The purpose of this section is to disclose and analyze the potential impacts associated with hazards and hazardous materials related to the project site and general vicinity, and to analyze the potential for exposure of people to hazards and hazardous materials as the project is built and operated in the future. There were no comments received during the NOP comment period related to this environmental topic. Potential environmental impacts and hazards related to air quality and the release of hazardous emissions are addressed in Section 3.2 of this Draft EIR.

Information in this section is derived primarily from the following:

- Screening Level Environmental Site Assessment, Sierra Pacific Industries (SPI) Proposed Cogeneration Plant by Hanover Environmental Services, Inc., September 2009 (Appendix H);
- City of Anderson General Plan, May 2007;
- Shasta County General Plan, 2004

3.6.1 Environmental Setting

The project site is depicted on the 1965 United States Geological Survey (USGS) 7.5 Minute topographic map of the Cottonwood, California Quadrangle as industrial land, as evident by structures mapped on the project site. The project site is located at an elevation of approximately 426 feet above mean sea level (msl).

Regional and Local Geology

The subject property is located in the Northern Sacramento Valley. The Sacramento Valley is the northern one-third of the Central Valley of California, which extends approximately 400 miles from the Tehachapi Mountains in the south to the Klamath Mountains in the north. The Sacramento Valley trough is strongly asymmetric with the deepest part of the trough west of the apparent surface axis of the valley. The valley is bordered to the east by the Sierra Nevada, to the north by the Cascade Range, and to the west by the Coast Ranges.

The Sacramento and San Joaquin Valleys have been filled to their present elevations with thick sequences of sediment derived from both marine and continental sources. The sedimentary deposits range in thickness from relatively thin deposits along the eastern valley edge to more than 25,000 feet in the south central portion of the Great Valley. The sedimentary geologic formations of the Great Valley province vary in age from Jurassic to Quaternary, with the older deposits being primarily marine in origin. Younger sediments are continentally derived and were typically deposited in lacustrine, fluvial, and alluvial environments with their main source being the Sierra Nevada Range.

Soil Survey

On September 2, 2009, Hanover Environmental Services, Inc. (Hanover) accessed the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS). The WSS "...provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS)

and provides access to the largest natural resource information system in the world..." (USDA, 2009). According to the WSS the soils on the project site are comprised primarily of Churn gravelly loam (CfA). For an in depth discussions of the geotechnical properties for the project site refer to Section 3.5 of this Draft EIR.

Regional and Local Groundwater

The project site is located within the Sacramento River Hydrologic Basin, as defined by the California Department of Water Resources (DWR). The closest DWR-monitored well is located up gradient in elevation and approximately ¼ mile west of the project site. It is a water site named Sierra Pacific Industries that has been continuously monitored for Nitrates (NO3), and Fluoride (F). Most recent tests on August 1, 2007 and November 21, 2006 show levels of NO3 detected at 4.9 MG/L and Fluoride at .4 MG/L. Both are within California Public Health Goals and below Primary US EPA limits for drinking water.

HAZARDOUS MATERIALS

Methods

To help define the existing conditions of the project area and adjacent properties, and to assess the risk of exposure to hazards and hazardous materials, Hanover conducted a site visit and a database search report was compiled by Environmental Data Resources, Inc. (EDR*).

DATABASE SEARCH

EDR® conducted a search for properties in the study area that have been designated as hazardous in one or more state or federal databases. EDR® conducted a search of federal and state environmental records for a 3-mile radius around the approximate center of the project area. The report meets the government records search requirements of the American Society for Testing and Materials (ASTM's) Standard Practice for Environmental Site Assessments, E 1527-05.

The objective of the assessment was to determine if the project area or surrounding lands are subject to the presence or likely presence of hazardous materials or wastes, including petroleum products, or if they exhibit conditions that indicate an existing release, a past release, or any material threat of a release of those materials or wastes into the ground, groundwater, or surface water of the properties.

The database search summary, provided by EDR®, reported that the project site as Sierra Pacific Industries (SPI) was listed in three (3) databases at 19758 Riverside Drive, Anderson CA. These databases include the Regional Water Quality Control Board (RWQCB) Leaking Underground Storage Tank (LUST), Underground Storage Tank (UST), Spills, Leaks, Investigation and Cleanup (SLIC), and National Pollution Discharge Elimination Systems (NPDES) databases, and the HIST CORTESE list. Hanover also reviewed the RWQCB database.

