

9

HAZARDS AND HAZARDOUS MATERIALS

9.1 INTRODUCTION

The Hazards and Hazardous Materials chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the proposed project area. The chapter discusses potential impacts posed by such hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the project area. The discussions and mitigation measures presented in each technical section apply all the properties included in the project site, as well as any off-site improvement areas, unless otherwise stated.

Information from this chapter is primarily drawn from Phase I Environmental Site Assessments (ESAs) prepared by Wallace Kuhl and Associates (WKA) for each of the Haight,¹ Ogg,² Placer Greens properties,³ and both the six- and 25-acre areas of the Pruett property,⁴ as well as two Phase II ESAs prepared for the Haight and Ogg properties, respectively (see Appendix H to this EIR).⁵ In addition, information was sourced from the Placer County General Plan,⁶ the Placer County General Plan EIR,⁷ and the Dry Creek-West Placer Community Plan (DCWPCP).⁸

9.2 EXISTING ENVIRONMENTAL SETTING

Background setting information on existing hazards and hazardous materials within the project site and the surrounding region is provided below.

¹ Wallace Kuhl and Associates. *Phase I Environmental Site Assessment, 12-Acre Haight Property, 2751 & 2755 PFE Road, Roseville, California, WKA No. 10217.01.* August 25, 2014.

² Wallace Kuhl and Associates. *Phase I Environmental Site Assessment, 19-Acre Ogg Property, 9700 Antelope Road, Roseville, California, WKA No. 10218.01.* August 25, 2014.

³ Wallace Kuhl and Associates. *Phase I Environmental Site Assessment, Placer Greens Property, Antelope Road North and PFE Road, Roseville, California, WKA No. 10281.01.* September 29, 2014.

⁴ Wallace Kuhl and Associates. *Phase I Environmental Site Assessment, 6-Acre Pruett Property, Antelope Road, Roseville, California, WKA No. 10216.01.* August 25, 2014; Wallace Kuhl and Associates. *Phase I Environmental Site Assessment, 25-Acre Pruett Property, 2851 & 2901 PFE Road, Roseville, California, WKA No. 10215.01.* August 25, 2014.

⁵ Wallace Kuhl and Associates. *Phase II Environmental Site Assessment, 12-Acre Haight Property, 2751 & 2755 PFE Road, Roseville, California, WKA No. 10217.03.* October 27, 2014; Wallace Kuhl and Associates. *Phase II Environmental Site Assessment, 19-Acre Ogg Property, 9700 Antelope Road, Roseville, California, WKA No. 10218.03.* October 8, 2014.

⁶ Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).

⁷ Placer County. *Countywide General Plan EIR.* July 1994.

⁸ Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.

Project Area Conditions

Hazards and hazardous materials associated with surrounding land uses, historical on-site land uses, current on-site conditions, and hazardous materials sites are discussed in detail below. Potential air traffic and wildland fire hazards associated with the project area are also discussed.

Surrounding Uses

The proposed project site is bounded on the west side by Cook Riolo Road, the former site of Dry Creek Elementary School, which is currently used as the Dry Creek Joint Elementary School District's (DCJESD's) office space, and several residences. Antelope Road extends north-south to PFE Road through the eastern third of the site. The eastern boundary of the project site includes a tributary to Dry Creek, south and east of which are industrial uses and vacant land. PFE Road forms the majority of the northern boundary of the project site, with the exception of the central portion of the project site, which is bordered to the north by rural residential dwellings and associated structures, where some agricultural operations occur. South of the project site, within Sacramento County, is a residential community (west of Antelope Road), and industrial uses (east of Antelope Road). The industrial uses consist of a tractor-trailer storage facility (Roseville Storage) located to the south of the Placer Greens property.

Historical On-site Land Use and Current Conditions

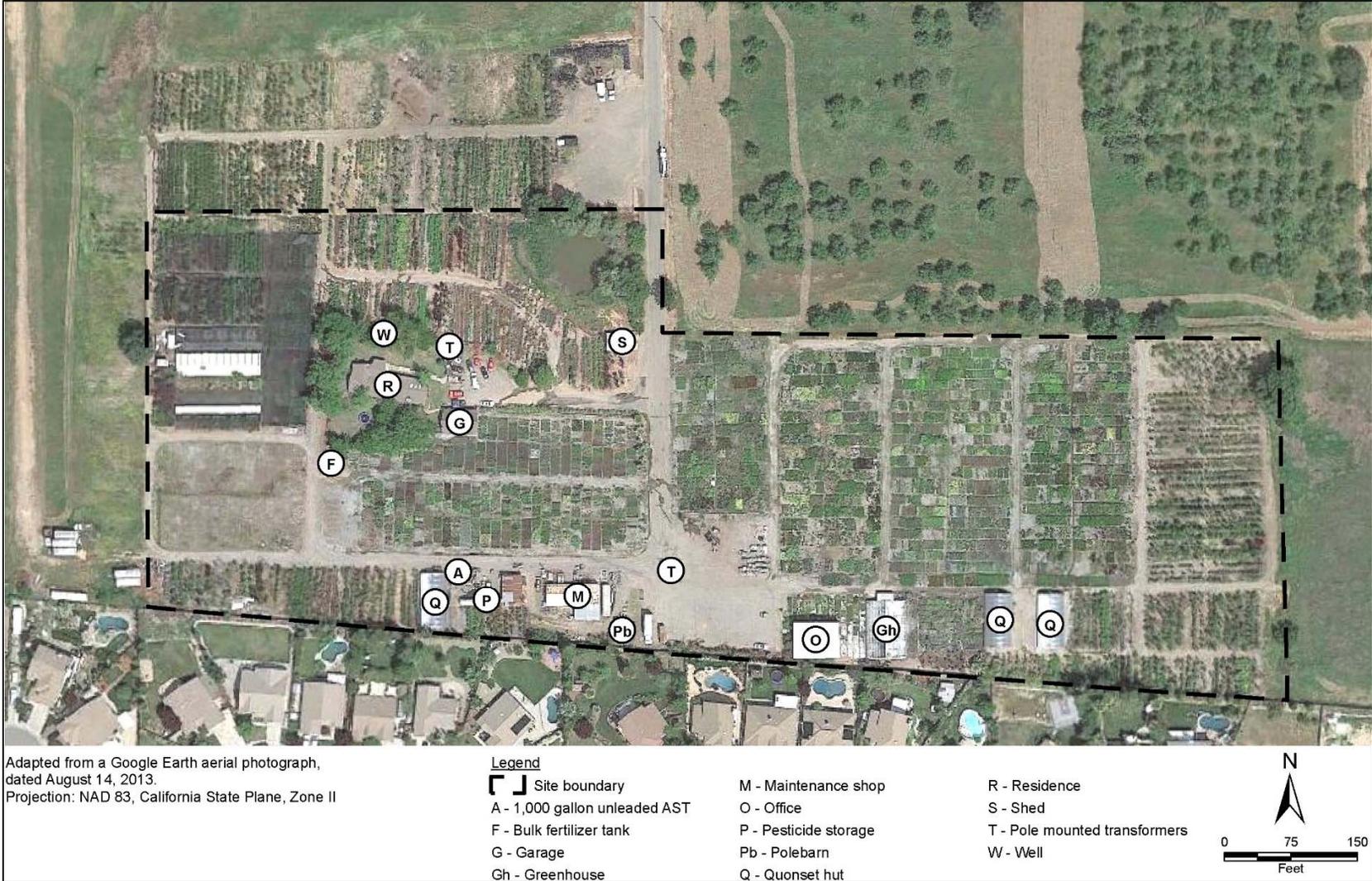
The historical land use associated with each of the properties on the project site is discussed below.

