

5.9 Hazards and Hazardous Materials

This section evaluates potential hazardous materials and public health impacts that would be associated with the Proposed Project and alternatives.

5.9.1 Setting

This section provides setting information specific to hazards and hazardous materials in the areas of the Proposed Project and alternatives. It discusses the potential presence of hazardous materials in soil and groundwater based on past and current operations, as well as in the wood power poles that would be removed under the Proposed Project. Wildfire hazard areas are also identified, as are the locations of nearby airports and schools. This section concludes with a discussion of the regulatory setting applicable to hazards and hazardous materials.

The term “hazardous materials” refers to both hazardous substances and hazardous wastes. Under federal and state laws, any material, including waste, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). The term “hazardous material” is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.¹

In some cases, past industrial or commercial activities on a site may have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The four basic exposure pathways through which an individual can be exposed to a chemical agent include inhalation, ingestion, bodily contact, and injection. Exposure can occur as a result of an accidental release during transportation, storage, or handling of hazardous materials. Disturbance of subsurface soil during construction can also lead to exposure of workers or the public from soils contaminated by hazardous materials from previous spills or leaks.

In addition to toxic substances, the California Public Utilities Commission (CPUC) generally provides information about electric and magnetic fields (EMF) in its environmental documents, including this Environmental Impact Report (EIR), to inform the public and decision makers; however, it does not consider EMF, in the context of California Environmental Quality Act (CEQA), as an environmental impact because there is no agreement among scientists that EMF creates a potential health risk and because CEQA does not define or adopt standards for defining any potential risk from EMF. For informational purposes, additional information about EMF generated by power lines is provided in Chapter 3, *Project Description*, and Appendix C.

¹ State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

Existing Environment

Potential Presence of Hazardous Materials in Soil and Groundwater

To evaluate the potential presence of hazardous materials in soil and groundwater, a regulatory database search of sites in the vicinity of the Proposed Project and alternative corridors was conducted to identify the documented use, storage, generation, or releases of hazardous materials and/or petroleum products in the area (CEH&S Environmental Engineering, 2012; SWRCB, 2014a and 2014b). The database search process included reviews of lists generated by federal, state, and county regulatory agencies for historically contaminated properties and for businesses that use, generate, or dispose of hazardous materials or petroleum products in their operation. In addition, active contaminated sites that are currently undergoing monitoring and remediation are identified.

The listed sites within the vicinity of the Proposed Project are provided in **Table 5.9-1**. These sites may have been subjected (or are suspected of being subjected) to a release of hazardous materials or petroleum products that has resulted in contamination of soil and/or groundwater. The table identifies two open cases within 0.5 mile of the Proposed Project. Both sites are identified as Category 1, which includes small sites characterized by soil or groundwater contamination that do not pose an immediate human health threat and do not extend off-site onto neighboring properties (SWRCB, 2014a). The sites are summarized below (CEH&S Environmental Engineering, 2012):

- **Smith Pumps Site** – This site is located at 1299 Lawrence Drive in the City of Thousand Oaks, approximately 0.16 mile northeast of Newbury Park Substation. The site is identified as having soil contamination by solvents. It is listed as not posing an immediate human health threat and existing contamination does not extend off-site onto neighboring properties (Category 1).
- **Northrop Aircraft Division Site** – This site is located at 1515 Rancho Conejo Boulevard in the City of Thousand Oaks, approximately 0.43 mile east-northeast of Newbury Park Substation. The site has been identified as having groundwater contamination with perchlorate, petroleum, and volatile organic compounds being the contaminants of concern. It is listed as not posing an immediate human health threat and existing contamination does not extend off-site onto neighboring properties (Category 1).

Wood Treatment Products

The Proposed Project would include removal of six wood poles at Newbury Substation. The wood poles could be treated with chemicals such as pentachlorophenol, creosote, and chromated copper arsenate. Typically, these chemicals are applied to utility wood poles during manufacturing to protect wood from rotting due to insects and microbial agents. These chemicals, for certain uses and quantities, can be considered to be hazardous materials, which require specific handling procedures and disposal prescribed by state and federal regulations. Additionally, the base of the treated wood poles may be wrapped with copper naphthenate paper, also known as CuNap wrap.² This paper has

² CuNap wrap is a self contained delivery system for copper naphthenate, the internationally recognized wood preservative that fights the damaging effects of moisture, decay, and insect attack.

