
3.9 Hazards and Hazardous Materials

3.9.1 ENVIRONMENTAL SETTING

Hazardous Materials

Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if released or misused. Hazardous materials occur in various forms and can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and the environment. Hazardous materials are used in industry, agriculture, medicine, research, and consumer goods. Many products containing hazardous chemicals are routinely used and stored in homes and used in industrial and municipal processes, including wastewater treatment. Hazardous materials come in the form of explosives, flammable and combustible substances, chemicals, poisons, radioactive materials, pesticides, and petroleum products. These substances are most often released as a result of motor vehicle or equipment accidents or because of chemical accidents during industrial use. Hazardous substances have the potential to leach into soils, surface water, and groundwater during spills if not properly contained.

Hazardous materials potentially present in the project area include, but are not limited to:

- Hazardous materials being transported by truck or trailer via State Route (SR) 104 and SR 124
- Oils, lubricants, and gasoline located in the immediate area
- Pesticides and herbicides stored and applied on agricultural lands, and landscaped areas
- Chemicals used in the secondary and tertiary treatment of wastewater

Hazardous materials are also used in the treatment of wastewater, and include sodium hypochlorite (bleach).

Hazardous Spill Records

The National Priority List (NPL) is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. There are no NPL listings in Amador County (EPA 2007).

The California EPA (CalEPA) compiles a list of known hazardous waste and substance spill and leak locations called the "Cortese List." The Cortese List contains six sites in Amador County, one of which is in Lone (CalEPA 2006). The Cortese List site located in Lone is the MP Associates site. The MP Associates site is a 300-acre aerospace manufacturing facility located approximately 4 miles southeast of the secondary WWTP in Lone, California. The site includes areas for manufacturing, testing, and storage of devices and materials. Operations at the site began in 1986, and involve the use of various chemical compounds. Process wastewater generated from cleaning equipment contaminated with these compounds and from washing manufacturing areas was released to the ground. Two open burn units were operated to dispose of waste materials generated at the facility. Remediation to remove heavy metals and perchlorate from the site is underway (DTSC 2007). Routine operations at MP Associates still continue today.

California's State Water Resources Control Board (SWRCB) offers an online geographical information systems service called GeoTracker, which provides online access to environmental data. GeoTracker is the interface to the Geographic Environmental Information Management System (GEIMS), which is a data warehouse that tracks regulatory data about underground

storage tanks, fuel pipelines, and public drinking water supplies. Table 3.9-1 shows the open cases in lone and relevant data from the GeoTracker database (SWRCB 2009).

Biological Hazards

Untreated wastewater can contain various disease organisms including bacteria, viruses, fungus, and worms. The composition of the untreated wastewater can vary greatly based on geographical location, time (both weekly and seasonal basis) and location within the WWTP (Garvey 2005).

Airports and Airstrips

All air traffic hazards are related to accidents resulting from an off-course airplane or dropping material, such as detached section of the aircrafts body or aircraft fuel. The only airstrip within a 2-mile radius of the proposed project is the Ranch Airstrip. The Ranch Airstrip is a private airstrip located about one mile southwest of the existing secondary WWTP.

Emergency Response

Emergency response time is defined as the elapsed time at which fire, police, and ambulance service effectively arrive and respond to an emergency call. Law enforcement for the project area is provided primarily through the City of Lone Police Department and the Amador County Sheriff's Department.

Fire protection services to the entire project area would be provided by the Lone Fire Department, California Department of Forestry and Fire Protection (CAL FIRE), and the Amador Fire Protection District. Additional discussion of emergency services is included in Section 3.12: Public Services and Utilities.

Fire Hazards

Wildfires are a public safety concern in lone. The rural nature of the landscape, combined with dry conditions in the warmer months of the year, creates ideal conditions for wildfires that burn hot, fast, and out of control. The WWTP location is surrounded by large agricultural fields with scattered wildland, which has wildfire potential.

Table 3.9-1: GeoTracker Results for Open Cases in Lone, Amador County, California

| Site Type | Site Name | Site Leakage | Distance from Secondary WWTP |
|-----------|--|------------------------------|------------------------------|
| LUST | Camanche North Shore Maintenance | Automotive gasoline | 4.3 Miles Southeast |
| LUST | Chevron #9-7004 | Automotive gasoline | 1.1 Miles East |
| SLIC | California Department of Forestry, Lone Fire Academy | Fuel oil | 1.2 Miles Northeast |
| SLIC | MP Associates | Heavy metals and perchlorate | 4.0 Miles Southeast |
| SLIC | Mule Creek State Prison | Perchlorethylene | 1.5 Miles North |
| SLIC | Preston Farm Grounds | DDT | 1.25 Miles Northeast |
| LUST | Sierra Energy | Automotive gasoline | 1.3 Miles East |
| LUST | Sierra Trading Post #2 | Automotive gasoline | 1.1 Miles East |
| SLIC | Unocal | Hydrocarbons | 1.2 Miles East |

Notes: LUST – Leaking Underground Storage Tank
 SLIC – Spills, Leaks, Investigations, Cleanups

SOURCE: SWRCB 2009

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE assesses areas within the state for fire hazard severity by examining:

- The history and intensity of wildfires in the area
- Size and type of vegetation in the area
- Proximity to fire extinguishing resources

CAL FIRE identifies five types of fire threat based on levels of severity of risk:

- (1) Extreme
- (2) Very High
- (3) High
- (4) Moderate
- (5) Little or No Threat

The areas of the proposed project that are outside the City of Lone's sphere of influence are in a CAL FIRE State Responsibility Area (SRA). CAL FIRE rates this area "Moderate" for fire hazard severity (CAL FIRE 2007).