Reasonably ascertainable records indicate that the database results were for activities not associated to the API.

Database Search Results

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

The review of the LUST list revealed that there are two LUST sites within approximately 0.5 miles of the target property. Both of these sites have been granted closure by the Regional Water Quality Control Board (RWQCB) with no further action required. These letters are available upon request at Shasta County Environmental Health. Mr. Mark Cramer, Senior Environmental Health Specialist, is identified as the county lead for both sites. Based upon the status and locations of these sites they are not considered as recognized environmental conditions in association with the subject property.

SLIC: SLIC Region comes from the California Regional Water Quality Control Board. The review of the SLIC list revealed that there is one SLIC site within approximately 0.5 miles of the target property. Based upon the distance and location of this site it is not considered as a recognized environmental condition in association with the subject property.

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

The review of the HIST CORTESE list revealed that there are two HIST CORTESE sites within approximately 0.5 miles of the target property. These two sites are those identified in the LUST database and both sites have been granted closure by the RWQCB. These sites are not considered as recognized environmental conditions in association with the subject property.

The State government database search included sites that are within the ASTM search range of the subject corridor. However, potential sites exist that are in the general vicinity of the project corridor but there is not enough information provided to databases to map these "orphan" sites or determine if they are within the ASTM search range. The database summary indicates that there are twenty nine (29) orphan sites within the subject properties search radius. Orphan sites are not considered in the foregoing analysis.

Additionally, Hanover reviewed the California Regional Water Quality Control Board (CRWQCB) Central Valley Region Monitoring and Reporting Program - Waste Discharge Requirements (WDRs). The reviewed files revealed the following:

The SPI facility was regulated under Waste Discharge Requirements (WDRs) Order No. R5-2004-0100. Violations recorded were not for the API specifically but for the larger SPI property. SPI was cited for exceeding discharge limits of cadmium, copper and zinc into the Sacramento River. California Water Code (CWC) Section 13385 (j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to Section 13263.3 of the California Water Code. A pollution prevention plan addresses only those constituents that can be effectively reduced by source control measures. Cease and Desist Order No. R5-2004-101 required SPI to implement

measures to achieve full compliance with WDR Order No. R5-2004-100 by July 1, 2009. According to the CVRWQCB, SPI has not discharged any stormwater or process water to the Sacramento River since July 2009, which brings SPI into compliance with this Order. The CVRWQCB is in the process of drafting new permit conditions for the SPI site, however, it is anticipated that in order to comply with the waste discharge requirements, SPI will continue to retain all stormwater and process water onsite, as indicated by SPI staff and CVRWQCB staff.

Documentation Review

Hanover also reviewed documentation concerning the other State and County Database Search Results indicated by EDR® in the vicinity of the project site. None of the files reviewed for those facilities indicated RECs in connection with the project site.

Adjoining Properties

The project site is located within a largely agricultural area north of the Anderson. During the site reconnaissance survey it was noted that land to the north of the project site was similar to other types of lumber harvest facilities, while land to the south includes the Spring Gulch Creek drainage. The site is adjacent to Highway 273 on the southwest, the Sacramento River on the northeast.

INTERVIEWS

Interviews with various persons familiar with the site vicinity, including representatives of public agencies, were conducted for the purpose of identifying past and present uses, which may have contributed to Recognized Environmental Conditions on the project site. Results of those interviews are discussed in the following sections.

Owner or Key Site Manager, Occupants

Sierra Pacific Industries (SPI) was contacted concerning site history. According to an onsite interviews from Mr. Cedric Twight and Mr. Shane Young:

- No evidence of any authorized releases, spill or leaks observed.
- All chemicals and/or hazardous material used in operations of adjacent properties are stored, used and disposed of by the manufacturer's recommendations.
- Material Safety Data Sheets (MSDS) for all chemicals used on lumber products were available for review.
- Project site was historically used in part (northwestern) to float logs and is currently used to store processed timber for distribution.

State and/or Local Government Officials

Hanover contacted the Shasta County Environmental Health Department regarding files related to the project site and SPI. Mr. Mark Cramer reported that the site had no current, active, or open issues associated with hazardous materials. He supplied Hanover with information regarding the removal of an underground waste oil tank in 1994. This tank was granted closure by the County based upon client supplied samples collected in the tank basin.