**TABLE 5.9-1
HAZARDOUS MATERIALS SITES IN THE VICINITY OF THE PROPOSED PROJECT**

Site Name	Distance to Project Corridor ^a	Regulatory List ^b	Notes
Peach Hill Organic Recycling	0.37 mile N	Landfills	Composting Operation
City of Thousand Oaks	0.25 mile E	UST	FACILITY ID: 056-000-002904
United Parcel Service	0.46 mile E	UST	FACILITY ID: 056-000-001937
Wendy Drive Chevron	0.38 mile S	UST	FACILITY ID: 056-000-001937
Vulcan Materials Co. Moorpark	0.48 mile E	TRI (Air)	ID No: 110013286050
Baxter Bioscience	0.32 mile E	TRI (Air)	ID No: 110002910752
JDK Controls Inc.	0.24 mile E	TRI (Air)	ID No: 110002142048
Wilson Golf Division	0.13 mile S	TRI (Air)	ID No: 110002142039
Fluid Ink Technology, Inc.	0.35 mile E	TRI (Air)	ID No: 110002145580
Polycore Electronics, Inc.	0.19 mile NE	Contaminated EnviroStor Site	No further action as of 7/31/1991
Conejo Circuits, Inc.	0.25 mile E	Contaminated EnviroStor Site	NA
Multilayer Prototypes, Inc.	0.37 mile S	Contaminated EnviroStor Site	NA
Baxter Health Corp.	0.49 mile E	Contaminated EnviroStor Site	NA
Wendy Arco Station	0.39 mile S	LUST Cleanup Site	Case closed as of 10/18/2011
Amplica (Former)	0.34 mile S	GeoTracker	Case closed as of 3/31/1999
Home Savings of America	0.15 mile E	LUST Cleanup Site	Case closed as of 12/13/1995
Chevron #9-0415	0.40 mile S	LUST Cleanup Site	Case closed as of 8/8/2012
Smith Pumps	0.16 mile E	GeoTracker	Open – Category 1 type
GTE	0.43 mile S	GeoTracker	Case closed as of 10/10/1996
Hill Canyon Treatment Plant	0.20 mile E	LUST Cleanup Site	Case closed as of 6/2/2004
Prudential Overall Supply	0.27 mile E	GeoTracker	Case closed as of 7/30/2002
Northrop Aircraft Division	0.43 mile E	GeoTracker	Open
Conejo Corporate Center	0.23 mile E	GeoTracker	Case closed as of 4/19/1997
Former Compsat Corp.	0.34 mile S	GeoTracker	Case closed as of 4/1/1999
Former Amplica	0.29 mile S	GeoTracker	Case closed as of 4/1/1999
Metropolitan Life	0.43 mile E	GeoTracker	Case closed as of 12/13/1995
Hitch Blvd. Lift Station	0.40 mile W	GeoTracker	Case Closed as of 4/15/2002

^a The distances shown represent the approximate distance to closest portion of the Proposed Project.

^b Date Source Notes:

Landfills: Maintained by the California Integrated Waste Management Board.

UST: Underground Storage Tank sites; list maintained by the California State Water Resources Control Board, Geotracker.

TRI (Air): Air Toxic Release Inventory Facilities; maintained by U.S. Environmental Protection Agency.

Contaminated EnviroStor Sites: Maintained by the California Department of Toxic Substances Control.

LUST Cleanup Site: Leaking Underground Storage Tanks; maintained by the California State Water Resources Control Board.

GeoTracker Site: Maintained by the California State Water Resources Board and the California Department of Toxic Substances Control.

Cleanup Program Site:

NA: No additional information is available.

SOURCE: CEH&S Environmental Engineering, 2012; SWRCB, 2014a and 2014b

been accepted as a wood preservative for several decades and has been employed in non-pressure treatments of wood and other products. Copper naphthenate is a common preservative and its use has increased recently in response to environmental concerns associated with other wood treatment products.

Wildfire Hazards

Responsibility for responding to wildfires in the Proposed Project area is assigned to the Ventura County Fire Department (VCFD). The VCFD has implemented a Wildfire Action Plan to assist residents in saving themselves and their property during a wildfire through advanced planning (VCFD, 2013). The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire hazard severity zones in Ventura County (County), including the Proposed Project area (see **Figure 5.9-1, Wildfire Hazards**). The Proposed Project area is mostly located in areas mapped as a very high Fire Hazard Severity Zone, with smaller lengths of the Proposed Project alignment found in high or moderate Fire Hazard Severity Zones (Cal Fire, 2007; 2010).

Airports

There are no public airports or private airstrips within 2 miles of the Proposed Project. The closest public airports are the Camarillo Airport located approximately 7 miles to the west of Segment 3, and the Santa Paula Airport located approximately 9.5 miles northwest of Segment 2. In addition, there are numerous helipads in the area, including one at Moorpark Substation. The next closest helipads to the Proposed Project are the RI Science Center Helistop located approximately 1 mile east of Newbury Substation, the TWI II Heliport located approximately 3 miles south of Newbury Substation, and the Los Robles Regional Medical Center helipad located approximately 3 miles to the northeast of Newbury Substation.

Schools

There are three schools that are located within 0.25 mile of the Proposed Project, including:

