5.8 Hazards and Hazardous Materials

This section describes the environmental and regulatory setting and discusses impacts associated with the construction and operation of the Sanger Substation Expansion Project (proposed project) proposed by Pacific Gas and Electric Company (PG&E, or the applicant) with respect to hazards and hazardous materials.

5.8.1 Environmental Setting

Hazardous Materials

Hazardous materials[1] are currently used at the existing Sanger Substation within transformers, circuit breakers, battery rooms, and other electrical equipment. These materials include sulfur hexafluoride (SF_6)[2], sulfuric acid, and petroleum hydrocarbon-derived electrical insulation oil (PG&E 2015). Oils in the Sanger Substation equipment may have legacy polychlorinated biphenyls (PCBs) at elevated concentrations (PG&E 2015).

Hazardous Waste and Substances Sites

The applicant hired Environmental Data Resources, Inc. (EDR) to conduct a database analysis to determine the location of hazardous wastes and hazardous material release sites within 0.25 miles of the proposed project because 0.25 miles is a typical distance used to identify potential sites not in the project area that may have contamination that could migrate into the project area. This analysis involved database searches from local, state, and federal agencies with varying levels of enforcement related to the generation, storage and handling, transportation, and treatment of wastes, as well as emergency response activities and remediation of contaminated soil and groundwater sites. This report did not identify any hazardous waste or hazardous material release sites within 0.25 miles of the proposed project. The report does identify a historic underground petroleum storage tanks site 0.10 miles east of the proposed project (EDR 2012). The database contains no additional information concerning the status of the underground storage tanks or whether there was a release (DTSC 2015; EDR 2012; SWRCB 2015).

In addition to EDR's search, the California Public Utilities Commission (CPUC) searched the State Water Resource Control Board's Geotracker database, Cease and Desist Orders and Cleanup and Abatement Orders list; California Environmental Protection Agency's highly hazardous solid waste sites; and the California Department of Toxic Substance Control's (DTSC's) EnviroStor database and hazardous waste sites. These sources are often collectively referred to as the "Cortese List," and are listed in Government Code Section 65962.5. A search of the Cortese List databases found no active Cortese List sites within 0.25 miles of the proposed project (DTSC 2015; EDR 2012; SWRCB 2015).

Emergency Evacuation Routes

The Fresno County's emergency plan does not identify roads in the project area (i.e., East Jensen Avenue and South McCall Avenue) as major transportation or emergency routes (Fresno County 2009). All project-related construction would occur on applicant-owned property or adjacent private property. Some

[1] 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 (California Health and Safety Code Chapter 6.95, Section 25501(o)).

[2] SF_6 is a colorless, odorless, and relative nontoxic gas used for electrical circuit breakers, electrical piping, and as a gaseous insulator. It is listed as a hazardous material because it is regulated by the Occupational Safety and Health Administration (OSHA). While SF_6 is inert during normal use, toxic byproducts can be produced when electrical discharges occur within SF_6-filled equipment.

activities, such as equipment delivery, could temporarily affect traffic on East Jensen Avenue and South McCall Avenues.

Airports

The proposed project would not be located near any public or public use airstrip. The closest private airstrip is Fresno Yosemite International Airport, 6.5 miles northwest of the proposed project area. Reedley Municipal Airport, a public airport, is 9.2 miles east southeast of the project area. The closest private airstrip is Del Rey Juice Airstrip, 3.6 miles south of the project area.

Schools

No schools are located within 0.25 miles of the proposed project site. The closest school, Ronald W. Reagan Elementary is located 1.6 miles northeast of the proposed project site. (FCOE 2016)

Wildfire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) identifies and maps areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (CAL FIRE 2012a). CAL FIRE maps indicate that the project area and vicinity are within a Local Responsibility Area (LRA), within which local government is responsible for wildland fire protection. The LRA is an Unzoned LRA, which indicates less-than-moderate susceptibility to wildland fire conflagrations. CAL FIRE has determined that Fresno County does not contain Very High Fire Hazard Severity Zones in any of its LRAs (CAL FIRE 2007). The Fence Meadow Repeater Station is in a Very High Fire Hazard Severity Zone (CAL FIRE 2012b). The station is located in the Sierra National Forest, within a Federal Responsibility Area (FRA). Fire protection services and equipment near the project alignment are discussed in detail in Section 5.14, “Public Services.”