The parts of the proposed project within the City limits are in a Local Responsibility Area (LRA). CAL FIRE rates the majority of the city "unzoned" for fire hazard severity. A portion of the City's outskirts, in the northeast corner of the sphere of influence, is rated "Very High" for fire hazard severity (CAL FIRE 2007).

Local Hazards

Exposure

Inhalation

Inhalation is a major route for chemicals or organisms to enter the body. Some chemicals are air-stripped from wastewater and could impact workers near weirs, aerated tanks, dewatering processes, and other sludge processes (drying, compacting, and incineration). Aeration and dewatering processes also put droplets and particles into the air that can be inhaled. Much of the material inhaled into the throat or bronchial tubes is cleared from the lungs and swallowed. As a result, respiratory and gastrointestinal exposure can occur from inhaled chemicals and organisms. Wastewater workers have also been exposed to chemicals while attempting to remove these substances from treatment plant equipment (Brown 1997).

During construction, the removal or disturbance of sludge in wastewater ponds could also provide a means for workers or others to inhale dust contaminated with chemicals or biohazards used in wastewater treatment or present in wastewater sludge.

Skin Contact

Skin Contact is also a route of entry for both chemicals and disease. Chemicals can be absorbed through the skin from contact with wastewater or sludge. Disease organisms can also enter the body through cuts or abrasions (Brown 1997).

Chemicals Present at the lone WWTPs

The tertiary WWTP requires the storing and use of materials such as sodium hypochlorite (commonly known as bleach) and aluminum chlorohydrate, both of which are hazardous materials. The secondary WWTP is also used by the City of lone as a storage location for pesticides and herbicides, some of which is used on the secondary WWTP for pest and weed abatement. Table 3.9-2 lists the chemicals presently stored onsite at the WWTP.

| Material | Amount Stored Onsite | Storage Location |
|--|-----------------------------|-----------------------------|
| Sodium hypochlorite | 3000 gallons | Tertiary WWTP |
| Aluminum Chlorohydrate - Polymer Blend | 5000 gallons | Tertiary WWTP |
| Pesticides and Herbicides | < 100 gallons | Secondary and Tertiary WWTP |

SOURCE: GUERRA PERS. COMM. 2009

Sodium Hypochlorite

As it passes through the tertiary WWTP, secondary treated wastewater is disinfected with sodium hypochlorite (13 percent solution) to kill bacteria. After disinfection, the effluent is ready to be discharged. If inhaled, sodium hypochlorite may cause irritation to the respiratory tract (nose and throat); symptoms may include coughing and sore throat. Presently, 3000 gallons of sodium hypochlorite is stored as a liquid onsite at the tertiary WWTP. The material is registered with the Amador County Environmental Health Department under a Hazardous Material Business Plan (HMBP).

Aluminum Chlorohydrate – Polymer Blend

Aluminum Chlorohydrate– Polymer Blend is used for adjusting pH at the tertiary WWTP. Contact with aluminum chlorohydrate may severely irritate skin, eyes, or mucous membranes (NOAA 2009). Presently, the substance is stored in a 5,000 gallon polyethylene storage tank in the chemical containment area onsite at the tertiary WWTP. The material is registered with the Amador County Environmental Health Department under a HMBP.

Pesticides and Herbicides

Pesticides and herbicides are use around the secondary and tertiary WWTP for landscaping needs. Both are poisons designed to kill a variety of plants and animals such as insects, weeds, and mold or fungus. Mild poisoning in humans can cause headache, fatigue, weakness, and dizziness. Moderate to severe poisoning can lead to stomach cramps, excessive perspiration, trembling, lack of muscle coordination, increased rate of breathing, vomiting, uncontrollable muscle twitches, pinpoint pupils, convulsions, inability to breathe, or unconsciousness (Cornell University 2009). Presently, there are less than 100 gallons of pesticide stored at the secondary WWTP for use at the WWTP. Pesticides for the City’s parks and street maintenance are stored at the tertiary WWTP. The exact amount that is stored at the tertiary WWTP varies over time. The City of lone’s possession and use of the pesticides and herbicides are covered under Amador County’s Operator Identification Number, which is renewed annually. The City of lone is required to send in monthly reports of pesticide and herbicide use to maintain the Operator Identification Number. The Operator Identification Number does not limit the amount of pesticide and herbicide used, but does regulate the type of product used and does not allow for any California or federally restricted products (Lesky pers. comm. 2009).

Minor amounts of other substances (e.g., cleaning solvents, laboratory chemicals, paints, and solvents) are used during operations on a regular basis to maintain site facilities.

3.9.2 REGULATORY SETTING

Federal Regulations

U.S. Environmental Protection Agency (EPA)

The EPA's mission is to protect human health and to safeguard the natural environment. The authority for many of the laws that EPA enforces is delegated in California to the Regional Water Quality Control Board (RWQCB) and the Department of Toxic Substances Control (DTSC). However, the EPA remains the lead on sites that are included on the NPL.

Resource Conservation and Recovery Act (RCRA)

RCRA regulates hazardous waste from the time that the waste is generated through its management, storage, transport, treatment, and ultimate disposal. The EPA has authorized the Environmental Protection Agency/Department of Toxic Substance Control (DTSC) to administer the RCRA program in California.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

CERCLA, also known as Superfund, addresses procedures to identify and clean up sites contaminated by unauthorized releases of hazardous materials. CERCLA assesses sites and places them on the NPL, and establishes and implements appropriate cleanup plans (EPA 2009).

Risk Management Program (RMP) Rule

The RMP Rule must be implemented if a tank, drum, container, pipe, or other "process" at the facility contains any of the extremely hazardous toxic and flammable substances listed in the Code of Federal Regulations (CFR) at 40 CFR 68.130 in an amount above the "threshold quantity". Facility operators using these materials at levels above threshold quantities must develop and implement a RMP under a rule issued by the EPA. The goal is to prevent accidental releases of substances that can cause serious harm to the public and the environment from short-term exposures, and to mitigate the severity of releases that do occur. Under the Clean Air Act (CAA), EPA was required to issue a rule specifying the types of actions to be taken by facilities to prevent accidental releases of hazardous chemicals into the atmosphere and reduce their potential impact on the public and the environment (EPA 2008a).