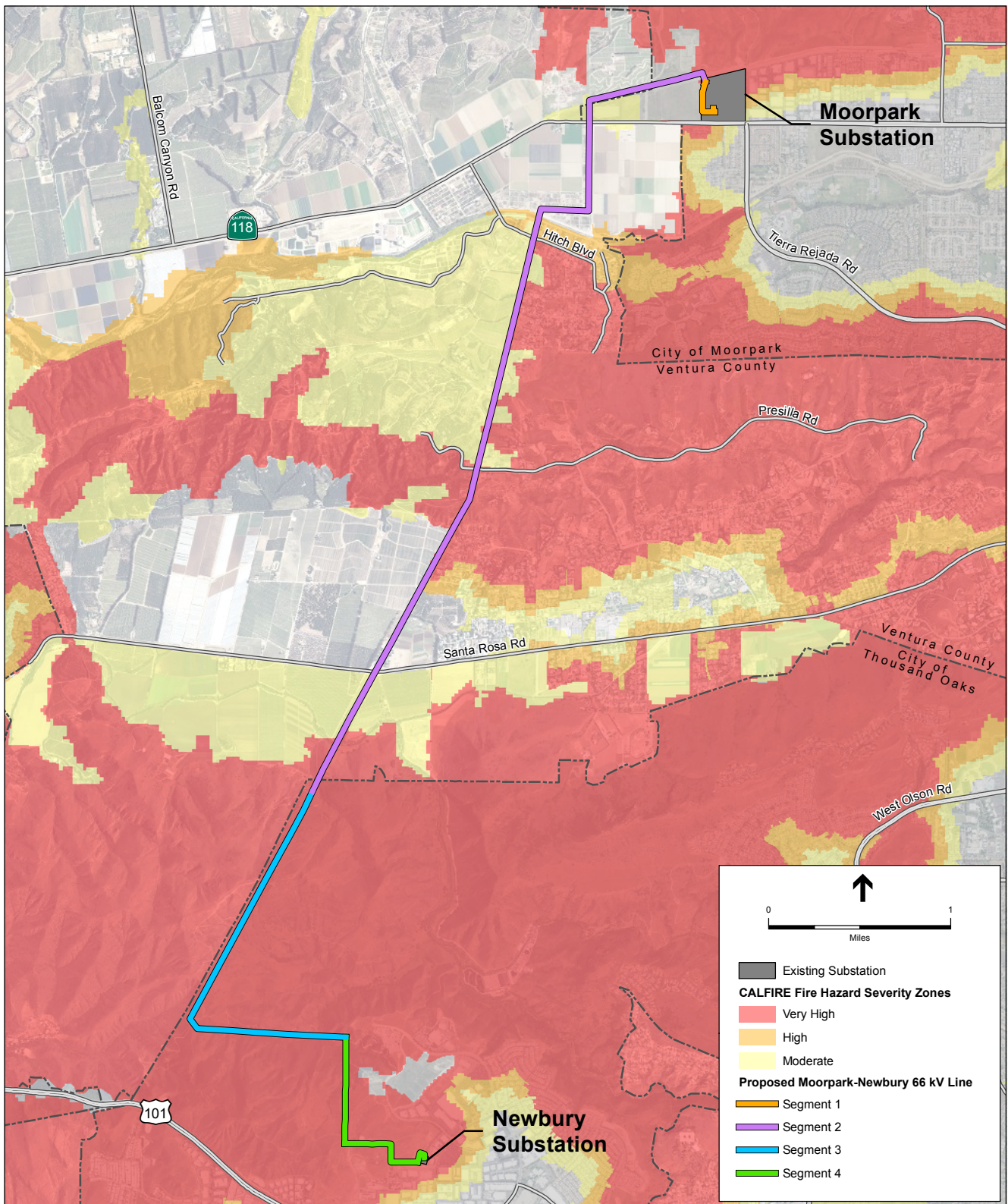
- The Newbury Park Adventist Academy, a private high school located at the terminus of Wendy Drive, approximately 0.15 mile south of Segment 4, west of Newbury Substation.
- The Conejo Adventist Elementary School, a private school (pre-school through 8th grade) located approximately 0.19 mile south of Segment 4, west of Newbury Substation.
- Passageway School, a special education school that is located approximately 0.08 mile south of Newbury Substation.

Regulatory Setting

Federal

Occupational Safety and Health Administration

The federal Occupational Safety and Health Administration (OSHA) enforces regulations covering the handling of hazardous materials in the workplace. The regulations established in the Code of Federal Regulations (CFR) Title 29 are designed to protect workers from hazards



SOURCE: SCE, 2013; CALFIRE, 2007

Moorpark-Newbury 66 kV Subtransmission Line Project. 207584.15

Figure 5.9-1
Wildfire Hazards

associated with encountering hazardous materials at the work site. The regulations require certain training, operating procedures, and protective equipment to be used at work sites where hazardous materials could be encountered.

Resource Conservation and Recovery Act

Under the federal Resource Conservation and Recovery Act (RCRA), individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements and is approved by the U.S. Environmental Protection Agency (USEPA). The USEPA approved California's RCRA program, referred to as the Hazardous Waste Control Law (HWCL) in 1992.

Toxic Substance Control Act

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

CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) was developed to protect the water, air, and land resources from the risk created by past chemical disposal practices. This act is also referred to as the Superfund Act, and the sites listed under it are referred to as Superfund sites. Under CERCLA, the USEPA maintains a list, known as the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), of all contaminated sites in the nation that have in part or are currently undergoing clean-up activities. CERCLIS contains information on current hazardous waste sites, potential hazardous waste sites, and remediation activities. This includes sites that are on the National Priorities List (NPL) or being considered for the NPL.

State

California Code of Regulations

The California Code of Regulations (CCR), Title 22, Section 66261.20-24, contains technical descriptions of characteristics that would classify wasted material, including soil, as hazardous waste. When excavated, soils with concentrations of contaminants higher than certain acceptable levels must be handled and disposed as a hazardous waste.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) administer the requirements of the Clean Water Act that regulate pollutant discharges into waterways of the U.S. The Los Angeles Regional Water Quality Control Board (LARWQCB) enforces site cleanup regulations for illicit discharges that have resulted in contamination of groundwater in the Proposed Project area.

California Hazardous Materials Release Response Plans and Inventory Law

The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials on-site prepare a business plan and submit it to local health and fire departments. The business plan must include details of the facility and business conducted at the site, an inventory of hazardous materials that are handled and stored on-site, an emergency response plan, and a safety and emergency response training program for new employees with an annual refresher course.

California Occupational Safety and Health Administration

In California, the California OSHA (CalOSHA) regulates worker safety similar to the federal OSHA.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In January 1996, the California Environmental Protection Agency (CalEPA) adopted regulations, which implemented the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The program has six elements, including: (1) hazardous waste generators and hazardous waste on-site treatment; (2) underground storage tanks (USTs); (3) aboveground storage tanks (ASTs); (4) hazardous materials release response plans and inventories; (5) risk management and prevention programs; and (6) Unified Fire Code hazardous materials management plans and inventories. The plan is implemented at the local level and the agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency (CUPA). In the Proposed Project area, the Ventura County Department of Environmental Health, Environmental Services Division is the designated CUPA.