5.8.2 Regulatory Setting

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) regulates hazardous waste from the time that waste is generated through to its management, storage, transport, treatment, and final disposal. The United States Environmental Protection Agency (EPA) has authorized the California DTSC to administer the State’s RCRA programs. A RCRA hazardous waste exhibits at least one of four characteristics: ignitability, corrosivity, reactivity, or toxicity. To keep track of hazardous waste activities, treatment, storage, and disposal facility owners and operators must keep certain records and submit reports to the EPA at regular intervals. All facilities that generate, transport, recycle, treat, store, or dispose of hazardous waste are required to notify the EPA (or its state agency) of their hazardous waste activities. An EPA Identification Number must be obtained unless the waste has been excluded from regulation or exempted. National Biennial RCRA Hazardous Waste Reports Sections 3002 and 3004 of RCRA require that the EPA collect information pertaining to hazardous waste management from hazardous waste generators and hazardous waste treatment, storage, and disposal facilities every two years. Used hazardous waste from construction and operation of the proposed project are regulated under this act.

Hazardous Materials Transportation Act

The primary objective of the Hazardous Materials Transportation Act is to provide adequate protection against risks to life and property inherent in the transportation of hazardous materials in commerce. This act empowers the United States Department of Transportation to regulate the transportation of hazardous materials by rail, aircraft, vessel, or public highway. Hazardous materials regulations are subdivided by

function into the following four areas within 49 Code of Federal Regulations (CFR) Parts 101, 106, 107, 171 to 177, and 178 to 180: Procedures and/or Policies, Material Designations, Packaging Requirements, and Operational Rules. The transportation of all hazardous materials to and from the proposed project area during construction and operation would be regulated by this act.

Oil Pollution Prevention

The objective of the oil pollution prevention regulation stated in 40 CFR Part 112 is to prevent oil discharges from reaching navigable waters of the United States or adjoining shorelines. This regulation was also written to ensure effective response to oil discharge. The regulation further requires that proactive measures be used to respond to oil discharge. It contains two major types of prevention requirements (the Spill Prevention, Control, and Countermeasure [SPCC] rule) and Facility Response Plan requirements. The SPCC plan for the Sanger Substation would be updated per applicant proposed measure (APM) HAZ-1.

Occupational Safety and Health Standards

The Occupational Safety and Health Standards (CFR Title 29) are regulations for safety in the workplace and construction safety, including safety regarding the use of helicopters for construction. Occupational Health and Safety Administration (OSHA) standards require implementation of a Hazard Communication Plan to identify and inventory all hazardous materials and material safety data sheets. OSHA's standards also require employee training in safe handling of hazardous materials. OSHA standards are relevant to the proposed project because its construction and operation would involve the use of heavy-duty and lighter vehicles that may pose health and safety risks to workers. In addition, workers would handle and use chemical substances.

United States Forest Service Sierra National Forest Land Management Plan

Two dishes would be installed on an existing tower at the Fence Meadow Repeater Station, which is on land managed by the U.S. Forest Service. The Sierra National Forest Land and Resource Management Plan includes the following management directions for protection of the Forest from wildfire: encourage adequate fire prevention, fire-safe construction and presuppression systems on private land to be developed in wildfire-prone areas; increase fire prevention, presuppression, fuelbreak systems and fire safety programs on forest land; reduce activity fuels to acceptable levels in a cost effective manner; encourage cooperation and coordination with appropriate fire management agencies; and, provide intensive law enforcement (USFS 1991).

State

Hazardous Materials and Waste

California Health and Safety Code (HSC) Section 25501 defines the term *hazardous material* 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. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. Title 8, Section 339 of the California Code of Regulations (CCR) lists substances identified as *hazardous substances* for which employers must provide material safety data sheets to employees.

