 1 and 4 Impact Hazard-a, above. *The impact would be less than significant.*

Mitigation Measures: MM HAZ-04 (refer to Section 4.7.9: Revised Project Mitigation Measures) and MM UTIL-01 (refer to Section 4.11.8: Revised Project Mitigation Measures)

Significance after Mitigation: Less than Significant

	Significance Determination
Impact Hazards-c: Would Alternative 2 emit hazardous emissions or handle hazardous or acutely hazardous materials, or substances, or waste within 0.25 mile of an existing or proposed school?	Construction: <i>Less than Significant with Mitigation</i>
	Operation & Maintenance: <i>Less than Significant</i>

### **Construction**

#### *Emissions*

Alternative 2 would require the use of diesel-powered equipment and grading activities during construction would emit TACs in the form of diesel exhaust emissions and fugitive dust within 0.25 miles of the two schools. The nearest school is located 650 feet away from Alternative 2 on Wineville Avenue, south of Limonite Avenue. Concentrations of air pollutants have the potential to exceed air quality thresholds within 1,000 feet of underground construction. Implementation of EPE AQ-01 (comply with SCAQMD) and EPE AQ-02 (worker training) would ensure that construction activities comply with applicable SCAQMD requirements, and construction crew and contractors would be trained in an Air Quality WEAP prior to starting project work. The impact would remain significant because the EPEs do not minimize TAC emissions. MM AQ-01 and MM AQ-02 require SCE to incorporate a dust plan, reroute construction trucks away from sensitive receptors, and reduce exhaust emissions, mud/dirt track out and dust, thereby reducing TAC emissions near the two schools. *The impact would be less than significant with mitigation.*

#### *Hazardous Emissions from Potential Damage to Underground Utilities*

Alternative 2 is located parallel to two natural gas pipelines. Excavation for the underground transmission line could potentially cause rupture of a natural gas line or sewer main and release of hazardous materials, if proper precautions were not taken. ~~Natural gas or sewage may be released as a result of accidental rupture to an underground pipeline, but a release would not be hazardous due to the distance to the school. SCE is required under CGC § 4216 to follow specific protocols prior to excavating to minimize potential for dig-ins to a natural gas line or pressurized sewer line. Not all sewer lines in Jurupa Valley are pressurized. The impact would remain~~

## 4.7 HAZARDS AND HAZARDOUS MATERIALS

~~potentially significant for non-pressurized sewer lines. Implementation of MM UTIL-01 and MM HAZ-04, which requires notification of utility providers and potholing to locate buried utilities, would reduce the risk of releasing raw sewage during construction. The impact would be less than significant *with mitigation*.~~

### *Hazardous Materials and Waste Handling*

Alternative 2 would transport and use limited amounts of hazardous substances within 0.25 mile of schools. SCE would follow all applicable federal, state, and local requirements for handling and disposing of hazardous materials and waste. ~~Any spill would be absorbed by soils within a short distance and would not be transported to the nearest school, approximately 600 feet away from Alternative 2. Hazardous materials that are spilled on site may be transported to a school if leaks and spills are not properly cleaned up following the release. SCE would implement EPE HAZ-01 health and safety, hazardous materials handling, and emergency response plans), EPE HAZ-03 (SPCC, SWPPP, and Hazardous Materials Business Plan), and EPE HAZ-04 (worker training) to address potential accidental releases of hazardous materials. The impact would be less than significant.~~

### **Operation and Maintenance**

Operation and maintenance of Alternative 2 would not require handling substantial quantities of hazardous or acutely hazardous material, or substances, or waste within 0.25 mile of an existing or proposed school. Operation and maintenance of the alternative would not cause substantial increases in ambient air pollutant concentrations, TAC emissions, or carbon monoxide emissions from periodic truck use. *The impact would be less than significant.*

Mitigation Measures: ~~MM HAZ-04 (refer to Section 4.7.9: Revised Project Mitigation Measures),~~ MM AQ-01, MM AQ-02 (refer to Section 4.3.8: Revised Project Mitigation Measures)

Significance after Mitigation: Less than Significant

	Significance Determination
Impact Hazards-g: Would Alternative 2 impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Construction: <i>Less than Significant with Mitigation</i>
	Operation & Maintenance: <i>Less than Significant</i>

### **Construction**

An emergency response plan has not been adopted by the City of Jurupa Valley. Van Buren Avenue is the only street in the vicinity of Alternative 2 that has been formally identified as an evacuation route (City of Riverside, 2012b). Alternative 2 duct bank and vault construction would require temporary full or partial closure of Wineville Avenue and Limonite Avenue, which are identified in the 2017 Draft General Plan as Primary Corridors (secondary roadway and urban arterial, respectively), and may be used during an emergency evacuation. Closures of Wineville Avenue and Limonite Avenue could last for up to 7 days during installation of each vault. Eighteen vaults would be constructed within Wineville Avenue. Construction of the vaults would require closures along Wineville Avenue for up to 6 months. Duct bank installation

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would require an additional 6 months. Two vaults and approximately 0.2 mile of duct bank would be constructed on Limonite Avenue. Partial or full closure of Limonite Avenue would occur for approximately 1 month. Temporary road or lane closures could impair implementation of an emergency response plan or evacuation plan, or disrupt emergency vehicle traffic and access, resulting in a significant impact.