Standards for the Use or Disposal of Sewage Sludge

As required by the Clean Water Act Amendments of 1987, the EPA developed a new regulation to protect public health and the environment from any reasonably anticipated adverse effects of certain pollutants that might be present in sewage sludge biosolids. Federal Regulations for Standards for the Use or Disposal of Sewage Sludge, also known as Title 40 of the CFR, Part 503 (40 CFR 503) contain general provisions and requirements for land application, surface disposal, pathogen and vector attraction reduction, and incineration. For each regulated user or disposal practice, the regulations include general requirements, pollutant limits, management practices, operational standards, and requirements for the frequency of monitoring, recordkeeping, and reporting (EPA 2008b).

State Regulations

California Code of Regulations (CCR)

CCR, Title 22, §66261.20 -24, contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste. The characteristics that are identified include ignitability, corrosivity, reactivity, and toxicity.

California Environmental Protection Agency (CalEPA)

In California, the Department of Toxic Substance Control (DTSC) works to enforce and implement specific hazardous materials laws and regulations. California has enacted its own legislation pertaining to the management of hazardous material. The California legislation for which the DTSC has primary enforcement authority is the Hazardous Waste Control Act, a statute that primarily regulates the registration of hazardous materials, placarding of trucks and buildings containing hazardous wastes, and the management of hazardous waste. The Hazardous Substance Account Act is another California statute that governs the cleanup of contaminated property and is modeled after CERCLA. The DTSC acts as the Lead Agency for soils and groundwater cleanup projects. For sites where water quality is potentially endangered, the DTSC consults with the RWQCB on technical and regulatory issues.

California Health and Safety Code

California law defines a hazardous material as any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a present or potential hazard to human health and safety or to the environment if released in the workplace or the environment (California Health and Safety Code §25501). A hazardous waste is defined as a discarded material of any form (e.g., solid, liquid, gas) that may pose a present or potential hazard to human health and safety or to the environment when improperly treated, stored, transported, disposed of, or otherwise managed (California Health and Safety Code §25117).

California's RCRA hazardous waste program is more stringent than the federal program, and certain wastes that would not qualify as "hazardous" based on federal standards may still qualify as hazardous waste according to California standards. These materials are termed "non-RCRA hazardous waste". Handling and storage of fuels, flammable materials, and common construction hazardous materials are governed by California Occupational Safety and Health Administration (Cal/OSHA) standards for storage and fire protection.

California Hazardous Waste Control Act

The California Hazardous Waste Control Act, California Health and Safety Code, Division 20, Chapter 6.5, Article 1, Section 25100, et seq., authorizes the California State Department of Toxic Substances Control and local certified unified program agencies to regulate facilities that generate or treat hazardous waste (Legal Info 2009).

Emergency Service Act

Under the Emergency Service Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California Office of Emergency Services. The office coordinates the responses of other agencies, including the EPA, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

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 report that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered to be hazardous waste. Health concerns pertaining to the release of hazardous material, however, are similar to those relating to hazardous waste.

Local Regulations

Amador County General Plan

The Amador County General Plan Safety Element (Amador County 1974) does not contain a list of goals and policies. The element's main objective is to protect the community from fires and geologic hazards, including features necessary for protection such as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazard.

Amador County Hazardous Materials Business Plan

Amador County requires owners and operators of businesses that handle hazardous materials in specific quantities to register and submit a Hazardous Materials Business Plan with the County. The plan is design to track the amount and locations of hazardous materials stored on a property, and to design a plan to be used during emergencies. This information is helpful to emergency responders, and helps prevent spills and releases through cooperation among businesses and local, state, and federal government authorities.

Amador County Regulated Material Permit

Amador County requires owners and operators of businesses that handle regulated material to obtain a Regulated Material Permit with the County. Pesticides are included as regulated material. The permit is renewed annually.

City of Lone General Plan

The City of Lone General Plan (City of Lone 2009) Noise and Safety element goals and policies relevant to hazards and hazardous materials are listed below.

- Goal NS-2: Maintain a safe community and environment.
- Policy NS-2.1: Strive to reduce levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in the area.
- Goal NS-5: Reduce serious harm to residents, employees, or the environment as the result of an accidental release of toxic or hazardous substances.
- Policy NS-5.1: Work with public agencies and private companies to identify and work towards elimination of potential hazardous releases and comply with state and federal laws.
- Policy NS-5.2: Consider the potential impact of hazardous facilities on the public and/or adjacent or nearby properties.

3.9.3 THRESHOLDS OF SIGNIFICANCE

The proposed project would result in a significant impact if it would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
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
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
4. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment
5. Result in a safety hazard for people residing or working in the project area 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
6. Result in a safety hazard for people residing or working in the project area for a project within the vicinity of a private airstrip
7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
8. 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.

3.9.4 IMPACTS AND MITIGATION

Potential Impact 3.9-1: The potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials

Overview of Impacts

The construction and operation of the WWTP and pipelines would involve the routine use, transport, and/or storage of hazardous materials. The hazardous materials stored and used on the site would include small quantities of gasoline, oil, grease, paint, and various pesticides and herbicides, and larger quantities of sodium hypochlorite and aluminum chlorohydrate – polymer blend. Gasoline, pesticides and herbicides would be used during normal landscaping maintenance of the WWTPs, while aluminum chlorohydrate – polymer blend would be used in the tertiary treatment of wastewater.