CCR Title 22, Section 66261.1 identifies those wastes which are subject to regulation as hazardous wastes and that are subject to the notification requirements pursuant to the California HSC. The HSC defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, and toxicity. It also provides lists of hazardous wastes listed pursuant to RCRA, non-RCRA hazardous wastes,

hazardous wastes from specific sources, extremely hazardous wastes, hazardous wastes of concern, and special wastes. The EPA has authorized the California DTSC to administer the RCRA program in California.

Under federal regulations, transformer oil, under most intended uses, would become used oil, the recycling of which is regulated by 40 CFR 279. Use resulting in chemical or physical change or contamination may also subject it to regulation as hazardous waste, which is also managed under 40 CFR 279. In California, however, all used oil is managed as hazardous waste until tests have shown that it is not hazardous (HSC Section 25250.4). Requirements for the transport of hazardous waste, including driver training, are established in CCR Title 26.

Treated Wood Waste

Section 25150.7 of the California HSC outlines procedures and regulations for the management and disposal of treated wood waste. Wood waste, including the type of wood utility poles that would be disposed of as part of the proposed project, may be treated with pesticides and other chemicals to protect the wood. Because the chemical treatments could leach into water supplies when disposed of, Section 25150.7 was developed to restrict how and where treated wood waste can be disposed of.

Certified Unified Program Agency and Hazardous Materials Plans

Administration of the Certified Unified Program Agency (CUPA) is authorized by the California HSC (Chapter 6.11, Sections 25404-25404.8) and CCR Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100–15620. This program is implemented at the local level by government agencies certified by the secretary of the California Environmental Protection Agency. The Fresno County Environmental Health Division is the CUPA for Fresno County.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined under the Business Plan Act as raw or unused materials that are part of a process or manufacturing step. Health concerns pertaining to the release of hazardous materials are similar to those relating to hazardous waste.

California HSC Section 25503.5 requires a business plan for emergency response for facilities that store hazardous materials in excess of 55 gallons (liquid), 500 pounds (solid), or 200 cubic feet (gas). Facilities that handle more than these indicated quantities of hazardous materials must submit a Hazardous Materials Business Plan (HMBP) to the CUPA, prior to project construction. In California, all used oil is managed as hazardous waste until tests have shown it is not hazardous (HSC Section 25250.4). The applicant would be required to submit an HMBP to the CUPA for project construction and operation. In general, HMBPs describe and identify storage areas for hazardous materials and waste; describe appropriate handling, storage, and disposal techniques; and include measures for avoiding and addressing spills pursuant to California HSC Section 25504.

Hazardous Waste Control Act

The Hazardous Waste Control Act established the state hazardous waste management program, which is similar to, but more stringent than, RCRA program requirements. CCR Title 26 describes the requirements for the proper management of hazardous waste under the Hazardous Waste Control Act, including the following:

- Identification and classification;

- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for the identification, packaging, and disposal of such waste. Under the Hazardous Waste Control Act, and Title 26, the generator of hazardous waste must document waste from generation to transporter to disposal. Copies of this documentation must be filed with the California DTSC.

The California DTSC operates programs to protect California from exposure to hazardous wastes through the following practices and procedures:

- Handling of the aftermath of improper hazardous waste management by overseeing site cleanup;
- Prevention of the release of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly;
- Enforcement against those who fail to appropriately manage hazardous wastes;
- Exploration and promotion of measures to prevent pollution and encourage reuse and recycling;
- Evaluation of site-specific soil, water, and air samples and development of new analytical methods;
- Practice in other environmental sciences, including toxicology, risk assessment, and technology development; and
- Involvement of the public in the California DTSC's decision-making.

Hazardous wastes that may be encountered or generated during the construction and operation of the proposed project would be subject to the requirements of the Hazardous Waste Control Act.

Government Code Section 65962.5: Cortese List

The Cortese List includes all hazardous waste facilities subject to corrective action; land designated as hazardous waste property or border zone property; information received from the California DTSC about hazardous waste disposals on public land; sites listed pursuant to the California HSC Section 25356 (removal and remedial action sites); and sites included in the Abandoned Site Assessment Program. Pursuant to Government Code Section 65962.5, the California DTSC compiles and updates the Cortese List as appropriate, but at least annually.