Haight Property

The Haight property was historically used for dry-land farming from at least 1937 to at least 1957. Since at least 1964, the property has been developed with a single-family residence and the Haight Nursery facility, a wholesale plant grower and distributor (see Figure 9-1). An office associated with the Haight Nursery was added to the site around 1971. Between 1964 and 1993, operations at the on-site nursery consisted primarily of storage of container plants; the majority of the nursery operations occurred to the south of the Haight property, in an area which is currently developed with single-family residences. A tail-water pond was installed on the southern portion of the property between 1981 and 1993. After 1993, main operations of the Haight Nursery, including a maintenance shop, were moved to the proposed project site, on the Haight property. A greenhouse was placed on the property by 1998, and three Quonset huts were placed on the property by 2005. It should be noted that a bulk fertilizer tank is currently located to the southwest of the residents. At the time of a site reconnaissance survey conducted on August 12, 2014, a distribution system was attached to the storage tank; however, several parts were missing, and the system was in disrepair.

The maintenance shop has a concrete floor where equipment used for nursery operations is maintained and repaired. At the time of the site reconnaissance survey, WKA observed tools, spare parts, empty buckets, nine buckets of hydraulic oil, a 55-gallon drum of new oil, one- and five-gallon buckets of paint, and scrap metal in the maintenance shop.

**Figure 9-1
 Haight Property Overview**



Source: Wallace Kuhl and Associates, 2014.

The concrete floor of the maintenance shop appeared to be in good condition with minimal staining. A surficial stain that measured six inches by 12 inches and less than one-quarter inch deep was observed outside of the maintenance shop, to the north.

The following discussion includes a discussion of potential Recognized Environmental Conditions (RECs) associated with the Haight property. An REC indicates the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to any release into the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.⁹

Aboveground/Underground Storage Tanks

A 1,000-gallon aboveground storage tank (AST) is located on the Haight property, to the east of the westernmost Quonset hut on the property. The AST was installed between 1993 and 1995, and has not been associated with any known major spills. At the time of the site reconnaissance survey conducted by WKA, minor surficial soil staining was present below the 1,000-gallon AST. In order to evaluate surface soil conditions around the AST for residuals of petroleum hydrocarbon products, WKA collected soil samples at two locations where the surface staining was observed. Samples were collected at between zero and six inches below ground surface (bgs) and between 30 and 36 inches bgs for each location for a total of four samples. The two near-surface samples were submitted for laboratory analysis. Per the Phase II ESA prepared for the Haight property, petroleum hydrocarbons were not detected at levels above laboratory reporting limits. The Haight property does not contain any documented underground storage tanks (USTs).

Septic Systems and Wells

Two septic systems are located on the Haight property, to the southwest of the existing single-family residence and to the east of the existing office, respectively. In addition, a well is located in the northwest portion of the property.

Pesticides

According to the Phase I ESA prepared for the Haight property, building maintenance activities associated with the single-family residence, shed, detached garage, and office on the Haight property likely included the application of persistent pesticides (termiticides) around the foundations to prevent pest invasions. Detailed analysis of pesticide residue concentrations within the Haight property is provided below.

The Phase II ESA prepared for the Haight property included an analysis of Organochlorine pesticides (OCPs) at the property, including, but not limited to, dieldrin, alpha-chlordane, and endrin. According to the Phase II ESA, dieldrin was detected in soil samples taken within the immediate vicinity of the single-family residence at concentrations ranging from

⁹ ASTM International. *ASTM E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. 2013.

0.267 to 1.09 milligram per kilogram (mg/kg), which exceeds the residential California Human Health Screening Level (CHHSL) of 0.035 mg/kg. Detected concentrations of alpha-chlordane and endrin were below the residential CHHLs of 0.43 mg/kg and 21 mg/kg, respectively. OCPs were not detected at levels above laboratory detection limits at other areas analyzed on the Haight property.

Asbestos and Lead Materials

Asbestos is a material that was commonly used in heating and electrical insulation because of the material's resistance to fire and heat. However, later discoveries found that, when inhaled, the material caused serious illness. For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as "presumed asbestos-containing material" unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act.

Lead is a highly toxic material that may cause a range of serious illnesses, and in some cases death. Lead was most commonly used in paint. In 1978, the Consumer Product Safety Commission banned the use of lead as an additive to paint. Currently, the U.S. Environmental Protection Agency (USEPA) and the U.S. Department of Housing and Urban Development are proposing additional lead-based paint regulations. Lead-based paints could be present in structures built prior to 1970. Typically, exposure of construction workers to lead from older vintage paint could occur during renovation, maintenance, or demolition work. The proposed project site contains existing structures that have been built prior to 1980 and 1970. Due to the age of the existing structures, it is possible that asbestos-containing materials and lead-based paint have been used in the construction of such structures.

According to the Phase II ESA prepared for the Haight property, lead was detected in samples collected within the dry tail pond and the plant storage area, as well as around the perimeter of each structure on the Haight property. However, the detected concentration of total lead ranged from 2.9 mg/kg to 28.8 mg/kg, which is below the residential CHHSL of 80 mg/kg.

Arsenic

Concentrations of arsenic cannot be directly compared to the residential CHHSL, as naturally occurring arsenic is often detected at levels above such a threshold. Consequently, the Phase II ESA for the Haight property included an analysis of cancer risk due to arsenic using the Department of Toxic Substances Control's (DTSC's) 12 mg/kg threshold for naturally occurring arsenic in soil at sensitive land use properties.

Per the Phase II ESA prepared for the Haight property, the maximum arsenic concentration detected at the property (nine additional occurrences of cancer in an exposed population of 1,000,000) and the 95 percent upper confidence limit (95% UCL) (two additional

occurrences of cancer in an exposed population of 1,000,000) falls below the risk associated with DTSC's 12 mg/kg threshold for a sensitive land use (31 additional occurrences of cancer in an exposed population of 1,000,000). While the cancer risk from detected arsenic at the Haight property falls above the risk associated with the residential CHHSL for arsenic, the risk determined with the property's maximum detected arsenic concentration and the 95% UCL falls below the no significant risk level established by the California Code of Regulations (Title 27, Article 7 § 25703) of 10 additional occurrences of cancer in an exposed population of 1,000,000. As such, WKA has determined that existing arsenic concentrations at the Haight property do not pose a significant risk to human health based on a residential land use.

Other RECs

A tail water pond is located on the southern portion of the Haight property. The tail water pond receives runoff from the existing plant storage areas on the property.

Ogg Property

The Ogg property has contained an orchard since at least 1937 (see Figure 9-2). In 1956, a single-family residence and a detached two-car garage were constructed on the southeastern portion of the property. A metal-roofed shop was added to the west side of the two-car garage between 1967 and 1971. A mobile home was placed on the property, to the east of the two-car garage, between 1981 and 1986. A former orchard area is located to the west of the single-family residence. Per the Phase I ESA prepared for the Ogg property, the former orchard includes an area which was likely used for the mixing of pesticides. The following discussion includes a discussion of potential RECs associated with the Ogg property.