The closure and/or partial filling of treatment and percolation ponds, as well as the routine cleaning out of such ponds, and the transport of ponds spoils to and from the site could result in the release of airborne hazardous materials, including chemicals or biological materials used to decompose sludge. Refer to Section 3.4: Air Quality for a discussion of airborne hazardous materials.

Other hazardous materials that would be used and stored on the site include cleaning products that are commonly used at wastewater treatment facilities. The project may include a temporary on-site fueling facility for construction equipment, which would result in additional transportation of fuels and increased potential for spills on the site. Bio-solids would be disposed of in accordance with 40 CFR 503 requirements, and the Class B sludge produced in the wastewater treatment process would be taken to an appropriate landfill or disposal site.

Existing Infrastructure

Pond 7

Construction. Pond 7 was constructed to the immediate south of Ponds 5 and 6 in 2001. The construction of Pond 7 involved grading and earth moving activities, as well as the importation of clean soil and fill.

The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during project construction. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities were less than significant since the construction activities were required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the construction of Pond 7.

Exposure to contaminated soils during the construction process can pose a health hazard to children, pedestrians, and workers. It is not known whether the excavated soils from the construction and later reconstruction of Pond 7 were contaminated with hazardous materials. Analysis of the impact level of significance from exposure to potentially contaminated soils is speculative, as the construction activities associated with Pond 7 have already occurred.

Operation. Sludge that accumulates in Pond 7 may contain some pathogens, and therefore cannot be applied to land that will be immediately used for agricultural crops, animal grazing, or public access. Time between the land application of sludge and these various activities allows natural environmental factors to further reduce pathogens to acceptable levels. Where appropriate, these restrictions are designed to ensure sufficient reduction in viable helminth ovas¹, one of the hardiest of pathogens, since these pathogens may not have been reduced during sewage sludge treatment (EPA 2003). The operation of Pond 7 has a less than significant impact in regard to hazards and hazardous materials, as the City complies with all regulations for the disposal of the sludge waste produced by Pond 7.

Part I – Treatment

Phase One

Line or Partially Fill Ponds 5 and 6

Construction. The City of Lone intends to comply with the RWQCB Cease and Desist Order by eliminating all portions of percolation ponds within 200 feet of the top of bank of Sutter Creek. The City would either fill in those portions of Ponds 5 and 6 within 200 feet of the creek bank, or install an impermeable liner within the same portions of these ponds in order to prevent the percolation of treated wastewater within 200 feet of Sutter Creek.

The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during project construction activities to line or partially fill Ponds 5 and 6. Clean fill dirt will be used if the City opts to fill the ponds. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling

¹ Helminths are parasitic worms. Helminths typically enter the body through the mouth and lodge in the intestines where they hatch, grow into adult worms, and begin producing eggs or ova. The ova are then passed out of the body with feces. Some helminths can infect areas of the body other than the intestines. Helminth ova were commonly found in relatively large numbers in the environment (Boden 2008).

and servicing of construction equipment would cease upon project completion, and all hazardous materials involved in the construction process would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant.

Exposure to contaminated soils during project construction could pose a health hazard to children, pedestrians, and workers. If the soils are found to be contaminated, removed soils would be contained and disposed of at an appropriate facility. Implementation of mitigation measure Hazards-1 would reduce construction impacts to a less than significant level.

Hazards-1: Prior to any construction activities at either of the proposed treatment plant sites, the City of Lone shall have soils sampled and analyzed by a licensed laboratory approved by DTSC or the Amador County Health Department (ACHD) to determine the level of residue for pesticides, herbicides, chemicals, associated metals, and biohazards. If residues are found to be within acceptable amounts per ACHD and DTSC standards, then grading and construction may begin. If any residues are found to be greater than the ACHD and DTSC standards, all contaminated soils exceeding the acceptable limits shall be remediated and/or properly disposed of per ACHD and DTSC requirements. Trucks transporting contaminated soils shall be covered to eliminate blowing dust. An appropriate verification closure letter from ACHD and DTSC shall be obtained and submitted to the City of Lone Planning Department prior to the initiation of construction of facilities. Depending on the extent of contaminated soils, a verification closure letter from the Central Valley RWQCB may also need to be obtained by the City of Lone Planning Department. Site remediation can occur by the use of on-site transportable thermal treatment units or bio-remediation. The soil can also be excavated and transported in covered trucks or train cars off-site to fixed incineration or bio-remediation facilities.

Operation. A wastewater treatment system by its nature collects, transports, treats, and disposes of a hazardous material. In addition, pesticides and herbicides are used at both the secondary and tertiary WWTP to control pests and weeds in the vicinity of the facilities. Long-term operational activities associated with the proposed facilities could result in a potentially significant effect related to public health and safety. The use, transport and storage of hazardous materials are regulated at the federal, state, and local level. These existing regulations would reduce the impacts associated with the use, storage, transport, and accidental release of hazardous materials in conjunction with continued use of Ponds 5 and 6 to a less than significant level.

Sludge that accumulates in Ponds 5 and 6 may contain some pathogens, and therefore cannot be applied to land that will be immediately used for agricultural crops, animal grazing, or public access. Time between the land application of and these various activities allows natural environmental factors to further reduce pathogens to acceptable levels. Where appropriate, these restrictions are designed to ensure sufficient reduction in viable helminth ovas, one of the hardest of pathogens, since these pathogens may not have been reduced during sewage sludge treatment (EPA 2003). The operation of Ponds 5 and 6 would have a less than significant impact in regards to hazards and hazardous materials, as the City complies with all regulations for the disposal of the sludge waste produced by Ponds 5 and 6.

Activated Sludge System

Construction. The construction of the activated sludge system would require grading and earth moving activities, and the construction of either above ground or underground facilities for the secondary treatment of Lone's municipal wastewater. The City may also opt to construct new tertiary treatment facilities adjacent to the activated sludge system.