California Occupational Health and Safety Administration

The California Occupational Health and Safety Administration (CalOSHA) is responsible for the development and enforcement of workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. CalOSHA requires businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. Its Hazards Communication Standard requires that workers be informed of the hazards associated with the materials they handle. Manufacturers are required to label containers, provide material safety data sheets in the workplace, and provide worker training.

The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. Similar to the federal OSHA, CalOSHA contains requirements to prevent worker exposure to certain types of hazardous substances in the work place, such as asbestos and lead. Specifically, exposure of construction workers to lead is controlled by the Lead Standard and the exposure of workers to asbestos containing materials is controlled by the asbestos Construction Standard.

Underground Service Alert (DigAlert)

California Government Code 4216 et seq. defines mandatory notification procedures for subsurface excavations and installations. Pursuant to Section 4216 et seq., the applicant must contact the Underground Service Alert of Southern California, also known as DigAlert, at least two working days but no more than 14 days prior to conducting excavation activities for each component of the proposed project (DigAlert 2014).

Local

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The SJVAPCD implements air quality programs required by state and federal mandates, enforces rules and regulations based on air pollution laws, and educates businesses and residents about their roles in protecting air quality. One such program is the asbestos program. Asbestos is a TAC (as defined by Title 17, California Code of Regulation, § 93000. Substances Identified As Toxic Air Contaminants). The SJVAPCD regulates ACM for demolition and renovations of regulated facilities. An Asbestos Notification form is required for any regulated demolition, whether or not asbestos is present, and for certain regulated renovations. A Demolition Permit Release form is required for all demolitions, including for facilities exempt from NESHAP.

Regional Water Quality Control Board and Stormwater Pollution Prevention Plans

Under the National Pollutant Discharge Elimination System, California's Regional Water Quality Control Boards require a Construction Activities Storm Water General Permit (Order 2009-0009-DWQ) for stormwater discharges associated with any construction activity including clearing, grading, excavation reconstruction, and dredge and fill activities that results in the disturbance of at least one acre of total land area. Since the proposed project would disturb more than one acre, this permit would be required, along with a Stormwater Pollution Prevention Plan (SWPPP). SWPPPs require the use of site-specific best management practices during construction to reduce the potential for erosion and sedimentation and for vehicle and equipment fueling and maintenance, material storage, spill prevention, and waste management. In Fresno County, permits are administered by the Central Valley Regional Water Quality Control Board.

Fresno County Multi-Hazard Mitigation Plan

The *Fresno County Multi-Hazard Mitigation Plan*, which includes the *Fresno County Operational Area Master Emergency Services Plan*, identifies and analyzes existing hazards (such as earthquakes, fire, drought, and severe weather), assesses community vulnerability and mitigation capabilities, and provides mitigation strategies, a mitigation action plan, and an implementation program. The plan covers the entire proposed project area and identifies that the proposed project site is located within the dam failure inundation area associated with Pine Flat Dam (see Section 5.9.1 of the plan). Specific evacuation and emergency response routes have not been defined in the proposed project area.

Fresno County General Plan

The *Fresno County General Plan* provides policy direction for land development in unincorporated Fresno County. The Health and Safety Element of the plan defines an electrical substation as a critical facility and also includes the following policy that is relevant to the proposed project:

- ***Policy HS-B.3.*** *The County shall require that development in high fire hazard areas have fire-resistant vegetation, cleared fire breaks separating communities or clusters of structures from native vegetation, or a long-term comprehensive vegetation and fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas.*
- ***Policy HS.B.5.*** *The County shall require development to have adequate access for fire and emergency vehicles and equipment. All major subdivisions shall have a minimum of two (2) points of ingress and egress.*
- ***Policy HS-D.7.*** *The County shall ensure compliance with State seismic and building standards in the evaluation, design, and siting of critical facilities.*
- ***Policy HS-F-1.*** *The County shall require that facilities that handle hazardous materials or hazardous wastes to be designed, constructed, and operated in accordance with application hazardous materials and waste management laws and regulations.*
- ***Policy HS-F.5.*** *The County shall require that demolition of structures where friable asbestos or other hazardous materials could be released into the environment comply with applicable regulations and standards.*

5.8.3 Environmental Impacts and Assessment

Applicant Proposed Measures

The applicant has incorporated APMs into the proposed project to specifically minimize or avoid impacts from hazards and hazardous materials caused by the proposed project; these are listed below. A list of all project APMs is included in Table 4-5.