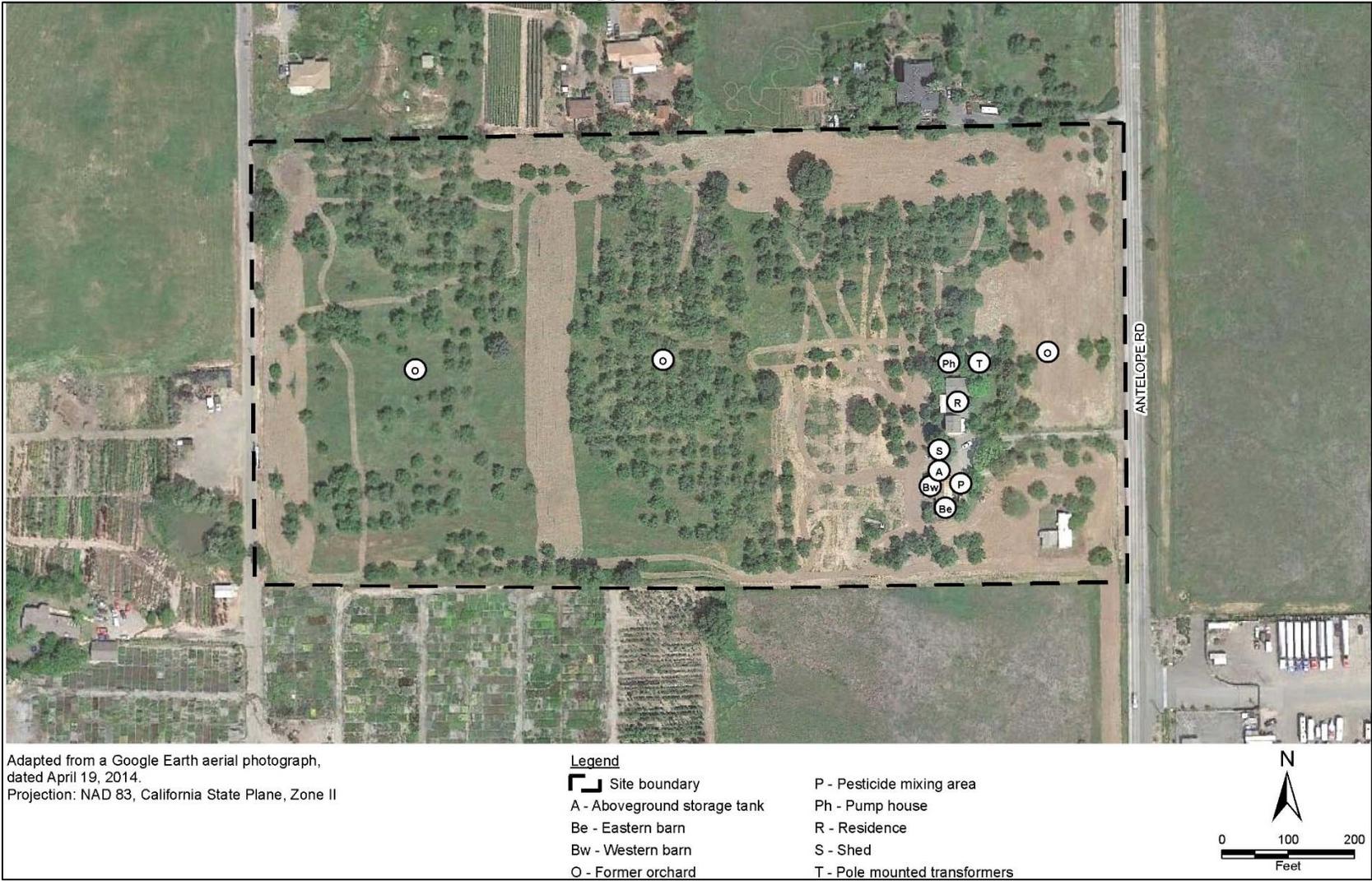
Aboveground/Underground Storage Tanks

Currently, a 500-gallon AST is located to the north of the two-car garage structure. The AST is located on a concrete pad. Per the Phase I ESA conducted for the property, stained concrete and/or soils were not observed in the vicinity of the AST. However, given the potential for accumulation of fuel-related products in the soil under and around the AST, a total of four samples, including two samples zero and six inches bgs and two samples between 30 and 36 inches bgs, were collected by WKA as part of a Phase II ESA. The two near-surface samples were submitted for laboratory analysis. Per the Phase II ESA prepared for the Ogg property, petroleum hydrocarbons were not detected at levels above laboratory reporting limits. The Ogg property does not contain any documented USTs.

Septic Systems and Wells

A septic system is located on the Ogg property, to the west of the single-family residence on the southeastern portion of the property. In addition, a well is located within a pump house to the north of the single-family residence.

**Figure 9-2
 Ogg Property Overview**



Source: Wallace Kuhl and Associates, 2014.

Pesticides

Per the Phase I ESA prepared for the Ogg property, termiticides may have been applied around the foundations of the single-family residence, detached shed, two-car garage, and pump house on the property. However, according to the Phase II ESA prepared for the property, OCPs were not present at concentrations exceeding the laboratory reporting limit for soils samples collected within the former orchard area. While OCPs, primarily chlordane, were detected in soils surrounding the structures on the Ogg property and within the former pesticide mixing area, all OCPs on the Ogg property were detected at levels below their respective CHHSLs for residential land uses.

Asbestos and Lead Materials

The Phase II ESA prepared for the Ogg property included an analysis of lead contaminants associated with the existing structures on the property, and the former orchard. With the exception of one sample (Sample S44-A), with a detected lead concentration of 87.9 mg/kg, lead detected along the perimeter of each structure on the Ogg property was detected at concentrations below the residential CHHSL of 80 mg/kg for lead. Sample S44-A was taken from an area contiguous with the former pesticide mixing area. Lead was detected at the former pesticide mixing area at concentrations between 77.4 mg/kg and 115.0 mg/kg. Exceedances of the CHHSL for lead was limited to samples collected in the vicinity of the former pesticide mixing area.

Arsenic

According to the Phase II ESA prepared for the Ogg property, the calculated risk associated with the maximum detected arsenic concentration or the 95% UCL at the Ogg property is below the risk associated with DTSC's 12 milligram per kilogram (mg/kg) threshold for a sensitive land use and below the no significant risk level established by the California Code of Regulations (Title 27, Article 7 § 25703) of 10 additional occurrences of cancer in an exposed population of 1,000,000.

Municipal Infrastructure and Utilities

Three pole-mounted transformers are located northwest of the single-family residence on the Ogg property. The transformers are owned and maintained by the Sacramento Municipal Utilities District (SMUD). SMUD has not identified any hazards or concerns associated with the transformers. According to the Phase II ESA prepared for the property, petroleum hydrocarbons were not detected above laboratory reporting limits within the vicinity of the pole-mounted transformers.