The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during project construction. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant since the construction activities would be required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the construction of an activated sludge system.

Exposure to contaminated soils during the construction process could pose a health hazard to children, pedestrians, and workers. If the soils are found to be contaminated with hazardous materials, then the soils removed from the site would be contained and disposed of at an appropriate facility. Implementation of mitigation measure Hazards-1 would reduce construction impacts to a less than significant level.

Operation. The City of Lone could opt to make tertiary wastewater treatment part of the activated sludge system. If the City adds this function to the activated sludge system, then the facility would use an ultra-violet (UV) system to kill bacteria, eliminating the need for continued use of sodium hypochlorite. The use of a UV system would still require the use of the aluminum chlorohydrate-polymers blend in the tertiary treatment process. If a UV system is not added to the activated sludge system, then the increased demand for tertiary wastewater treatment would be accommodated by doubling the capacity of the existing tertiary WWTP. This expansion of the tertiary WWTP would also mean an increase in the amount of sodium hypochlorite used in the tertiary treatment process. There would also be a continued need for pesticides and herbicides to maintain the landscaping around the facility, regardless of the type of tertiary wastewater treatment ultimately chosen by the City.

The sludge that would be produced as a byproduct in the activated sludge system would be Class B sludge. The form of Class B sludge that is produced by the activated sludge system is considered more stable sludge in terms of vector² transmission than the form of Class B sludge produced by the existing secondary treatment system. Class B sludge cannot be applied to land that will be immediately used for agricultural crops, animal grazing, or public access. Time between the land application of Class B sludge and these various activities allows natural environmental factors to further reduce pathogens to acceptable levels. This restriction on the timing of land application is designed to ensure sufficient reduction in viable helminth ovas, one of the hardiest of pathogens, since these pathogens may not have been eliminated during sewage sludge treatment.

The use, transport, and storage of hazardous materials are regulated at the federal, state, and local level. Existing regulations would reduce the impacts associated with the use, storage, transport, and accidental release of hazardous materials to a less than significant level, regardless of the type of tertiary treatment ultimately proposed by the City of Lone.

Close and Reclaim Ponds 1-4

The closure and reclamation of Ponds 1-4 would involve draining the ponds, and removing and appropriately disposing of any sludge waste at the bottom of these ponds. The City may also

² Vectors are any living organism capable of transmitting a pathogen from one organism to another either mechanically (by simply transporting the pathogen) or biologically by playing a specific role in the life cycle of the pathogen. Vectors for sewage sludge pathogens would most likely include insects, rodents, and birds (EPA 2003).

choose to either leave the berms for the ponds in place, or level the berms and fill the pond depressions with imported soil.

The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during project construction. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant since the construction activities would be required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the closure and reclamation of Ponds 1-4.

Exposure to contaminated soils during the construction process could pose a health hazard to children, pedestrians, and workers. If the sludge and soils in and around Ponds 1-4 are found to be contaminated with hazardous materials, then any soils removed from the site would be contained and disposed of at an appropriate facility. Implementation of mitigation measure Hazards-1 would reduce construction impacts to a less than significant level.

Pipelines between the Secondary and Tertiary WWTP Facilities

Construction. The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during construction of the pipelines to connect the secondary and tertiary WWTPs. These short-term construction activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials involved in the construction process would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant because the construction activities are required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the project,.

The pipelines would be placed underground, except at the point where they would cross the Five Mile Drive/Old Stockton Road Bridge, at which point the pipelines would be mounted on the underside of the bridge. Construction would require trenching within the right-of-way of Five Mile Drive and West Marlette Street. Five Mile Drive and West Marlette Street are considered by the City of Lone as “collector” streets with considerable traffic (City of Lone 2003). Any trenching performed within the rights-of-way of Five Mile Drive and West Marlette Street could encounter soils that contain high levels of hydrocarbon or lead contamination. Exposure to contaminated soils could pose a health hazard to children, pedestrians, and workers. If the soils are found to be contaminated, then any soils removed from the site would be contained and disposed of at an appropriate facility that accepts hydrocarbon and lead wastes. Implementation of mitigation measure Hazards-1 would reduce construction impacts of these pipelines to a less than significant level.

Operation. Routine operation and maintenance of the pipelines connecting the secondary and tertiary WWTPs would not create any significant hazard.

Tertiary WWTP Expansion or New Construction

Construction. The City of Lone would need to expand the capacity of the existing tertiary WWTP if it does not construct new tertiary treatment facilities in conjunction with the new activated sludge system. If the City decides to pursue the expansion of the tertiary WWTP, then the City would need to double the existing facility’s capacity. This expansion of capacity would be accomplished

entirely within the currently paved portion of the tertiary WWTP site, and would not expand the footprint of the tertiary WWTP.

The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during construction of the tertiary WWTP expansion. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant since the construction activities would be required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the construction of the expanded tertiary WWTP.

The portion of the tertiary WWTP site where the expansion would take place is entirely paved, and there would therefore be no soil disturbance involved in the expansion of the tertiary WWTP. The tertiary WWTP expansion would have no impact on the exposure of people to contaminated soils.

Operation. A wastewater treatment system by its nature collects, transports, treats and disposes of a hazardous material. The tertiary treatment process at the tertiary WWTP requires the transport, storage, and use of an aluminum chlorohydrate-polymer blend and sodium hypochlorite. The operation of the expanded tertiary WWTP would require approximately double the amount of sodium hypochlorite and aluminum chlorohydrate-polymers blend that is currently used at the tertiary WWTP at full capacity. The expanded tertiary WWTP would also continue to store and use pesticides and herbicides for the maintenance of the landscaping around the facility, and the amount of these pesticides and herbicides would not increase as a result of the tertiary WWTP expansion. Long-term operational activities associated with the proposed facilities could result in a potentially significant effect related to public health and safety. The use, transport, and storage of hazardous materials are regulated at the federal, state, and local level. These existing regulations would reduce the impacts associated with the use, storage, transport, and accidental release of hazardous materials in conjunction with the expansion of the tertiary WWTP to a less than significant level.