APM HAZ-1, Spill Prevention, Control, and Countermeasure. In the event of an accidental spill, the substation is equipped with a retention basin that meets Spill Prevention, Control, and Countermeasure (SPCC) Guidelines (40 Code of Federal Regulations 112). The retention basin is sufficiently sized to accommodate the accidental spill of all mineral oil from the largest transformer in the substation. The substation will also be equipped with lead-acid batteries to provide backup power for monitoring, alarm, protective relaying, instrumentation and control, and emergency lighting during power outages. Containment will be constructed around and under the battery racks, and the SPCC will address containment from a battery leak.

A site-specific SPCC plan will be prepared prior to the initiation of construction.

APM HAZ-2, Emergency Spill Response Equipment and Training. Emergency spill response and clean up kits will be available onsite and at the Fresno PG&E Service Yard Headquarters. The kits will be readily available for the cleanup of an accidental spill at the substation. Construction crews will be trained in safe handling and cleanup responsibilities prior to the initiation of construction.

APM HAZ-3, Shock Hazard. All authorized personnel working on site, during either construction or maintenance and operation, will be trained in accordance with PG&E standards. To minimize potential exposure of the public to electric shock hazards, an 8-foot-tall chain link fence topped with 1 foot of barbed wire will extend around the perimeter of the expanded substation for a total of

approximately 9 feet, thus restricting site access. Warning signs will be posted to alert persons of potential electrical hazards. All electric power lines will be designed in accordance with California Public Utilities Commission General Order 95 Guidelines for safe ground clearances established to protect the public from electric shock.

APM HAZ-4, Soil Testing and Disposal. In the event that soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are removed during site grading activities or excavation activities, the excavated soil will be tested and if contaminated above hazardous waste levels, will be contained and disposed of at a licensed waste facility. The presence of known or suspected contaminated soil will require testing and investigation procedures to be supervised by a qualified person, as appropriate, to meet state and federal regulations.

Hazards and Hazardous Materials Impacts

Table 5.8-1 includes the significance criteria from Appendix G of the California Environmental Quality Act Guidelines for hazards and hazardous materials to evaluate the environmental impacts of the proposed project. There are no schools within 0.25 miles of the proposed project site; therefore, there would be no impact to schools and no detailed discussion of significance criterion (c) is provided. The proposed project would not be located within an airport land use plan or within 2 miles of a public airport or public use airport. The proposed project would not be in the vicinity of a private airstrip. There would be no safety impacts related to public airports, public use airports, or private airstrips. Therefore, detailed discussions for significance criteria (e) and (f) are not provided.

Table 5.8-1 Hazards and Hazardous Materials Checklist

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site 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 two 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?	☐	☐	☐	☒

Table 5.8-1 Hazards and Hazardous Materials Checklist

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

Hazardous materials would be used during construction and operations. During construction, gasoline, diesel fuel, motor oil, antifreeze, transmission fluids, hydraulic fluids and lubricants, paints, solvents, adhesives, and cleaning chemicals would be used. Existing transformers containing oil and PCBs and the existing battery room containing sulfuric acid would be incorporated into the proposed expanded Sanger Substation and would not be moved. Obsolete SF_6 and oil-containing switches would be replaced by new SF_6-containing switches. The proposed demolition and transmission line rerouting activities may also generate hazardous waste materials, such as chemically treated wood. Asbestos could be found during demolition of transmission poles and towers if it is contained in the structures. Removal or relocation of utility lines requires notification to the SJVAPCD, an asbestos survey conducted by a Certified Asbestos Inspector, and applicable removal and disposal requirements of identified ACM (NESHAP 40 Code of Federal Regulations 61, Subpart M). Compliance with applicable regulations would ensure that asbestos air quality impacts would be less than significant. The routine use of hazardous materials could result in an accidental spill or other avenue of exposure during construction and refueling activities, which could result in a significant impact to the public. Additionally, routine disposal of unidentified contaminated soils could also result in a significant impact to workers. APM HAZ-2 would require that construction crews are trained in safe handling of hazardous materials prior to the initiation of construction activities. APM HAZ-4 would require suspected contaminated soils to be tested. Implementation of these APMs should prevent significant hazards from occurring during routine construction; however, the APMs are not comprehensive enough to mitigate impacts. For example, APM HAZ-2 requires spill response equipment and training, but does not require immediate and thorough cleanup of spills and does not require storage of equipment to contain runoff from contaminated areas from accidental spills. And, APM HAZ-4 requires testing of removed soil suspected of contamination, but does not contain specific details on equipment to keep on site to allow for removal of such soil as well as coordination procedures to follow if contaminated soil is located. Impacts could be significant. Mitigation measure (MM) HAZ-1 would supersede APM HAZ-2 and APM HAZ-4. MM HAZ-1 would require the applicant to prepare and implement a Hazardous Materials Management Plan to ensure that specific actions and protocols are established. Through implementation of MM HAZ-1, potential impacts associated with hazardous materials management would be less than significant.