Pruett Properties

The Pruett property includes two distinct areas: a 25-acre area located to the west of the Haight property, and a smaller six-acre area to the east. The 25-acre area was dry farmed and used as pasture land from the late 1800s until the 1960s. A private aircraft landing strip was installed on

the western portion of the site in the 1940s. The landing strip was used only by the property owner's family-owned aircraft. A barn was constructed to the west of the landing strip, along the west boundary of the property, between 1947 and 1957. The barn was used to store cattle feed until the 1960s, after which the barn was used for the storage of cars and airplane parts. At the time of a site reconnaissance survey conducted on August 12, 2014, WKA noted four cars, a truck, airplane parts, a wine grape press, and empty 55-gallon and unlabeled 10-gallon drums within the barn. The visible portions of the concrete floor were absent of chemical stains. Per the Phase I ESA prepared for the 25-acre property, a natural gas pipeline owned by the Pacific Gas and Electric Company (PG&E) is located within an easement along the eastern property boundary. Within the project site, the diameter of the pipeline ranges from 12 to 16 inches.

The six-acre area was used for dry-land farming from at least 1937 to approximately 1971. The area has been vacant since at least 1983. RECs related to pesticides were not identified in the Phase I ESAs prepared for the two Pruett properties.

Currently, an empty 500-gallon diesel AST is located at the south end of the existing landing strip on the 25-acre Pruett property. According to the property owner, the 500-gallon AST has not been filled while located on the site. It should be noted that a septic system may have been installed on the six-acre Pruett property; however, information regarding the location of such a tank is not available. A capped well is located on the central portion of the property.

Placer Greens Property

The Placer Greens property was vacant from at least 1893 to approximately 1937, and was used for dry-land farming from at least 1947 to approximately 1957. The property has been vacant since approximately 1964. RECs related to pesticides were not identified in the Phase I ESA prepared for the Placer Greens Property.

The southern portion of the Placer Greens property contains two areas where soil has been placed in a pile, a separate pile of scrap metal, as well as an abandoned truck and miscellaneous trash. In addition, the business located on the adjoining property to the south of the Placer Greens property has placed equipment and other non-soil materials on the Placer Greens property, including five semi-truck trailers, a pile of concrete, a pile of eight tires, and other miscellaneous debris. WKA noted three areas of stained soils associated with the debris, which all measured less than one foot in diameter and less than one inch in depth. In addition, on December 14, 2016, WKA observed a third soil stockpile had been placed near the two previously noted soil stockpiles.

Based on the findings of the Phase I ESA prepared for the Placer Greens property, WKA collected soil samples from each of the three stockpiles on the property. Four samples were collected from each stockpile and sent to a laboratory for analysis. The results of the sampling are summarized in a Stockpile Soil Sampling and Analyses letter prepared for the proposed project.¹⁰ Per the letter, the stockpiled soils did not contain substantial concentrations of any of the chemical tested for, including, but not limited to, VOCs, OCPs, hazardous metals, arsenic, and asbestos.

¹⁰ Wallace Kuhl and Associates. *Stockpile Soil Sampling and Analyses Letter, Placer Greens Property, WKA No. 10281.04*. February 6, 2017.

Hazardous Materials Sites

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency. The DTSC defines hazardous waste, as found in the California Health and Safety Code, Section 25141(b), as follows:

[...] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

A search of federal, State, and local databases for the project site and surrounding area was performed. The Haight Nursery facility is listed on the DTSC's Historical UST and Haznet databases. However, per the Phase I ESAs, the USTs were located to the south of the Haight Property, where the primary operations associated with the Haight Nursery were located from 1964 and 1993. As noted above, the area to the south of the Haight property has since been developed with single-family residences. According to a SCEMD letter, dated September 10, 1992, the Haight Nursery facility received a "no further action" status. The facility is not suspected of negatively impacting on-site conditions.¹¹

Several nearby facilities within an eighth- to a quarter-mile of the site are also listed either on the Placer County Master List, the California Facility Information Database (FID) for Underground Storage Tanks (USTs), the Regional Water Quality Control Board (RWQCB) Leaking UST database, and the DTSC Envirostor and Spills, Leaks, Investigation, and Control databases. However, per the Phase I ESAs prepared for the proposed project, none of the facilities are suspected of negatively impacting the proposed project site.

Vapor Encroachment

To confirm that nearby known or suspected contaminated properties would not have any negative impacts on the project site, vapor encroachment screening was conducted at the project site. WKA conducted a preliminary screening for vapor encroachment conditions (VECs) beneath all of the properties included in the proposed project site using Tier 1 vapor encroachment screening evaluation. The Tier 1 screening included performance of a Search Distance Test to identify any known or suspect contaminated properties within the site vicinity and a Chemicals of Concern (COC) test to evaluate whether COCs are likely to be present on the aforementioned suspect contaminated properties. Based on the results of the VEC-screening matrix, VECs do not or are not likely to exist on any of the properties within the project site.

¹¹ Wallace Kuhl and Associates. *Phase I Environmental Site Assessment, 12-Acre Haight Property, 2751 & 2755 PFE Road, Roseville, California, WKA No. 10217.01* [pg. 17]. August 25, 2014.

Public and Private Airports

The closest public use airport to the proposed project site is the McClellan Airport, which is located approximately four miles to the southwest of the site. The project site is not located in the vicinity of any private airstrips. McClellan Airport was formerly known as the McClellan Air Force Base, and was operated for more than 60 years as an industrial military facility; however, the airport is currently part of a master-planned community consisting of more than 16 million square feet of industrial, research and development, office, aviation, and mixed-use facilities. McClellan Airport's most recent Airport Land Use Compatibility Plan was updated in 1987, when the airport was still operated as an Air Force base. The Sacramento Area Council of Governments is currently in the process of developing an Airport Land Use Compatibility Plan Update for the airport.¹²

Wildland Fires

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP), the proposed project is located within an unincorporated Local Responsibility Area (LRA). An LRA is an area that is not under federal or State responsibility and in which the local agencies have sole responsibility for fire suppression activities. Per the Very High Fire Hazard Severity Zones (VHFHSZ) in the LRA map, the project site is within a non-VHFHSZ.¹³

9.3 REGULATORY CONTEXT

The following section is a summary of the regulatory context under which hazards and hazardous material issues are managed at federal, State, and local levels.

Federal Regulations

Federal agencies that regulate hazardous materials include the USEPA, the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). Prior to August 1992, the principal agency at the federal level regulating the generation, transport and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California DTSC was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The following federal laws and related regulations govern hazardous materials.

Occupational Safety and Health Act (29 U.S.C. §651 et seq. [1970])

Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from

¹² Sacramento County. *Economic Development, McClellan*. Available at: <http://economic.saccounty.net/LocateHere/McClellan/Pages/default.aspx>. Accessed June 15, 2017.

¹³ Cal Fire. *Fire Hazard Severity Zones in LRA Placer County*. November 24, 2008.

recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for the OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states.

Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §9601 et seq. [1980])

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The USEPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, USEPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The USEPA also recovers costs from financially viable individuals and companies once a response action has been completed. The USEPA is authorized to implement the Act in all 50 states and U.S. territories.

Superfund Amendments and Reauthorization Act of 1986, Title III; Section 305(a)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.

Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq. [1976])

The RCRA gives USEPA the authority to control hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The federal Hazardous and Solid Waste Amendments (HSWA) - are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for USEPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

Toxic Substances Control Act (15 U.S.C. §2601 et seq. [1976])

The Toxic Substances Control Act (TSCA) of 1976 provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100–185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive required training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections, use of vehicle controls and equipment including emergency equipment, procedures for safe operation of the transport vehicle, training on the properties of the hazardous material being transported, and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Asbestos Hazard Emergency Response Act

The 1986 Asbestos Hazard Emergency Response Act (AHERA) was signed into law as Title II of the TSCA, requiring the Asbestos Model Accreditation Plan (MAP) for accrediting individuals conducting asbestos inspection and corrective-action activities in schools and public and commercial buildings. The MAP provides guidance on the minimum training requirements for accrediting asbestos professionals such as, procedural entry, exit, sampling, and monitoring, safety hazards, and relevant federal, state, and local regulatory standards.

Lead-based Paint Regulations

Lead pollutants are regulated by several laws administered by the USEPA, including the TSCA, the Residential Lead-Based Paint Hazard Reduction Act of 1992, CAA, CWA, SDWA, RCRA, and CERCLA. The aforementioned regulations address lead in paint, dust and soil, lead in air and water, and the disposal of lead wastes. Regulations specific to lead-based paint include, but are not limited to, the Lead Renovation Repair and Painting Program Rule, the Lead Abatement Program, the residential Lead-based Paint Disclosure Program, and Residential Hazards of Lead in Paint,

Dust and Soil. Such regulations require risk assessments, inspections, and work practices that work to minimize exposure to lead hazards.

State Regulations

The California EPA (CalEPA) and the California State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). The following discussion contains the applicable State laws.

Cortese List: Government Code Section 65962.5(a)

The DTSC shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

1. All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
2. All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
3. All information received by the DTSC pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
4. All sites listed pursuant to Section 25356 of the Health and Safety Code.

Regional Water Quality Control Board

The CalEPA and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within CalEPA, DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The RWQCB's regulations are contained in Title 27 of the CCR. The DTSC, RWQCB, and/or a local agency typically oversees investigation and cleanup of contaminated sites.

California Health and Safety Code

The handling and storage of hazardous materials is regulated on the federal level by the USEPA under CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA). Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses which store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III

required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

Ammonia is an example of an acutely hazardous material (AHM) that is regulated by the California Office of Emergency Services under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and the OSHA under the Process Safety Management Program (OSHA 1910.119). The California Accidental Release Program and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by CalEPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

In California, the underground storage of hazardous materials is regulated by Chapter 6.7 of the California Health and Safety Code per the Underground Storage of Hazardous Substances Act. Under section 25280, the USTs used for the storage of substances hazardous to the public health and safety and to the environment are stored prior to use or disposal in thousands of underground locations in the State. The USTs used for storage are potential sources of contamination of the ground and underlying aquifers, and may pose other dangers to public health and the environment. Chapter 6.7 establishes orderly procedures that will ensure that newly constructed USTs meet appropriate standards and that existing tanks be properly maintained, inspected, tested, and upgraded so that the health, property, and resources of the people of the state will be protected.

The handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility, and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are also required to prepare a Risk Management Plan and California Accidental Release Plan, which provides information on the potential impact zone of a worst-case release, and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Vehicle Code Section 31303

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials

and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the Governor's Office of Emergency Services (OES), which coordinates the responses of other agencies, including CalEPA, CHP, California Department of Fish and Wildlife (CDFW), Central Valley RWQCB, and Placer County Fire.

Local Regulations

Relevant goals and policies from the Placer County General Plan and various other local guidelines and regulations related to hazards and hazardous materials are discussed below. The DCWPCP does not contain specific goals or policies related to hazards and hazardous materials.

Placer County General Plan

The following goals and policies from the Placer County General Plan are applicable to the proposed project:

- Policy 8.C.3 The County shall require that new development meets state, County, and local fire district standards for fire protection.

- Policy 8.C.5 The County shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.

- Policy 8.C.11 The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards.

- Policy 8.D.1 The County shall ensure that new development around airports does not create safety hazards such as lights from direct or reflective sources, smoke, electrical interference, hazardous chemicals, or fuel storage in violation of adopted safety standards.

- Policy 8.G.1 The County shall ensure that the use and disposal of hazardous materials in the County complies with local, state, and federal safety standards.

- Policy 8.G.2 The County shall discourage the development of residences or schools near known hazardous waste disposal or handling facilities.

Policy 8.G.3 The County shall review all proposed development projects that manufacture, use, or transport hazardous material for compliance with the County's *Hazardous Waste Management Plan (CHWMP)*.

Placer County Environmental Health Department

The Placer County Environmental Health Department (PCEHD) is the Certified Unified Program Agency for local implementation of CalARP and several other hazardous materials and hazardous waste programs. PCEHD is responsible for regulating hazardous materials business plans and chemical inventory, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Placer County to prepare business emergency response plans if hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of PCEHD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

The PCEHD distributes the information in the hazardous materials business plans and business emergency response plans to emergency response agencies, such as the Fire Department/Hazardous Materials Response Teams. The PCEHD helps to facilitate the resources necessary for first responders to the emergency incidents utilizing emergency response plans and training responders for preparedness.

Placer County Local Hazard Mitigation Plan

The 2016 LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that Placer County would be eligible for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant Programs as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within Placer County's jurisdictional boundaries. The six goals of the multi-hazard mitigation plan are as follows:

- Prevent future hazard related losses of life and property;
- Increase public awareness/action of vulnerability of hazards;
- Improve community emergency services/management capability;
- Implement and complete identified high priority projects listed in the plan;
- Pursue Multi-Objective Opportunities (MOO) whenever possible; and
- Maintain FEMA eligibility/position jurisdictions for grant funding.

The purpose of this plan is to guide hazard mitigation planning and to better protect the people and property of the County from the effects of hazard events. The LHMP demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources.

Placer County and Placer Operational Area Emergency Operations Plan

The *Placer County and Placer Operational Area Emergency Operations Plan* (EOP) provides the guidelines needed for emergency response planning, preparation, training and execution throughout unincorporated Placer County.¹⁴ The EOP is applicable to any natural disaster or manmade emergency occurring in or in the proximity of Placer County that affects, or may affect, the unincorporated area of the County (or the entire operational area, should response require coordination of the emergency response efforts of multiple agencies or jurisdictions). Emergency events range from minor oil spills, brush fires and minor flooding to severe winter storms, floods, wildland fires, earthquakes to countywide public health emergencies all of which have potentially catastrophic long-term public safety, economic, social and political implications.

9.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hazards and hazardous materials. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

In accordance with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this Draft EIR, an impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials;
- 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;
- Emit hazardous emissions, substances, or waste within one-quarter mile of an existing or proposed school;
- 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;
- 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;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing in the project area;

¹⁴ Placer County Office of Emergency Services. *Placer County and Placer Operational Area Emergency Operations Plan*. Adopted December 14, 2010.

- 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;
- Create any health hazard or potential health hazard; or
- Expose people to existing sources of potential health hazards.

Method of Analysis

Site conditions and impacts for this chapter are based primarily on the Phase I and Phase II ESAs conducted for the proposed project. The goal of a Phase I ESA is to identify whether RECs exist at a property, where RECs are defined by ASTM as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. [...]” The Phase I ESAs meet or exceed the requirements of the ASTM “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-05.” The Phase II ESA prepared for the Haight property included an evaluation of the surface soil around the structures on the property for the presence of OCPs, arsenic, copper, and lead. In addition, soil in the vicinity of the 1,000-gallon AST was evaluated for residues of petroleum hydrocarbon fuel products. Samples were collected from a total of 27 locations, with surface samples collected at depths of zero to six inches bgs, and deeper samples collected at depths of 30 to 36 inches bgs.