The existing tertiary WWTP produces a biosolid sludge waste that is composed primarily of the algae removed from the system, and the expanded tertiary WWTP would produce approximately twice as much of this waste. The biosolid waste currently produced by the tertiary WWTP does not have a significant pathogen component because it is currently a stand-alone plant that receives and treats oxidized and disinfected secondary wastewater from ARSA. The expanded tertiary WWTP would also treat Lone's municipal secondary wastewater after it has been processed by the new activated sludge system, and this secondary wastewater would likewise have a low pathogen content. The procedure for the disposal of solids would follow the requirements outlined in 40 CFR 305. Impacts for the operation of the expanded tertiary WWTP on the use, storage, and handling of hazardous materials would be less than significant.

Phase Two

The impacts from use, storage, and handling of hazardous materials from construction and operation of the phase two project elements (expanding the activated sludge system from 0.80 MGD to 1.60 MGD capacity, and possibly also expanding the tertiary WWTP from 0.80 MGD to 1.60 MGD capacity) would be identical to those discussed above for phase one, as the use of materials and equipment, and transport and storage methods for phase two project elements would be on the same as the phase one elements, and would be regulated by the same federal, state, and local regulations as described above. Impacts associated with the use, storage,

transport, and accidental release of hazardous materials in conjunction with phase two elements would be a less than significant.

Part II – Disposal

Once wastewater has been treated to a tertiary level by the facilities described in Part I, this wastewater must be disposed of. The City of Lone has identified one project level option (Pond 8) and several programmatic level options for the subsequent disposal of tertiary treated wastewater, and these options are discussed below.

Phase One

Pond 8

Construction. The use, storage, and handling of minor amounts of hazardous materials would be anticipated with refueling or equipment cleaning activities during construction of Pond 8. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant since the construction activities would be required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the construction of Pond 8.

Exposure to contaminated soils during the construction process could pose a health hazard to children, pedestrians, and workers. If the soils in and around Pond 8 are found to be contaminated with hazardous materials, then any soils removed from the site would be contained and disposed of at an appropriate facility. Implementation of mitigation measure Hazards-1 would reduce construction impacts to a less than significant level.

Operation. Disposal of the tertiary treated wastewater into percolation pond does not involve the use of hazardous materials. Operation impacts would be less than significant for Pond 8.

Phase Two

Disposal Option 1 – Disposal to Pond 9

Disposal Option 1 would involve the disposal of the City of Lone's tertiary-treated municipal wastewater in a series of percolation ponds located on land owned by the City of Lone. This option would include the continued use of Ponds 5-8, and the construction of a new Pond 9.

Construction. The use, storage, and handling of minor amounts of hazardous materials would likely be similar to the discussion of construction of Pond 8. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would likely be less than significant since the construction activities would be required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the construction of Pond 9.

Exposure to contaminated soils during the construction process could potentially pose a health hazard to children, pedestrians, and workers. If the soils in and around Pond 9 are found to be contaminated with hazardous materials, then any soils removed from the site would be contained

and disposed of at an appropriate facility. Implementation of mitigation measure Hazards-1 would likely reduce construction impacts to a less than significant level. Further CEQA analysis would have to be performed at the project level to determine the significance of pond construction hazard impacts.

Operation. Disposal of the tertiary treated wastewater into percolation pond would not likely involve the use of hazardous materials. Operation impacts would likely be less than significant for Disposal Option 1. Further CEQA analysis would have to be performed at the project level to determine the significance of pond operation hazard impacts.

Disposal Option 2 – Disposal to Charles Howard Park and Unimin Mine

Disposal Option 2 would involve the disposal of the City of Lone's tertiary-treated municipal wastewater in the existing percolation Ponds 5-7, and the construction of a pipeline to provide for additional tertiary treated wastewater disposal at Charles Howard Park and Unimin Mine.

Construction. The use, storage, and handling of minor amounts of hazardous materials would likely be anticipated with refueling or equipment cleaning activities during the construction of a pipeline to Charles Howard Park and Unimin Mine. These short-term activities would be subject to federal, state, and local health and safety requirements. The fueling and servicing of construction equipment would cease upon project completion, and all hazardous materials associated with such construction activities would be removed from the project site and disposed of pursuant to applicable federal, state and local regulations. Health hazards from construction activities would be less than significant since the construction activities would be required to comply with the applicable regulations and laws pertaining to the transport, storage, use, and disposal of potentially hazardous materials associated with the construction of this pipeline.

All of the six potential pipelines routes would likely require some amount of excavation activities along Five Mile Drive, West Marlette Street, Old Stockton Road, and/or Highways 104 and 124. Any areas that are not paved or covered by concrete in proximity to these roadways could potentially contain high levels of hydrocarbon or lead contamination. Exposure to contaminated soils could pose a health hazard to children, pedestrians, and construction workers. If the soils are found to be contaminated, removed soils would likely be contained and disposed of at a proper facility that accepts hydrocarbon and lead wastes. Implementation of mitigation measure Hazards-1 would likely reduce impacts to be less than significant. Further CEQA analysis would have to be performed at the project level to determine the significance of pipeline construction hazard impacts.

Operation. Disposal of the tertiary treated wastewater into percolation ponds and through land application at Charles Howard Park and Unimin Mine would not likely involve the use of hazardous materials. Operation impacts would likely be less than significant for Disposal Option 2. Further CEQA analysis would have to be performed at the project level to determine the significance of pipeline operation hazard impacts.