MM HAZ-1: Hazardous Materials Management Plan (supersedes APM HAZ-2 and APM HAZ-4). Prior to construction, the applicant shall prepare a Hazardous Materials Management Plan, which shall be implemented during construction to prevent the release of hazardous materials and hazardous waste. The plan shall include the following requirements and procedures:

1. Training requirements for construction workers in appropriate work practices, including spill prevention and response measures. Additional training requirements for those performing excavation activities shall be required and shall include training on types of contamination and contaminants (e.g., petroleum hydrocarbons, asbestos, and *hazardous materials* [as defined by the California HSC]) and identifying potentially hazardous contamination (e.g., stained or discolored soil and odor).
2. Contain all hazardous materials at work sites and properly dispose of all such materials.
    a. Hazardous materials shall be stored on pallets within fenced and secured areas and protected from exposure to weather and further contamination.
    b. Fuels and lubricants shall be stored only at designated staging areas.
3. Maintain hazardous material spill kits for small spills at all active work sites and staging areas. Thoroughly clean up all spills as soon as they occur.
4. Store sorbent and barrier materials at all construction staging areas, including staging areas used during activities for decommissioning. Sorbent and barrier materials will be used to contain runoff from contaminated areas and from accidental releases of oil or other potentially hazardous materials.
5. Perform all routine equipment maintenance at a shop or at the staging area and recover and dispose of wastes in an appropriate manner.
6. Monitor and remove vehicles used for construction-related activities with chronic or continuous leaks from use and complete repairs before returning them to operation.
7. Store shovels and drums at the staging areas. If small quantities of soil become contaminated, use shovels to collect the soil and store in drums before proper offsite disposal. Large quantities of contaminated soil may be collected using heavy equipment and stored in drums or other suitable containers prior to disposal. Should contamination occur adjacent to staging areas because of runoff, shovels and/or heavy equipment shall be used to collect the contaminated material. Only trained construction workers shall handle hazardous, and potentially hazardous, materials.
8. Transporting, shipping, and disposal procedures for hazardous waste.
9. Procedures for notifying applicant and agency personnel in the event of the discovery of contaminated soil and/or groundwater. Contact information for federal, regional, and local agencies, the applicant's environmental coordinator(s) responsible for the cleanup of contaminated soil or groundwater, and licensed disposal facilities and haulers.

This plan will be submitted to the CPUC for review and approval at least 30 days prior to the start of construction of the proposed project.

Operation and Maintenance

LESS THAN SIGNIFICANT IMPACT

Similar to the existing operations, mineral oil would be present in sealed electrical equipment (such as transformers) at Sanger Substation during operation. The amount of mineral oil at the proposed Sanger Substation would be the same as presently located on the site. The proposed project would replace older oil-filled circuit breakers that may contain small amounts of PCBs with new circuit breakers, which would be a beneficial impact. The retention basin would be moved on site, which would cause the SPCC plan for the existing Sanger Substation to be inaccurate. If a spill were to occur while an inaccurate SPCC plan is in place, potentially significant impacts related to spill response and prevention could occur. As described in APM HAZ-1, the applicant would prepare a new SPCC plan for Sanger Substation to address the new substation design and retention basin. Hazardous materials impacts from operation and maintenance activities would be less than significant with implementation of APM HAZ-1.