Similarly, the Phase II ESA prepared for the Ogg property included an analysis of soil samples from the former orchard on the property, areas immediately adjacent to the existing structures, and an area historically used for pesticide mixing. A total of 92 soil samples were collected from the Ogg property. The general locations, numbers, and depths of the samples are shown in Table 9-1 below.

Table 9-1			
Ogg Property Phase II ESA Soil Sampling Locations			
Sample Location	Number of Samples		
	0 to 6 inches bgs	30 to 36 inches bgs	Total
Orchard	32	8	40
Residence	4	4	8
Shed	4	4	8
Pump House	2	2	4
Eastern Barn	4	4	8
Western Barn	3	3	6
Pole-Mounted Transformers	1	1	2
AST	2	2	4
Former Pesticide Mixing Area	12	0	12
Grand Total:			92
<i>Source: Wallace Kuhl and Associates, 2014.</i>			

On both the Haight and Ogg properties, samples were collected using hand auger sampling methods and collected in eight-ounce glass jars with Teflon-lined lids. The samples were subsequently preserved on ice and sent to a laboratory for analysis to determine the presence of OCPs, arsenic, copper, and lead. The soil in the underneath the existing 1000-gallon AST on the Haight property and the 500-gallon AST on the Ogg property was evaluated for residues of petroleum hydrocarbon fuel products. The results of the sampling are included in the Phase II ESAs (see Appendix H to this EIR) and summarized below.

Project-Specific Impacts and Mitigation Measures

The project site conditions, as well as conditions at off-site improvement areas, have been compared to the standards of significance presented above in order to determine the project's impact significance. If significant impacts are identified for the construction and operational phases of the proposed project, recommended mitigation measures have been included to reduce the identified impacts to less-than-significant levels.

9-1 Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials. Based on the analysis below, the impact is *less than significant*.

A significant hazard to the public or the environment could result from the routine transport, use, or disposal of hazardous materials. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would not be industrial in nature.

Implementation of the proposed project would include the construction of a 308-lot residential development, as well as associated on- and off-site infrastructure improvements. Construction activities would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. The project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),¹⁵ the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, PCEHD) in accordance with the regulations adopted pursuant to this section. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all state, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of this project, the contractor is required to notify the PCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

¹⁵ Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

During project operation, hazardous materials associated with the proposed residential uses would consist mostly of typical household-type cleaning products and fertilizers, which would be utilized in small quantities and in accordance with label instructions. Use of such chemicals would not create a substantial hazard to the public or the environment.

Based on the above, the proposed project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials. Thus, a *less-than-significant* impact would occur.

Mitigation Measure(s)

None required.

- 9-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, create any health hazard or potential health hazard, or expose people to existing sources of potential health hazards. Based on this analysis below and with implementation of mitigation, the impact is *less than significant*.**

The following includes a discussion of potential impacts associated with various RECs, including ASTs, wells, septic systems, asbestos and lead materials, copper, arsenic, and electrical transformers. Note that a detailed description of each REC potentially occurring on the proposed project site is included in the Existing Setting section of this chapter.

Aboveground Storage Tanks – Haight and Ogg Properties

The proposed project site contains two ASTs, located on the Haight and Ogg properties. While some soil staining was observed underneath the ASTs, staining was limited to the ground surface. In addition, per the Phase II ESA prepared for the two properties, which included laboratory analysis of soil samples collected in the immediate vicinity of the ASTs, petroleum hydrocarbons were not detected at levels above laboratory reporting limits within the vicinity of the 500- and 1000-gallon ASTs. Both ASTs would be removed from the project site during construction activities associated with the proposed project. Removal of the ASTs and subsequent disturbance of underlying soils is not anticipated to create a significant hazard to the public or the environment.

Wells – Haight, Ogg, and Six-Acre Pruett Properties

As discussed in the Existing Setting, the proposed project site contains three wells, located on the Haight, Ogg, and six-acre Pruett properties. The well on the six-acre Pruett property is currently capped. The existing wells would need to be removed to accommodate development of the proposed project. Proper abandonment of these wells would need to occur in accordance with the standards set forth in Department of Water Resources Bulletin 74-81 (see also Placer County Code Section 13.80.100 requiring compliance with DWR Bulletin 74-81). As discussed in Part III of Bulletin 74-81, the top of the well or well casing shall be provided with a cover, that is secured by a lock or by other means to prevent its removal without the use of equipment or tools, to prevent unauthorized access, to prevent

a safety hazard to humans and animals, and to prevent illegal disposal of wastes in the well. The cover shall be watertight where the top of the well casing or other surface openings to the well are below ground level, such as in a vault or below known levels of flooding.

All abandoned wells shall be destroyed. The objective of destruction is to restore as nearly as possible those subsurface conditions which existed before the well was constructed taking into account changes, if any, which have occurred since the time of construction. Destruction of a well shall consist of the complete filling of the well in accordance with Section 23 of Part III of Bulletin 74-81. As discussed further below, Mitigation Measure 9-2(a) is proposed to ensure any existing wells that need to be removed are abandoned in conformance with all applicable laws.

Septic Systems – Haight and Ogg Properties

Two septic systems are located on the Haight property, to the southwest of the existing single-family residence and to the east of the existing office. A third septic system is located on the Ogg property, to the west of the single-family residence on the southeastern portion of the property. As discussed previously, a fourth septic system may have been installed on the six-acre Pruett property; however, information regarding the location of such a tank is not available. The proposed project would be required to properly abandon all existing septic systems prior to connection of the project to the existing County sewer infrastructure.

Pesticides – Haight and Ogg Properties

According to the Phase II ESA prepared for the Haight property, dieldrin, a type of termiticide, was detected in soil samples taken within the immediate vicinity of the single-family residence at concentrations ranging from 0.267 to 1.09 milligram per kilogram (mg/kg), which exceeds the residential CHHSL of 0.035 mg/kg. WKA has concluded that the detected concentrations of dieldrin at the location of the residence on the Haight property could have impacted the soil in a way that would be adverse to human health for a residential land use. Alpha-chlordane and endrin were also detected in samples taken near the single-family residence, but at concentrations that were below the respective CHHLs of 0.43 mg/kg (chlordane) and 21 mg/kg (endrin) for residential land uses. OCPs were not detected at levels above laboratory detection limits at other areas analyzed on the Haight property.

As noted previously, the Phase II ESA prepared for the Ogg property included an analysis of soil samples from the former orchard on the property, areas immediately adjacent to the existing structures, and an area historically used for pesticide mixing. A total of 92 soil samples were collected from the Ogg property. Based on the results of the soil sample analysis, all OCPs on the Ogg property were detected at levels below their respective CHHSLs for residential land uses. It should be noted that the agricultural portions of the overall project site were sampled for pesticides, and OCPs were not detected above the relevant thresholds.

Due to the elevated levels of dieldrin detected within the vicinity of the single-family residence on the Haight property, demolition and ground-disturbing activities associated with the proposed project could potentially create a significant hazard to the public or the environment through upset conditions involving the release of hazardous materials into the environment.