Department of Toxic Substance Control

The California Department of Toxic Substances Control (DTSC) is responsible for regulating the use, storage, transport, and disposal of hazardous substances in the state. DTSC maintains a Hazardous Waste and Substances Site List for site cleanup. This list is commonly referred to as the Cortese List. Government Code Section 65962.5 requires the CalEPA to update the Cortese List at least annually. DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Hazardous Waste Management and Handling

Under RCRA, individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements. The USEPA must approve state programs intended to implement federal regulations. In California, CalEPA and DTSC, a department within CalEPA, regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The USEPA approved California's RCRA program (HWCL), in 1992. DTSC has primary hazardous material regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL.

The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe the management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in ordinary landfills. Hazardous waste manifests must be retained by the generator for a minimum of 3 years. Hazardous waste manifests provide a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with the state. The generator must match copies of hazardous waste manifests with receipts from treatment, storage, and disposal facilities.

Aboveground Storage of Petroleum Products

The Aboveground Petroleum Storage Act of 1990 requires owners or operators of facilities that store petroleum products with a capacity of 1,320 gallons or more to file a storage statement with the SWRCB and prepare a spill prevention, control, and countermeasure (SPCC) plan. The plan must identify appropriate spill containment or equipment for diverting spills from sensitive areas, as well as discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and personnel training.

The SWRCB requires registration of an AST at a construction site only if the tank is 20,000 gallons or larger, or if the aggregate volume of aboveground petroleum storage is over 100,000 gallons, which would not be applicable to the Proposed Project. For smaller temporary tanks used during construction, methods for controlling a release and measures to clean up an accidental release and prevent degradation of water quality are addressed in the construction storm water pollution prevention plan (SWPPP) that would be prepared for the Proposed Project, as described in Section 5.10, *Hydrology and Water Quality*.

Underground Storage Tanks

State laws governing USTs specify requirements for permitting, monitoring, closure, and cleanup associated with these facilities. Regulations set forth construction and monitoring standards for existing tanks, release reporting requirements, and closure requirements. In the Proposed Project area, the Ventura County Department of Environmental Health, Environmental Services Division has regulatory authority for permitting, inspection, and removal of USTs. Any entity proposing to remove a UST must submit a closure plan to the Environmental Services Division prior to tank removal. Upon approval of the UST closure plan, the Environmental Services Division would issue a permit, oversee removal of the UST, require additional subsurface sampling if necessary, and issue a site closure letter when the appropriate removal and/or remediation has been completed.

Hazardous Materials Transportation

The State of California has adopted U.S. Department of Transportation (USDOT) regulations for the intrastate movement of hazardous materials; state regulations are contained in 26 CCR. In addition, the State of California regulates the transportation of hazardous waste originating in the state and passing through the state (26 CCR). Both regulatory programs apply in California.

The two state agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol

(CHP) and the California Department of Transportation (Caltrans). The CHP enforces hazardous materials 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 the 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.

Common carriers are licensed by the CHP, pursuant to California Vehicle Code Section 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

Every hazardous waste package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel. Every package is not put through every test. However, most packages must be able to be kept under running water for a time without leaking, dropped fully loaded onto a concrete floor, compressed from both sides for a period of time, subjected to low and high pressure, and frozen and heated alternately.

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 (OES). The OES coordinates the responses of other agencies, including the USEPA, CHP, California Department of Fish and Wildlife, the RWQCBs (in this case the LARWQCB), the local air districts (in this case, the Ventura County Air Pollution Control District), and local agencies.

Pursuant to the Business Plan Law, local agencies are required to develop “area plans” for the response to releases of hazardous materials and wastes. These emergency response plans depend to a large extent on the Business Plans submitted by people who handle hazardous materials. An area plan must include pre-emergency planning and procedures for emergency response, notification, and coordination of affected governmental agencies and responsible parties, training, and follow up.

Utility Notification Requirements

Title 8, Section 1541 of the CCR requires excavators to determine the approximate locations of subsurface installations such as sewer, telephone, fuel, electric, and water lines (or any other subsurface installations that may reasonably be encountered during excavation work) prior to conducting an excavation. The California Government Code (§4216 et seq.) requires owners and operators of underground utilities to become members of and participate in a regional notification center. According to Section 4216.1, operators of subsurface installations who are members of, participate in, and share in the costs of a regional notification center are in compliance with this section of the code. Underground Services Alert of Southern California (known as DigAlert)

receives planned excavation reports from public and private excavators and transmits those reports to all participating members of DigAlert that may have underground facilities at the location of excavation. Members will mark or stake their facilities, provide information, or give clearance to dig.

Fire Protection

The California Public Resources Code includes fire safety regulations that apply to state responsibility areas during the time of year designated as having hazardous fire conditions. During the fire hazard season, these regulations: restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors³ on equipment that has 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. Additional codes require that any person who owns, controls, operates, or maintains any electrical transmission or distribution line must maintain a firebreak clearing around and adjacent to any pole, tower, and conductors that carry electric current as specified in Sections 4292 and 4293.

Local

CPUC General Order No. 131-D explains that local land use regulations would not apply to the Proposed Project or alternatives. However, for informational purposes, the goals and policies of local general plans and other planning documents pertaining to hazards and hazardous materials that would otherwise be relevant to the Proposed Project and alternatives are described below.

Ventura County Environmental Health Division

The Ventura County Department of Environmental Health, Environmental Services Division, is responsible for ensuring conformance with state laws and county ordinances pertaining to food protection, hazardous materials, hazardous waste, individual sewage disposal systems, land use, medical waste, ocean water quality monitoring, recreational health, solid waste, underground fuel tanks, and vector control programs. This department also administers the Leaking Underground Fuel Tank (LUFT) Program, which regulates soil and groundwater cases involving releases from USTs that contain gasoline, diesel, waste oil, and other petroleum hydrocarbons within the County. The primary objectives of the LUFT Program are to protect groundwater supplies, public health, and the environment from petroleum products leaked from USTs. These objectives are accomplished by implementing state and federal laws and regulations. The County of Ventura has entered into a contract with the SWRCB to be the lead agency that regulates cleanup of unauthorized releases from USTs within Ventura County.