SCE would implement EPE TRANS-03 (traffic control plans). EPE TRANS-03 does not require that emergency access is maintained at all times and the road closure could result in delays to emergency response times. The impact would remain significant. Implementation of MM TRANS-06 would reduce impacts by requiring notification of emergency personnel and accommodation of emergency vehicles by maintaining a minimum of one lane clear or easily cleared on urban arterials and secondary roadways at all times. *Impacts would be less than significant with mitigation.*

**Mitigation Measures:** MM TRANS-06 (Refer to Section 4.13.8: Revised Project Mitigation Measures)  
**Significance after Mitigation:** Less than Significant

### Alternative 3 Environmental Impacts and Mitigation Measures

Alternative 3 involves extending the underground segment of the Revised Project by 0.25 mile along I-15 in the Revised Project alignment. The riser poles would be constructed at the north end of the extended underground segment.

<b>Impact Hazards-a: Would Alternative 3 create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</b>	<b>Significance Determination</b>
	<b>Construction: <i>Less than Significant</i></b>
	<b>Operation &amp; Maintenance: <i>Less than Significant</i></b>

### Construction

Alternative 3 construction would involve use of the same hazardous materials as the Revised Project and Alternatives 1 and 4, described above. Alternative 3 be the same as described for Alternatives 1 and 4, above. Spills of hazardous materials could cause a significant impact. EPE HAZ-01 (Health and safety, hazardous materials handling, and emergency response plans), EPE HAZ-03 (SPCC, SWPPP, and Hazardous Materials Business Plan), and EPE HAZ-04 (worker training) would be implemented by SCE to train workers and address the use, transport, storage, and potential accidental releases of hazardous materials. *The impact would be less than significant.*

### Operation and Maintenance

Alternative 3 would not involve transport, use, or disposal of large quantities of hazardous materials. The only hazardous material that would be used during operation and maintenance includes hazardous materials within equipment and vehicles. Operation and maintenance of Alternative 3 would have a low likelihood and low potential quantity of any potential spills of hazardous materials because vehicles and equipment would not be present in the alternative area on a routine basis. *The impact would be less than significant.*

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Mitigation Measures: None Required

Impact Hazards-b: Would Alternative 3 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?	<b>Significance Determination</b>
	Construction: <i>Less than Significant</i>
	Operation & Maintenance: <i>Less than Significant</i>

### Construction

The impacts from potential spills of hazardous materials are addressed under Impact-a, above. The impact from potential spills of hazardous materials would be less than significant. Alternative 3 is not located in proximity to or parallel to any pipelines containing hazardous materials. Construction of Alternative 3 would have no impact from potential release of hazardous material from a buried utility line.

### Operation and Maintenance

The only hazardous materials that would be present in the area during operation and maintenance would involve the hazardous materials described in Impact-a above. Potential spills of hazardous materials would not cause a significant hazard to the public. *The impact would be less than significant.*

Mitigation Measures: None Required

Impact Hazards-i: Would Alternative 3 expose workers or the public to excessive shock hazards?	<b>Significance Determination</b>
	Construction: <i>Less than Significant</i>
	Operation & Maintenance: <i>Less than Significant</i>

### Construction

The Alternative 3 underground transmission line would not be energized during construction. Construction activities would involve stringing transmission lines on riser poles and pulling transmission lines through underground duct banks. Construction of Alternative 3 would meet or exceed ~~IEEE, ANSI~~ CPUC GO 95 and GO 128 safety standards, and OSHA and Cal/OSHA safety regulations. *Impacts would be less than significant.*

### Operation and Maintenance

The implementation of standard operating procedures would minimize the exposure of workers and the public to excessive shock hazards from contact with conductive objects. Concrete bollards would be installed around riser poles to protect the conductor cable and riser pole shroud from errant farm equipment. There are no known buried conductive objects within or in close proximity to the Alternative 3 alignment. *Impacts would be less than significant.*

Mitigation Measures: None Required



## 4.7 HAZARDS AND HAZARDOUS MATERIALS

### 4.7.12 No Project Alternative Impact Analysis

The No Project Alternative would require routine transport, use, and disposal of hazardous materials during construction and operation of the battery storage facility and gas-fired generation. Accidental releases of these hazardous materials could occur as spills or leaks. Battery storage (Alternative 13) and the addition of a gas fired power plant (Alternative 16) would increase the storage and handling of hazards, and risks associated with the accidental spill, leak, or release of hazardous materials and waste relative to the Revised Project; however, these impacts would occur within existing gas-fired power plants or substations and would not increase the risk substantially relative to the baseline conditions of these facilities. *The impact would be less than significant.*

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## 4.7 HAZARDS AND HAZARDOUS MATERIALS

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