Asbestos and Lead Materials

As previously mentioned, the proposed project site contains existing structures that were built prior to 1980 and 1970. Accordingly, the some of the existing structures likely contain asbestos-containing materials and lead-based paints. The potential presence asbestos-containing materials and lead contamination would be considered an REC.

As discussed previously, the Phase II ESAs prepared for the Haight and Ogg properties included an analysis of soil samples for potential lead contamination. On the Haight property, the detected concentration of lead ranged from 2.9 mg/kg to 28.8 mg/kg, which is below the residential CHHSL of 80 mg/kg. However, on the Ogg property, lead was detected at concentrations between 77.4mg/kg and 115.0 mg/kg, above the CHHSL, at the former pesticide mixing area. Exceedances of the CHHSL for lead on the Ogg property were limited to samples collected in the vicinity of the former pesticide mixing area.

During demolition and ground-disturbing activities associated with the proposed project, construction workers could come into contact with, and be exposed to, asbestos-containing materials or lead-based paint materials present in the existing structures. Additionally, workers could potentially be exposed to elevated concentrations of lead associated with soil in the vicinity of the former pesticide mixing area. Collection and disposal of asbestos containing materials and lead materials, including lead-based paint, by untrained personnel could cause asbestos and lead dust emissions to be transported off-site, resulting in the release of hazardous material into the environment.

Arsenic

As discussed previously, concentrations of naturally occurring arsenic are often detected above the residential CHHSL. As such, the Phase II ESAs for the Haight and Ogg properties included an analysis of cancer risk due to arsenic. The results of the soil sampling are discussed in detail in the Existing Setting section above. Based on the results of the soil sampling conducted on both of the properties, WKA concluded that the maximum detected arsenic concentration and the 95% UCL are below the no significant risk level established by the California Code of Regulations (Title 27, Article 7 § 25703) of 10 additional occurrences of cancer in an exposed population of 1,000,000. In addition, the risk associated with the maximum detected arsenic concentration and the 95% UCL are below the risk associated with the DTSC's 12mg/kg sensitive land use threshold for naturally occurring arsenic. As such, existing arsenic concentrations at the Haight and Ogg properties do not pose a significant risk to human health for the proposed residential land use, and implementation of the proposed project would not result in accident or upset conditions involving arsenic.

Transformers – Ogg Property

The proposed project site contains three pole-mounted electrical transformers, which are considered RECs, given that older transformers used polychlorinated biphenyls (PCB) as a cooling oil. The three transformers are located on the Ogg property. PCBs belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until manufacturing was banned in 1979. PCBs have a range of toxicity and vary in consistency from thin, light-colored liquids to yellow or black waxy solids. Due to their non-flammability, chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including, but not limited to, the following:

- Electrical, heat transfer and hydraulic equipment;
- Plasticizers in paints, plastics and rubber products;
- Pigments, dyes and carbonless copy paper; and
- Various other industrial applications.

As discussed previously, SMUD has not identified any hazards or concerns associated with the transformers. According to the Phase II ESA prepared for the Ogg property, petroleum hydrocarbons were not detected above laboratory reporting limits within the vicinity of the pole-mounted transformers. As such, the transformers do not pose a hazard to human health.

Stockpiled Soils – Placer Greens Property

Based on the findings of the Phase I ESA prepared for the Placer Greens property, WKA conducted sampling of the stockpiled soils located on the southern portion of the property. The results of the sampling are summarized in a Stockpile Soil Sampling and Analyses letter prepared for the proposed project.¹⁶ Per the letter, the stockpiled soils did not contain substantial concentrations of any of the chemical tested for, including, but not limited to, VOCs, OCPs, hazardous metals, arsenic, and asbestos. Thus, the stockpiled soils do not constitute a REC, and would not pose a health risk to future residents of the proposed project.

PG&E Gas Line – 25-Acre Pruett Property

Per the Phase I ESA prepared for the 25-acre property, a natural gas line owned by PG&E is located within an easement along the eastern property boundary. Within the project site, the diameter of the pipeline ranges from 12 to 16 inches. The proposed project would not include development of new residences within the easement, and existing rights associated with the easement would be honored. As such, the natural gas line would not pose a risk to the proposed project during operation. Nonetheless, consultation with PG&E would be necessary prior to commencement of grading and construction activities associated with

¹⁶ Wallace Kuhl and Associates. *Stockpile Soil Sampling and Analyses Letter, Placer Greens Property, WKA No. 10281.04*. February 6, 2017.

the proposed project in order to ensure that the natural gas line is not damaged as a result of such activities.

Conclusion

Existing ASTs, arsenic contamination, and existing pole-mounted transformers on the project site would not pose a hazard to workers associated with construction of the proposed project or future residents. The stockpiled soils on the Placer Greens property do not contain elevated concentrations of any hazardous materials. However, the proposed project site contains existing wells and septic systems which would require proper abandonment prior to construction of the proposed project. In addition, the proposed project site contains existing structures that were built prior to 1980 and 1970, and are likely contain asbestos-containing materials and lead-based paints.

Furthermore, elevated levels of dieldrin, a type of termiticide, were detected within the vicinity of the single-family residence on the Haight property, and elevated levels of lead were detected on the Ogg property in the vicinity of the former pesticide mixing area. The existing on-site natural gas line could potentially be damaged as a result of project construction activities. Therefore, the proposed project could 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, create any health hazard or potential health hazard, and/or expose people to existing sources of potential health hazards. Thus, a *significant* impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

9-2(a) *Prior to Improvement Plan approval, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Placer County Environmental Health Department (PCEHD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the PCEHD and the Placer County Department of Public Works. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable PCEHD standards. Verification of abandonment shall be ensured by the Placer County Community Development Resource Agency.*

9-2(b) *Prior to issuance of a demolition permit by the County for any on-site structures, the project applicant shall provide a site assessment that determines whether any structures to be demolished contain lead-based paint or asbestos. If structures do not contain lead-based paint or asbestos, further mitigation is not required; however, if lead-based paint is found, all loose and peeling paint shall be removed and disposed of by a licensed and*

certified lead paint removal contractor, in accordance with California Air Resources Board recommendations and OSHA requirements. If asbestos is found, all construction activities shall comply with all requirements and regulations promulgated through the PCAPD Asbestos Dust Mitigation Plan. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead and/or asbestos. The contractor shall follow all work practice standards set forth in the Asbestos National Emission Standards for Hazardous Air Pollutants (Asbestos NESHAP, 40 CFR, Part 61, Subpart M) regulations, as well as Section V, Chapter 3 of the OSHA Technical Manual. Work practice standards generally include appropriate precautions to protect construction workers and the surrounding community, and appropriate disposal methods for construction waste containing lead paint or asbestos in accordance with federal, State, and local regulations subject to approval by the County Engineer.

9-2(c) *Haight Residence*

Prior to demolition of the single-family residence on the Haight property, the project applicant shall comply with the Soil Characterization Workplan prepared for the Haight property, dated December 21, 2016, as follows.

The coordinates of the foundation of the residence shall be documented using a high-precision global satellite receiver (GPSr) prior to the beginning of building demolition activities. Excavation limits shall be marked according to the requirements of Underground Services Alert (USA) and a Dig Permit shall be requested at least 48 business hours prior to the beginning of construction activities. A licensed contractor shall excavate the soil within a three-foot area surrounding the residence to a depth of 12 inches below ground surface (bgs) and stockpile the excavated soils at a location designated near the residence.