b. Would the 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

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

As described under the discussion for impact criterion (a), the applicant would transport, use, or dispose of hazardous materials and petroleum products in accordance with all applicable federal, state, and local regulations. However, accidental releases or spills could still occur, representing a potential hazard to the public and environment during construction and operations, which would be a significant impact. Compliance with applicable regulations and implementation of a SWPPP, HMBP, SPCC plan, APM HAZ-2, and APM HAZ-4 would reduce this risk but not prevent all significant impacts that may still occur from upset and accident conditions involving the release of hazardous materials and wastes. For example, APM HAZ-2 requires spill response equipment and training but does not require immediate and thorough cleanup of spills and does not require storage of equipment to contain runoff from contaminated areas from accidental spills. And APM HAZ-4 requires testing of removed soil suspected of contamination, but does not contain specific details on equipment to keep on site to allow for removal of such soil as well as coordination procedures to follow if contaminated soil is located or if contaminated soil is created during construction. Impacts could be significant. MM HAZ-1 would require the implementation of a Hazardous Materials Management Plan that addresses the significant impacts. MM HAZ-1 would supersede APM HAZ-2 and APM HAZ-4. Implementation of MM HAZ-1would reduce impacts to a less than significant level.

Other potential hazards associated with construction at the electrical substation include the presence of high voltage, open-air conductors that can create a high temperature electrical arc between the electrical conductor and persons or objects. The applicant's power lines and station facilities are designed and constructed with grounding devices and in the event of a lightning strike on a power line, this safety feature ensures that the strike is discharged to appropriate ground. However, impacts would be significant if workers were not informed of proper safety procedures. All workers would be trained in appropriate safety procedures, as described in APM HAZ-3. Impacts on onsite construction workers from high temperature electrical arc would be less than significant with implementation of APM HAZ-3.

Accidental contact with existing underground utility lines or a private utility line such as leach lines associated with a septic system could result in a release of waste materials or could pose a safety risk for the public and workers. Compliance with California Government Code 4216.1 would reduce potential

impacts to public utility lines because underground utilities would be identified and marked prior to construction so that they could be avoided. The potential for the proposed project to damage existing underground infrastructure would be less than significant.

Operation and Maintenance

LESS THAN SIGNIFICANT IMPACT

Similar to the existing operations, mineral oil would be present in sealed electrical equipment (such as transformers) at Sanger Substation during operation. The amount of mineral oil at the proposed Sanger Substation would be the same as presently located on the site. The older oil-filled circuit breakers that could contain small amounts of PCBs would be replaced with newer circuit breakers, which would be a beneficial impact. The retention basin would be moved on site, which would cause the SPCC plan for the existing Sanger Substation to be inaccurate. If a spill were to occur while an inaccurate SPCC plan is in place, potentially significant impacts related to spill response and prevention could occur. As described in APM HAZ-1, the applicant would prepare a new SPCC plan for Sanger Substation to address the new substation design and retention basin. Hazardous materials impacts from operation and maintenance activities would be less than significant with implementation of APM HAZ-1.

d. Would the project 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?

Construction

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

The proposed project would not be located within 0.25 miles of an open Cortese List site. Therefore, construction of the proposed project would not result in any significant hazard to the public or environment due to affecting existing Cortese List sites.

Ground disturbing activities associated with construction of the proposed project would have the potential to discover previously unreported areas of contaminated soil from spills of PCBs and insulation oils on the existing substation property and pesticides or herbicide-contaminated soil from agricultural application in the expansion area. In the event of an unanticipated discovery of contaminated soils at the project site, the measures identified in APM HAZ-4 would be implemented, which would require the appropriate testing and proper disposal of the contaminated soil. However, not enough details are provided in this APM to determine its effectiveness. For example, APM HAZ-4 does not contain details about what equipment should be stored on site for use in case suspected contaminated soil is found. There are also no details regarding coordination with agencies if such soil is found. Impacts could therefore remain significant. In addition to the APM, MM HAZ-1 would require the applicant to prepare and implement a Hazardous Materials Management Plan to ensure that specific actions and protocols are established. MM HAZ-1 would supersede APM HAZ-4. Through implementation of MM HAZ-1, potential impacts associated with undiscovered soil contamination would be less than significant.