The Ventura County Department of Environmental Health, Environmental Services Division also serves as the CUPA, to assist with hazardous materials emergency response, investigation of illegal disposal of hazardous waste, and public complaints.

³ A spark arrestor is a device that prohibits exhaust gases from an internal combustion engine from passing through the impeller blades where they could cause a spark. A carbon trap commonly is used to retain carbon particles from the exhaust.

Ventura County General Plan

The Ventura County General Plan contains goals and policies pertaining to hazardous materials and wildfires. Goal 2.13.1 addresses fire hazards by encouraging development in high fire hazard areas to be designed and constructed in a manner that minimizes the risk from fire hazards. Goal 2.15.1 minimizes the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous wastes, and encourages locating potentially hazardous facilities and operations in areas that would not expose the public to a significant risk of injury, loss of life, or property damage. The following policies are associated with Goal 2.15.2 (Ventura County, 2013):

Policy 1: Hazardous wastes and hazardous materials shall be managed in such a way that waste reduction through alternative technology is the first priority, followed by recycling and on-site treatment, with disposal as the last resort.

Policy 2: Site plans for discretionary development that will generate hazardous wastes or utilize hazardous materials shall include details on hazardous waste reduction, recycling and storage.

Policy 3: Any business that handles a *hazardous material* shall establish a plan for emergency response to a release or threatened release of a hazardous material. The County Fire Protection District is designated as the agency responsible for implementation of this policy.

Policy 4: Applicants shall provide a statement indicating the presence of any hazardous wastes on a site, prior to development. The applicant must demonstrate that the waste site is properly closed, or will be closed before the project is inaugurated.

Policy 5: Commercial or industrial uses which generate, store, or handle hazardous waste and/or hazardous materials shall be located in compliance with the County Hazardous Waste Management Plan's siting criteria.

City of Moorpark General Plan

The City of Moorpark General Plan Safety Element contains goals and policies that reduce the potential for risk of death, injuries, property damage, and economic and social dislocation that could result from natural and man-made hazards (City of Moorpark, 2001). There are no hazards and hazardous materials goals or policies that would be applicable to the Proposed Project.

City of Thousand Oaks General Plan

The City of Thousand Oaks General Plan Safety Element protects life, property, and the environment from releases of hazardous materials in addition to protection from other hazards, including fire. Related policies include waste reduction, implementing the Countywide Emergency Response Plan, and ensuring proper disposal of household hazardous waste (City of Thousand Oaks, 2014).

The City of Thousand Oaks Emergency Operations Plan provides emergency guidelines for responding to disasters. It provides protocols for different emergency situations and outlines specific agency responsibilities and mutual aid agreements with nearby jurisdictions. Safety Element Goal 2.5.1 is to provide for preparation and implementation of persons and property

within the City in the event of a disaster, and to coordinate disaster functions with other public agencies and affected persons and property. Related policies include periodically updating the City Emergency Operation Plan, providing on-going disaster training for City employees, and evaluating emergency power generation supplies.

5.9.2 Significance Criteria

According to Appendix G of the CEQA *Guidelines*, a project would result in significant hazards and hazardous materials effects on the environment if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project 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, would the project result in a safety hazard for people residing or working in the project area?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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?

5.9.3 Applicant Proposed Measures

SCE has identified no applicant proposed measures (APMs) for reducing impacts associated with hazards or hazardous materials.

5.9.4 Impacts and Mitigation Measures

Approach to Analysis

Hazards and hazardous materials impacts could result from fluids used in construction equipment, from materials used and or stored at the construction sites, from encountering unexpected contaminated soil during construction, and from wildfires. Impact thresholds are discussed below

as defined by CEQA. Mitigation measures are recommended to ensure that all potentially significant impacts are reduced to less than significant.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact 5.9-1: Construction would require the use of hazardous materials that could pose a potential hazard to the public or the environment if improperly used or inadvertently released. *Less than significant with mitigation (Class II)*

As discussed in Chapter 3, *Project Description*, SCE's helicopter contractor may need to refuel the helicopter during construction at designated helicopter landing zones, which could potentially result in a spill at a landing zone. Construction would also require the use of limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, and oils to maintain vehicles and motorized equipment. Accidental spill of any of these substances could occur during handling and transfer from one container to another and could impact water and/or groundwater quality. Depending on the relative hazard of the material, an accidental spill could pose a hazard to construction workers, the public, and environment. Implementation of the SWPPP would reduce that chance of spill and would have provisions to contain spills to avoid contamination of water bodies and groundwater. For further information regarding the SWPPP, refer to Section 5.10, *Hydrology and Water Quality*. As described in Section 3.6.5, *Vehicle Maintenance and Refueling*, an absorbent mat would be laid on the ground below the helicopter fuel tank port to catch any inadvertent spills or drips. Implementation of Mitigation Measures 5.9-1a through 5.9-1d (see below) would also be required to ensure that this potentially significant impact would be reduced to a less-than-significant level.

Pursuant to APM WET-1: Worker Environmental Awareness Training, prior to construction, all construction workers would receive training according to the Worker Environmental Awareness Plan (WEAP). Among other things, the WEAP would provide instructions for implementation of the Proposed Project SWPPP. Mitigation Measure 5.9-1e would also be required to ensure that the WEAP would include training on site-specific physical conditions to improve hazard prevention and include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. Implementation of the SWPPP and WEAP, and all the associated best management practices, and Mitigation Measures 5.9-1a through 5.9-1e would ensure that this impact would be reduced to a less-than-significant level.