Disposal Option 3 – Other Potential Disposal Options

Disposal Option 3 would involve identifying additional end users beyond the Castle Oaks Golf Course, Charles Howard Park, and Unimin Mine for the disposal of tertiary treated wastewater through some form of land application. Possible end users could include additional mining operations, the irrigation of agricultural crops, and other municipal or commercial uses. Establishing possible impacts for these unidentified potential end users may be speculative at this time, and the following discussion therefore analyzes potential impacts in a broad fashion. Further CEQA analysis would have to be performed at the project level to determine the significance of Disposal Option 3 construction hazard impacts.

Construction. Additional potential end users for the City of Lone's tertiary treated wastewater have not yet been identified; however, no matter what type of end user the City may explore in the future, or the location of that end user, a pipeline would be required to convey the tertiary treated wastewater to that end user. The construction impacts of building a new pipeline would be similar to the construction impacts described above for the project-level elements in Part I and Part II. These construction impacts would likely be less than significant with adherence to all applicable federal, state, and local regulations, and the implementation of mitigation measure Hazards-1. Further CEQA analysis would have to be performed at the project level to determine the significance of Disposal Option 3 operation hazard impacts.

Operation. The disposal of tertiary treated wastewater through land application would not involve the use of hazardous materials. Operation impacts would be less than significant for Disposal Option 3.

Part III – Storage

The City of Lone may in the future pursue the use of a storage reservoir to help meet the City's wastewater treatment and disposal needs. Future storage needs could be met by using an existing reservoir, such as Preston Reservoir or the Lone Water Reservoir, or by constructing a new reservoir. The use of a storage reservoir is not among the project-level elements of the Master Plan, but is rather an option that the City may wish to explore in the future. Establishing possible impacts for these potential future storage reservoirs may be speculative at this time, and the following discussion therefore analyzes potential impacts in a broad fashion.

Construction. Storage facilities for the City of Lone's treated wastewater have not yet been identified; however, no matter the location of the storage facility that the City may explore in the future, a pipeline would be required to convey the treated wastewater to that reservoir. The construction impacts of building a new pipeline would be similar to the construction impacts described above for the project-level elements in Part I and Part II. These construction impacts would likely be less than significant with adherence to all applicable federal, state, and local regulations, and the implementation of mitigation measure Hazards-1.

Construction of a new reservoir would have the potential for larger impacts than those for pipeline construction. Determining the significance of the hazards and hazardous materials impacts of the construction of a new reservoir are speculative at this time, as no determination has been made as to where such a reservoir would be located, or how large the reservoir would be. The potential construction impacts of a new reservoir are therefore not carried forward for analysis.

Operation. Routine operation of reservoirs for the storage of treated wastewater does not include the use of hazardous materials. Storage of treated wastewater could have the potential to have a negative impact in regard to hazards and hazardous waste, particularly if the wastewater has not been treated to a tertiary level prior to storage, or if the storage lasts for a significant period of time. Operation impacts would therefore have to be reviewed under a project-level analysis to determine the level of significance.

Potential Impact 3.9-2: Potential to 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

Overview of Impacts

The project would have the potential for a significant impact to humans from exposure to hazardous materials or from accidental hazardous material spills. Construction and operation of the project-level elements in Part I and Part II would involve the use of such hazardous materials

as gasoline, oil, grease, paint, sodium hypochlorite, and other materials. Hazardous materials such as gasoline and pesticides would be used in area of the secondary and tertiary WWTPs during normal landscaping maintenance. Other hazardous materials that would be used and stored on the site include cleaning products that are commonly used at wastewater treatment facilities. The project may also include temporary on-site fueling facilities for construction equipment.

Construction. The project involves the transport, storage, and use of hazardous materials. There is a potential for a significant impact to humans from exposure to hazardous materials or from accidental hazardous material spills during project construction. The risk of exposure of people to construction-associated hazardous materials would be reduced to less than significant levels with the implementation of a Stormwater Pollution Prevention Plan (SWPPP) and a Health and Safety Plan prior to project construction. The SWPPP describes potential sources of pollutions and identifies practices to be used to reduce construction site pollutants from entering stormwater. The Health and Safety Plan would identify methods and techniques to minimize the exposure of onsite workers and the public to potentially hazardous materials during the project. The plan would require implementation of appropriate Best Management Practices and approved containment and spill-control practices (i.e., a spill control plan) for construction and the storage and use of hazardous materials on-site. The Health and Safety Plan would remain onsite along with spill clean-up kits at all times during construction. Construction impacts involving the accidental spill or release of hazardous materials would be less than significant.

Operation. There is the potential for a significant impact to humans from exposure to hazardous materials during project operation. Although unlikely, there is a potential for the proposed pipelines to experience a break and result in an accidental release of raw wastewater. Potential accidental releases of untreated effluent could occur within streets or at creek crossings. This untreated wastewater is considered hazardous; therefore, accidental release of untreated effluent due to a pipeline break would be considered a significant impact.

Similarly, there is the potential for a break, overflow, or malfunction of the secondary or tertiary WWTP facilities resulting in an accidental release of untreated effluent and/or the sodium hypochlorite and aluminum chlorohydrate – polymer blend used in the wastewater treatment process at the tertiary WWTP. This potential accidental release is considered a potential significant public health and safety impact.

Existing federal, state, and local regulations reduce the potential for accidents to occur. Implementation of mitigation measures Hazards-2 would reduce the impact from the accidental release of hazardous materials to a less than significant level.