Operation and Maintenance

NO IMPACT

The proposed project would not be located within 0.25 miles of an open Cortese List site. Therefore, construction and operation of the proposed project would not result in any significant hazard to the public or environment due to affecting operations at Cortese List sites. Operation and maintenance of the

proposed project would not involve new ground disturbance; therefore, there would be no potential for uncovering contaminated soils. There would be no impact.

g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

NO IMPACT

Some activities, such as equipment delivery, could temporarily affect traffic on East Jensen Avenue and South McCall Avenues. However, Fresno County's emergency plan does not designate the roads in the project area (i.e., East Jensen Avenue and South McCall Avenues) as major transportation or emergency routes (Fresno County 2009). Therefore, there would be no impact to implementation of emergency response plans or emergency evacuation plans during construction or operation and maintenance of the proposed project.

h. Would the project 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?

Construction

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

The proposed project area at and in the vicinity of the Sanger Substation is in an area of irrigated and cultivated agricultural fields and rural road corridors. The area is not adjacent to or near wildlands or urbanized areas. Equipment and vehicles used during construction, as well as welding activities required for construction of towers or support structures, have the potential to ignite dry vegetation and cause a fire. Smoking by site and construction workers is also a potential fire hazard. However, the project is not in a high fire hazard area, and there is not a significant amount of vegetation in the project area aside from irrigated crops, which would be removed from construction areas in the early stages of construction. Impacts from wildland fires would be less than significant for construction activities in the vicinity of the Sanger Substation.

The Fence Meadow Repeater Station is located in a Very High Fire Hazard Severity Zone in the Sierra National Forest, within a Federal Responsibility Area. Construction activities associated with installation of two dishes on an existing tower would increase fire risk during vehicle and equipment use, worker activities (such as cigarette smoking), and other activities that could produce a spark. However, the area around the station is for the most part cleared of vegetation, which reduces the risk of fire. Nonetheless, certain activities (e.g., starting a vehicle on a grassy area, workers smoking in a vegetated area) have the potential for igniting fire, which could result in a significant impact given the vegetation surrounding the Fence Meadow Repeater Station. No APMs were proposed to minimize or avoid impacts from wildland fires caused by the proposed project. MM HAZ-2 would require the applicant to prepare and implement a fire hazard reduction measures to minimize the risk of fire and to address impacts should a fire occur. Through implementation of MM HAZ-2, potential impacts associated with wildland fire would be less than significant.

MM HAZ-2: Fire Control Measures. PG&E shall implement the following measures prior to and during work at the Fence Meadow Repeater Station

1. As part of the Worker Training Program, workers will be trained in fire prevention and response practices to be implemented to minimize the risk of fire, and in the event of fire, trained to provide immediate response. At minimum, construction personnel shall be trained in fire

reporting and incipient-stage fire prevention, control, and extinguishing (i.e., the fire can be controlled or extinguished by portable fire extinguishers, small hose systems, or portable water supplies without the need for protective clothing or breathing apparatus.)

2. Prohibit smoking at the worksites other than in designated areas chosen that are free of ignitable material. Require disposal of cigarette butts in a way that will not ignite vegetation or other materials.
3. Ensuring an appropriate fire extinguisher is present before initiating and during each hot-work activity (e/g/, welding, brazing, soldering, grinding, and arc cutting).
4. Preventing vehicles with hot exhaust manifolds from idling on roads with combustible vegetation under the vehicles.
5. Do not park vehicles in areas with vegetation prone to ignition.
6. Equip all vehicles with a fire extinguisher.

Operation and Maintenance

NO IMPACT

Operation and maintenance of the proposed project would be similar to existing operation and maintenance of the Sanger Substation and nearby infrastructure. The project is not in a high fire hazard area, and there is not a significant amount of vegetation in the project area aside from irrigated crops. Operation and maintenance activities at the Fence Meadow Repeater Station would not increase or change as a result of installing two new dishes. Therefore, there would be no impact from wildland fires during operation and maintenance of the proposed project.