Mitigation Measure 5.9-1a: SCE and/or its contractors shall implement construction best management practices including but not limited to the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks;
- Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;

- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

Mitigation Measure 5.9-1b: SCE shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, state, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

Mitigation Measure 5.9-1c: SCE shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction.

Mitigation Measure 5.9-1d: SCE shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substance Control and Emergency Response Plan (see Mitigation Measure 5.9-1b), which shall be implemented during construction.

Mitigation Measure 5.9-1e: SCE shall ensure that the Workers Environmental Awareness Plan includes training on site-specific physical conditions to improve hazard materials release prevention and include a review of the Health and Safety Plan and the Hazardous Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first program. SCE shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program.

Significance after mitigation: Less than significant.

Impact 5.9-2: Operation and maintenance would require the use of hazardous materials that could pose a potential hazard to the public or the environment if improperly used or inadvertently released. *Less than significant* (Class III)

Operation and maintenance of the Proposed Project may require the limited use of certain materials such as fuels, oils, solvents, and other chemical products that could pose a potential hazard to the public or the environment during routine transport, use, or disposal. Normal operation of the 66 kV subtransmission lines would be controlled remotely through SCE control systems, and manually in the field as required. During operation and maintenance of the Proposed Project, vehicles and equipment used for routine inspections and emergency repair would require

the use of fuel and lubricants. Routine maintenance activities would include washing or replacing insulators, repairing or replacing other hardware components, tree trimming, and brush and weed control. While the Proposed Project would not require long-term operational use, storage, treatment, disposal, or transport of significant quantities of hazardous materials, hazardous materials would be used during maintenance activities.

Hazardous materials needed for maintenance activities would be stored and used in accordance with the product specifications and applicable regulations. Product specifications are described in detail on Material Safety Data Sheets (MSDS), which accompany every batch of materials considered to be hazardous. Information in the MSDS includes instructions on proper use and application of the material, accidental release measures, and handling and storage requirements. Applicable regulations specify storage and handling requirements such as proper container types and usage methods.

Applicable regulations under Caltrans and the CHP regulate the transportation of hazardous materials and wastes, including container types and packaging requirements as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. All transport of hazardous materials would be in compliance with applicable laws, rules, and regulations, including the acquisition of required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations. This impact would be less than significant.

Mitigation: None required.

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.

Impact 5.9-3: Construction activities could release previously unidentified hazardous materials in the environment. *Less than significant with mitigation (Class II)*

In addition to the use of hazardous materials, the Proposed Project would entail ground-disturbing activities that could expose or unearth soil or groundwater contamination in the vicinity of the Proposed Project. The regulatory agency database search conducted for the Proposed Project identified two hazardous materials release sites within 0.5-mile of the Proposed Project site. The Smith Pumps Site is identified as having contaminated soil and is located at 1299 Lawrence Drive in Newbury Park, approximately 0.2 mile east of the proposed alignment. Soil contamination does not extend off-site and therefore this site would not impact construction activities associated with the Proposed Project. The second site, the Northrop Aircraft Division Site is identified as having groundwater contamination and is located at 1515 Rancho Conejo Boulevard in the City of Thousand Oaks. This site is not anticipated to impact the Proposed Project as the contamination does not extend offsite and the Proposed Project is located approximately 0.4 mile to the east. The potential for the Proposed Project to encounter soil or groundwater contamination associated with these sites is very low and this impact would be less than significant.

While data obtained from the Proposed Project records searches indicate that no contamination has been identified along the proposed alignment, several nearby hazardous material sites have been identified. Contamination that may be associated with these sites may have migrated and could be uncovered or encountered during construction. There is also a potential that there could have been undocumented releases of hazardous materials (e.g., petroleum hydrocarbons from underground storage tanks, polychlorinated biphenyls (PCBs) from transformers) along the proposed alignments and sites that could have migrated and could be uncovered or encountered during construction.

Implementation of Mitigation Measure 5.9-3 would ensure that potential impacts associated with releasing previously unidentified hazardous materials into the environment would be less than significant by outlining steps to take in the event of encountering previously unidentified hazardous materials. Impacts would be less than significant with mitigation. For impact discussions related to water quality, refer to Section 5.10, *Hydrology and Water Quality*.

Additionally, during construction activities the potential exists that subsurface utilities (e.g., a natural gas line) or structures (e.g., an UST) might be encountered and damaged, resulting in a release of a hazardous material. The potential for such incidents would be reduced by thoroughly screening for subsurface structures in areas prior to commencement of any subsurface work. Screening activities would include use of DigAlert (Underground Services Alert of Southern California), visual observations, hand digging, and use of buried line locating equipment.

Mitigation Measure 5.9-3: SCE's Hazardous Substance Control and Emergency Response Plan (Mitigation Measure 5.9-1b) shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies, including the CPUC designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of county and state agencies and primary, secondary, and final cleanup procedures. The Hazardous Substance Control and Emergency Response Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

Significance after mitigation: Less than significant.

c) Produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

Impact 5.9-4: Construction activities could release hazardous materials within the vicinity of an existing school. *Less than significant (Class III)*

There are three schools located within 0.25 mile of Segment 4 of the proposed subtransmission line and/or Newbury Substation. Hazardous emissions resulting from construction of the Proposed Project would include the temporary and short-term generation of diesel particulate matter (DPM) emissions from the use of off-road diesel equipment and from construction material deliveries and debris hauling using on-road heavy-duty trucks. The majority of Proposed Project DPM emissions

would be associated with subtransmission line construction, which would proceed at a linear pace and would not be expected to expose any one receptor along the Proposed Project alignment for longer than 2 weeks. Because the total emissions and duration of exposure at any one sensitive receptor location would be relatively minor compared to the 70-year exposure used in health risk assessments, the health risk from the short-term DPM emissions that would be associated with construction of the Proposed Project would be negligible, and this impact would be less than significant.