Hazards-2: Prior to completion of the new and/or expanded wastewater treatment facilities, the City of Lone or its contractor shall prepare and the City shall adopt a Hazardous Materials Business Plan (HMBP) for the wastewater treatment facilities. This HMBP will become part of the standard operating procedures for the wastewater treatment facilities. The HMBP shall identify and characterize the hazardous materials stored or used at the wastewater treatment facilities, and identify the storage, handling, training, and spill contingency procedures for these materials. Additionally, the HMBP shall identify procedures in the event of accidental spills of hazardous materials. These procedures shall include immediate response personnel to limit public access to spill areas, potentially shutting down pump stations, creating berms, use of vacuum trucks, and the use of water booms to contain spills within open water areas. The HMBP shall address response and containment of fuel at pump stations sites, when used.

Potential Impact 3.9-3: Potential to produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

There are no existing or proposed schools within one-quarter mile of the WWTP or any of the proposed pipeline routes. The nearest school to the project site is Lone Junior High School, located approximately 1.0 mile east from the existing secondary WWTP. Therefore, project construction would not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, no impact would occur, and no mitigation would be required.

Potential Impact 3.9-4: Potential to be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment

The project site is not located on a hazardous materials site list compiled pursuant to Government Code Section 65962.5 ("Cortese List"). The closest listed site is the MP Associates, Inc. site located at 6555 Jackson Valley Road in the City of Lone. This site is located approximately 2 miles southeast of the proposed pipeline connection between Charles Howard Park and Unimin Mine, and about 4 miles southeast of the existing secondary WWTP. The project would have no effect on these sites, no impacts would occur, and no mitigation would be required.

Potential Impact 3.9-5: 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 or public use airport, potential to result in a safety hazard for people residing or working in the project area

There are no public use airports or airstrips in with a two-mile radius of the proposed project. The project would have no impact, and no mitigation would be required.

Potential Impact 3.9-6: For a project within the vicinity of a private airstrip, potential to result in a safety hazard for people residing or working in the project area

The only airstrip within a two-mile radius of the proposed project is the Ranch Airstrip. The Ranch Airstrip is a private airstrip located about one mile southwest of the existing secondary WWTP.

Construction and operation of the proposed project would not cause a safety hazard for persons residing or working in the project area related to an airport or airstrip. The maximum height of the proposed facilities is 20 feet, which is less than the height of a two story building. The construction equipment required for the construction of the project elements would likewise not exceed 30 feet in height. There would be no aviation or public hazard as a result of the project, and no mitigation would be required.

Potential Impact 3.9-7: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

Overview of Impacts

Neither the City of Lone nor Amador County currently have an adopted emergency response plan or emergency evacuation plan. Construction activities could involve temporary disruption of vehicle traffic on local streets, particularly during pipeline construction or when oversized construction equipment and materials are being delivered to the site. Operation activities would involve a minimal amount of normal vehicle traffic, and would not result in the blockage of emergency vehicle access. There are no hospitals, fire, police, or sheriff stations located near the secondary and tertiary WWTP sites or along any of the proposed pipeline routes.

Construction. Project construction would cause temporary impacts to emergency response time if construction requires West Marlette Street, Old Stockton Road, or any of the roads along the six wastewater disposal pipeline routes to become blocked in all directions. Blocking access for emergency vehicles, even for a short period of time, would be a potentially significant impact. The City of Lone intends to stage construction activities such that a minimum of one travel lane would be open at all times, with a flag person present to direct vehicle traffic and allow access for emergency vehicles. In the event that construction activities would require trenching across the entire width of a roadway, construction workers would have steel plates on hand to place over such trenches to allow emergency vehicles access across the project area. Implementation of these measures, as well as mitigation measures Traffic-1 and Traffic-2, would reduce impacts to a less than significant level.

Operation. Operation of the proposed facilities would have no impact on emergency response plans or emergency evacuation plans. All new facilities and infrastructure would be located underground or in the place of existing structures, and would not block any roadways.

Potential Impact 3.9-8: Potential to 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

Overview of Impacts

The WWTP sites are currently surrounded by cultivated agricultural lands and orchards. These agricultural properties typically are well maintained with little undergrowth and regularly trimmed to remove deadwood. There are scattered wildlands surrounding the larger project area and along some portions of some of the treated wastewater disposal pipeline routes. CAL FIRE rates the area outside of city limits of Lone where a majority of the proposed project is located as “Moderate” for fire hazard severity (CAL FIRE 2007). The parts of the proposed project within the city limits are in a Local Responsibility Area (LRA). CAL FIRE rates the majority of the city “unzoned” for fire hazard severity.

Construction. Construction of the proposed project could require the use of tools or equipment, such as soldering equipment or blowtorches, that could present a fire threat if the work was performed near dry grass or other natural fuels. Construction workers could cause wildfires by dropping cigarettes into dry vegetation or smoking near combustible materials.

The implementation of the following mitigation measures would reduce construction impacts on the threat of wildfires to a less than significant level.

Hazards-3: Smoking shall be prohibited except in designated areas, which shall be located at least 20 feet from any combustible chemical/material and from any dry vegetation.

Hazards-4: All heavy equipment and rubber-tired construction vehicles shall be equipped with fire extinguishers. All rubber-tired construction vehicles shall also be equipped with appropriate fire fighting equipment, such as shovels and axes or pulaskis³, to aid in the prevention or spread of fires. All construction equipment shall be equipped with the appropriate spark arrestors and functioning mufflers.

³ A pulaski is a hand tool used in wildland firefighting. The tool combines an axe and a mattock in one head, with a rigid handle of wood, plastic, or fiberglass. The pulaski is considered one of the most versatile tools for constructing firebreaks, as it can be used to both dig soil and chop wood.

Hazards-5: Soldering or welding shall not be performed within 15 feet of dry grass or other fuels. An extinguisher shall be available at the project site at all times when welding or performing other activities that can generate sparks.

Operation. Operation of the facility would have no impact on exposure to wildfires.