Upon completion of excavation activities, actual excavation limits shall be documented using a GPSr. Soils samples shall be collected, in coordination with the PCEHD, from locations distributed along the excavation sidewalls and floor, and each confirmation soil sample shall be submitted for analysis of organochlorine pesticides (OCPs) using United States Environmental Protection Agency (USEPA) Method 8081B. A set of four soils shall be collected from the soils stockpiled from the excavation at the residence and analyzed, as necessary, to obtain approval to dispose stockpiled soil at an appropriate off-site facility.

A letter report shall be prepared describing field activities, including figures illustrating the excavated area and locations where samples were collected for laboratory analysis, tables summarizing laboratory results, laboratory data sheets, and the findings, conclusions, and professional

opinions regarding the data, as well as a discussion of off-site disposal alternatives for stockpiled soil. The report shall be submitted to the Placer County Community Development Resource Agency and the PCEHD for review prior to disposal of stockpiled soils. Pending approval of the report, a licensed contractor shall transport stockpiled soil for disposal at an appropriate off-site facility.

9-2(d) *Former Ogg Pesticide Mixing Area*

Prior to the beginning of ground-disturbing activities near the former pesticide mixing area on the Ogg property, the project applicant shall comply with the Soil Characterization Workplan prepared for the Ogg property, dated December 21, 2016, as follows.

Soil samples shall be collected and analyzed in accordance with the Soil Characterization Workplan. The measured concentrations of lead in the samples shall be used to determine a statistically derived representative concentration for lead within the sampling area. The statistically derived representative concentration will be based on the 95 percent upper confidence limit (95% UCL). If the 95% UCL concentration is found to be less than the residential CHHSL of 80 mg/kg, no further study or remediation is required.

If the 95% UCL is determined to exceed 80 mg/kg, selective excavation of soil shall be conducted to remove lead concentrations causing the exceedance. Such excavation shall include confirmation sampling to demonstrate that the excavation has successfully reduced the 95% UCL for lead within the sampling area to below 80 mg/kg.

Soil remediation shall include, at a minimum, the following activities:

- *Prior to the beginning of excavation activities, the coordinates of the proposed excavation area shall be documented using a high-precision GPSr. Excavation limits shall be marked according to the requirements of USA and a Dig Permit shall be requested at least 48 business hours prior to the beginning of construction activities.*
- *A licensed contractor shall excavate the soil within the designated area to a depth approximately one foot bgs and stockpile the excavated soils at a location designated near the excavation.*
- *Upon completion of excavation activities, actual excavation limits shall be documented using a GPSr.*
- *Soils samples shall be collected, in coordination with the PCEHD, from locations distributed along the excavation sidewalls and floor, and each confirmation soil sample shall be submitted for analysis of total lead using USEPA Method 6010B.*

- *A set of four soils shall be collected from the soils stockpiled from the excavation and composited into one sample for analysis of total lead to support to obtain approval to dispose stockpiled soil at an appropriate off-site facility.*
- *A letter report shall be prepared describing field activities, including figures illustrating the excavated area and locations where samples were collected for laboratory analysis, tables summarizing laboratory results, laboratory data sheets, and the findings, conclusions, and professional opinions regarding the data, as well as a discussion of off-site disposal alternatives for stockpiled soil. The report shall be submitted to the Placer County Community Development Resource Agency and the PCEHD for review prior to disposal of stockpiled soils.*
- *Pending approval of the report, a licensed contractor shall transport stockpiled soil for disposal at an appropriate off-site facility.*

9-2(e) *If indicators of apparent soil contamination (soil staining, odors, debris fill material, etc.) are encountered at the project site, in particular, in the vicinity of the ASTs, the impacted area should be isolated from surrounding, nonimpacted areas. The project environmental professional shall obtain samples of the potentially impacted soil for analysis of the contaminants of concern and comparison with applicable regulatory residential screening levels (i.e., Environmental Screening Levels, California Human Health Screening Levels, Regional Screening Levels, etc.). Where the soil contaminant concentrations exceed the applicable regulatory residential screening levels, the impacted soil shall be excavated and disposed of offsite at a licensed landfill facility to the satisfaction of the PCEHD.*

9-2(f) *Prior to commencement of grading and construction, the construction contractor, a representative from PG&E and a representative from the County Engineering and Surveying Division shall meet on the project site and the applicant shall prepare site-specific safety guidelines for construction in the field to the satisfaction of the Engineering and Surveying Division. The safety guidelines and field-verified location of the pipelines shall be noted on the Improvement Plans and be included in all construction contracts involving the project site.*

9-3 Emit hazardous emissions, substances, or waste within one-quarter mile of an existing or proposed school. Based on the analysis below, the impact is less than significant.

The proposed project site is not located within one-quarter mile of an existing or proposed school. The nearest school, Antelope Crossing Middle School, is located, 0.41-mile south of the site. Furthermore, the project consists of a residential subdivision, and, thus, would

not involve the routine use or transport of substantial quantities of hazardous materials during operation. As such, a *less-than-significant* impact would occur.

Mitigation Measure(s)

None required.

- 9-4 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, create a significant hazard to the public or the environment. Based on the analysis below, the impact is less than significant.**

As discussed previously, the Haight Nursery facility is listed on the DTSC's Historical UST and Haznet databases. However, per the Phase I ESAs prepared for the proposed project, the USTs were located to the south of the Haight Property, where the primary operations associated with the Haight Nursery were located from 1964 and 1993. As noted above, the area to the south of the Haight property has been developed with single-family residences. According to a SCEMD letter, dated September 10, 1992, the Haight Nursery facility received a "no further action" status. The facility is not suspected of negatively impacting on-site conditions. Per the Phase I ESAs, none of the properties that comprise the project site are included on the DTSC's Hazardous Waste and Substances Sites (Cortese) List.

Based on the above, the proposed project would not create a significant hazard to the public or the environment associated with hazardous material sites, and a *less-than-significant* impact would occur.

Mitigation Measure(s)

None required.

- 9-5 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, public use airport, or private airstrip, would the project result in a safety hazard for people residing or working in the project area. Based on the analysis below, the project would have no impact.**

The proposed project is not located within an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. As discussed previously, the nearest airport relative to the proposed project site is the McClellan Airport, which is located approximately four miles to the southwest of the site. Therefore, the proposed project would not result in a safety hazard associated with an airport or airstrip, and *no impact* would occur.

Mitigation Measure(s)

None required.

9-6 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. Based on the analysis below, the impact is less than significant.

As stated previously, the proposed project site is located within a non-VHFHSZ, which indicates that the site is not in an area subject to a substantial hazard due to wildland fires. In addition, the project site is abutted to the west and south by existing residential development, and to the east by an industrial area. Such development would preclude the spread of wildfires. PFE Road forms the majority of the northern boundary of the project site, with the exception of the central portion of the project site, which is bordered to the north by rural residential dwellings and associated structures. PFE road effectively acts as a firebreak between the project site and the rural grasslands located to the north of the site.

Based on the above, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and a *less-than-significant* impact would result.

Mitigation Measure(s)

None required.