In addition to hazardous emissions, minor spills of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, could occur during construction; however, such spills would be limited in volume and would not migrate off-site. This impact would be less than significant (Class III).

Mitigation: None required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment. (No Impact)

Based on regulatory database searches conducted for the Proposed Project (see Section 5.9.1, *Setting*), the Proposed Project sites are not identified on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and therefore construction of the Proposed Project would not create a significant hazard to the public or the environment (No Impact).

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the Proposed Project area. (No Impact)

No general aviation airports are located within 2 miles of the Proposed Project. The closest airport is Camarillo Airport, located approximately 7 miles from the Proposed Project; therefore, no impact would occur (No Impact).

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

Impact 5.9-5: The Proposed Project could result in a safety hazard for people working in the Proposed Project area because a nearby private helipad. *Less than significant* (Class III)

As discussed in the setting, there are no private airstrips located within 2 miles of the Proposed Project; however, there are two helipads located within 2 miles, including one at SCE's Moorpark

Substation. The next closest helipad is the RI Science Center Helistop, located 1.3 miles east of Segment 4 in the City of Thousand Oaks. Proposed Project activities in the vicinity of the Moorpark Substation helipad would entail installing the new 66 kV subtransmission line underground within the substation and on existing TSPs in Segment 2. While the new conductor could potentially present a hazard to aviation, the new 66 kV subtransmission line and associated TSPs would be constructed adjacent to the existing Moorpark-Ormond Beach 220 kV lines. The existing lines and associated poles are taller than those associated with the Proposed Project; therefore, the new poles and conductor associated with the Proposed Project are unlikely to pose a significant new aviation hazard. Further, the Moorpark Substation helipad is owned and operated by SCE and all employees would be aware of the proposed conductor installation. In Segment 4, the new conductor would be collocated with the Moorpark-Newbury-Pharmacy 66 kV Subtransmission Line on previously installed lightweight steel (LWS) poles and would not pose a new hazard to aviation.

As part of the Proposed Project, marker balls may be required by FAA to be installed on several of the subtransmission line spans. In Segment 2, marker balls may be installed on the conductor between poles 25 and 26, and between poles 27 and 28. In Segment 3, marker balls may be installed on the conductor between poles 32 and 33, and poles 39 and 40. Marker balls would increase the visibility of the new lines and as required by the FAA. This impact would be less than significant.

Mitigation: None required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact 5.9-5: Construction of the Proposed Project could interfere with an emergency response or evacuation plan. *Less than significant* (Class III)

Construction of the Proposed Project could impact area roadways. However, as discussed in Chapter 3, *Project Description*, all construction at the substations would be within the fence lines of the facilities. Activities and construction vehicles at the substations would not reduce the width of access roads or driveways, or block roads or driveways, and thus would not impair emergency access to substations.

Construction activities associated with the subtransmission lines in Segments 2 and 3 may require temporary closure of travel lanes on public roadways, private roads, and driveways, and would involve the movement of oversized vehicles that could affect emergency vehicle access to and through the Proposed Project construction areas. However, as discussed in Section 5.17, *Traffic and Transportation*, pursuant to APM TRA-1, SCE would implement recommendations contained in the California Joint Utility Traffic Control Manual (CJUTCM), including use of signage, flaggers, and coordination with relevant agencies and emergency responders. Vehicle movements along, and use of, access roads would be communicated to and coordinated with the appropriate agencies as necessary. Equipment placed on equipment pad/turnaround areas and drill pads would be situated or

attended to facilitate adequate emergency vehicle access. Implementation of these measures would provide for efficient and safe transit of emergency vehicles through construction areas. SCE would also obtain the appropriate permits from the local jurisdictions, Union Pacific Railroad, and Caltrans, as applicable, for construction activities that would encroach upon any public ROW or easement. Therefore, the impact would be less than significant.

Mitigation: None required.

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?

Impact 5.9-6: Construction-related activities could ignite dry vegetation and start a fire.
Less than significant with mitigation (Class II)

The majority of the Proposed Project would be located in high fire hazard zones. Heat or sparks from construction vehicles and equipment would have the potential to ignite dry vegetation and cause a fire, particularly during the dry season. Therefore, depending on the time of year and location of construction activities, this could be a potentially significant impact.

SCE has standard protocols that are implemented when the National Weather Service issues a “Red Flag Warning,” which is a warning that conditions (e.g., strong wind, low humidity, warm temperatures) favor explosive fire growth potential. These protocols include measures to address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements. However, to ensure that potentially significant wildland fire impacts associated with the Proposed Project are reduced to less than significant, implementation of Mitigation Measure 5.9-6 would require the preparation of a Health and Safety/Fire Safety Plan and appropriate fire protection equipment.

Mitigation Measure 5.9-6: SCE and/or its contractors shall prepare and implement a Health and Safety/Fire Safety Plan to ensure the health and safety of construction workers and the public. The Ventura County Fire Department (VCFD) shall be consulted during plan preparation and include health and safety/fire safety measures recommended by this agency. The plan shall list fire prevention procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. The plan shall include, but not be limited to, the following:

- SCE and/or its contractors shall have water tanks and/or water trucks sited/available in the Proposed Project area for fire protection.
- All construction vehicles shall have fire suppression equipment.
- All construction workers shall receive training on the proper use of fire-fighting equipment and procedures to be followed in the event of a fire.

- As construction may occur simultaneously at several locations, each construction site shall be equipped with fire extinguishers and fire-fighting equipment sufficient to extinguish small fires.
- Construction personnel shall be required to park vehicles away from dry vegetation.
- Prior to construction, SCE shall contact and coordinate with the VCFD to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks if water trucks are not used. SCE shall submit verification of its consultation with CalFire and the local fire departments to the CPUC.
- The plan shall be submitted to CPUC staff for approval prior to commencement of construction activities and shall be distributed to all construction crew members prior to construction of the Proposed Project.

Significance after mitigation: Less than significant.

Impact 5.9-7: Operation of the subtransmission lines could increase the probability of a wildfire. *Less than significant (Class III)*

During operations, the Proposed Project could increase the risk of wildland fires in the area. Electrical lines can start a fire if an object, such as a tree limb, kite, Mylar balloon, etc., simultaneously contacts the subtransmission line conductors and a second object, such as the ground or a portion of the supporting pole; if two conductors make contact; or if dust and/or dirt builds up on insulators such that a conductive path to a portion of the tower is created. To minimize the risk of trees falling on the subtransmission line or other accidental ignition of a wildland fire from the subtransmission line, SCE would follow State vegetation and tree clearing requirements, including CPUC General Order 95, PRC Section 4293.

Given proper ROW management, arcing between conductor phases is more likely than between a conductor and the ground. System component failures and accidents during maintenance activities can also cause line faults that result in arcing on subtransmission lines. Distribution and subtransmission lines are also subject to conductor-to-conductor contact, which can occur when extremely high winds force two conductors on a single pole to oscillate so excessively that they contact one another. This contact can result in arcing (sparks) that can ignite nearby vegetation.

Both distribution and transmission systems are designed to withstand high winds, and it is extremely rare for higher-voltage transmission structures to blow over. When this rare event does occur, the protection system on a subtransmission line is designed to shut off power flow in a fraction of a second. However, a fraction of a second can be enough for an energized conductor to cause sparks and ignite nearby vegetation. Distribution structure failures are also infrequent but due to their placement in narrower corridors in close proximity to trees and other tall vegetation they may be pushed down in storms by wind-blown trees.

The risk of ignitions and the risk of damage from a Proposed Project-related ignition are low, and as mentioned above, SCE would be required to implement state vegetation and tree clearing requirements, including CPUC General Order 95, PRC Section 4293. Also, SCE would inspect all components of the proposed subtransmission line at least annually for corrosion, equipment misalignment, loose fittings, and other common mechanical problems. Consequently, implementation of the Proposed Project would not result in a significant risk of loss, injury, or death involving wildland fires; therefore, operational impacts would be less than significant.

Mitigation: None required.

5.9.5 Alternatives

No Project Alternative 1

Because the baseline conditions would remain in their current state under No Project Alternative 1, there would be no impacts with respect to hazards and hazardous materials (No Impact).

No Project Alternative 2

Under No Project Alternative 2, the Proposed Project would not be constructed and the infrastructure already constructed for the Moorpark-Newbury 66 kV Subtransmission line would be removed, with the exception of the previously installed LWS poles and energized conductor. This alternative would have similar impacts compared to the Proposed Project because construction activities associated with removing project components installed in 2010 and 2011 would be similar to those described under the Proposed Project. Similar to construction of the Proposed Project, removal activities would require the use of fuels (primarily gasoline and diesel) for operation of construction equipment (e.g., dozers, excavators, and trenchers), construction vehicles (e.g., dump and delivery trucks), and construction worker vehicles. Impacts resulting from a potential release of hazardous materials would be the same as those described for construction of the Proposed Project under Impact 5.9-1, and would be less than significant with implementation of Mitigation Measures 5.9-1a through 5.9-1e (Impact 5.9-1) and Mitigation Measure 5.9-3 (Impact 5.9-3). Construction activities would occur in high fire hazard zones; however, there would be less potential to start a fire under this alternative given the limited amount of activities that would occur in high fire zone compared to the Proposed Project (Impact 5.9-6). Nevertheless, Mitigation Measure 5.9-6 would be required to reduce impacts to less than significant. In sum, No Project alternative would result in hazards and hazardous materials-related impact that would be less than significant with mitigation incorporated regarding criteria a), b), and h) (Class II); less than significant regarding criteria c), f), and g) (Class III); and there would be no impact regarding criteria d) and e) (No Impact).

References – Hazards and Hazardous Materials

- California Department of Forestry and Fire Protection (CAL FIRE), 2007. Ventura County Fire Hazard Severity Zones in SRA, adopted on November 7, 2012.
- CAL FIRE, 2010. Thousand Oaks and Moorpark Very High Fire Hazard Severity Zones in LRA, October 6, 2010.
- CEH&S Environmental Engineering, 2012. Letter from Julie Gilbert – OS Corporate EH&S. February 17.
- City of Moorpark, 2001. City of Moorpark General Plan, Moorpark 2000 – 2005 Safety Element. March.
- City of Thousand Oaks, 2014. City of Thousand Oaks General Plan, Safety Element. March.
- Southern California Edison (SCE), 2013. Proponent’s Environmental Assessment, Moorpark-Newbury 66 kV Subtransmission Line Project, October 28, 2013.
- California State Water Resources Control Board (SWRCB), 2014a. Geotracker Public Participation Categories. Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL204711661, accessed October 28, 2014.
- SWRCB, 2014b. Geotracker Database – Record for Chevron #9-0415. Available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0611186575, accessed October 28, 2014.
- Ventura County, 2013. Ventura County General Plan Goals Policies and Programs. October 22, 2013.
- Ventura County Fire Department (VCFD). 2013. Ready, Set, Go! Wildfire Action Plan, updated October 4, 2013.
- VCFD, 2014. About VCFD. Available at: <http://fire.countyofventura.org/AboutVCFD/tabid/60/Default.aspx>, accessed October 14, 2014.