Abandoned Properties

As referenced in 40 CFR Part 312, in the case of inquiries conducted at "abandoned properties," as defined in §312.23(d), "where there is evidence of potential unauthorized uses of the site or evidence of uncontrolled access to the site, the environmental professional's inquiry must include interviewing one or more (as necessary) owners or occupants of neighboring or nearby properties from which it appears possible to have observed uses of, or releases at, such abandoned properties..." No evidence of potential unauthorized uses or evidence of uncontrolled access to the site was observed. Therefore, Hanover did not interview owners or occupants of neighboring properties.

RECORDS REVIEW

The purpose of the records review is to obtain and review information concerning the current and historical use of the project site and adjoining properties that would help identify the presence of RECs in connection with the project site. The records review included review and discussion of the following, as available:

- Physical Setting Source(s)
- Historical Use Information
- Environmental Record Sources Environmental Data Resources, Inc. (EDR®)

Historical Use Information

Historical information was reviewed to develop a history of the previous uses of the project site and surrounding area, in order to evaluate the project site and adjoining properties for evidence of Recognized Environmental Conditions. Standard historical sources reviewed during the preparation of this report included the following, as available:

- Sanborn® Maps
- Aerial Photographs
- Prior Assessments

Discussion of these historical sources is provided in the following sections.

SANBORN® MAPS

Sanborn Maps with coverage of the project site were sought through Environmental Data Resources, Inc. (EDR). Sanborn® Maps are detailed drawings of site development, and were typically used by fire insurance companies to determine site fire insurability. According to EDR®, Sanborn® Map coverage of the project site is not available.

AERIAL PHOTOGRAPHS

Historical aerial photographs of the project site and general vicinity were compiled by EDR®. Photographs covering the years 1952, 1963, 1974, 1981, 1998 and 2005 were available for review. The results of the review are discussed in Chapter 3.5, Geology and Soils.

PRIOR ASSESSMENTS

Hanover reviewed the December 14, 2007 Sierra Pacific Industries Hydrogeologic Analysis for Expansion of Cogeneration Plant at Sierra Pacific Industries Anderson Facility, prepared by Lawrence and Associates. Review of that report indicated a similar site use/history as presented herein.

Additionally, Hanover reviewed the September 2009 "Screening-level Assessment", Sierra Pacific Industries (SPI) Proposed Cogeneration Plant, prepared by Hanover Environmental Services, Inc. Review of that report indicated a similar site use/history and conclusions regarding past uses as presented herein.

Site Reconnaissance

A visual site reconnaissance was conducted by Hanover Environmental Services, Inc. on September 10, 2009. On the date of the site reconnaissance the project site was centered within SPI operations. The project site contained dirt access roads that were in and around the subject property.

At the time of the September 10, 2009 site inspection, the project site where the proposed cogeneration facility would be located was structurally undeveloped. The current uses were a staging area for wood products for distribution and tractor trailer parking.

3.6.2 REGULATORY SETTING

A hazardous material is defined by the California Department of Toxic Substances Control (DTSC) as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 CCR 25501). Common hazardous materials include petroleum hydrocarbons, pesticides, volatile organic chemicals, and certain metals. Various federal and state agencies exercise regulatory authority over the use, generation, transport, and disposal of hazardous substances. The primary federal regulatory agency is the EPA. The primary California state agency with similar authority and responsibility is the California Environmental Protection Agency (Cal-EPA), which may delegate enforcement authority to other local agencies with which it has agreements. Federal regulations applicable to hazardous substances are contained primarily in the CFR Titles 29 (Labor), 40 (Protection of Environment), and 49 (Transportation). State regulations are contained in CCR Titles 13 (Motor Vehicles), 19 (Public Safety), 22 (Social Security), and 26 (Toxics).

The primary federal agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the Environmental Protection Agency (EPA), Department of Labor Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Several laws governing the transport, storage, and use of hazardous materials are governed by these agencies as well as oversight for contaminated sites cleanup. Federal laws and regulations that are applicable to hazards and hazardous materials are presented below. Specific legislation and policies related to hazards and hazardous materials are summarized below.

FEDERAL

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. CERCLA was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

STATE

The primary state agencies that are responsible for overseeing regulations and policies regarding hazardous materials are the California Office of Emergency Services (OES), California

Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Water Quality Control Board, and the California Air Resources Board. Several laws governing the generation, transport, and disposal of hazardous materials are administered by these agencies. State laws and regulations that are applicable to hazards and hazardous materials are presented below.

California Health and Safety Code

Cal-EPA has established rules governing the use of hazardous materials and the management of hazardous wastes. Many of these regulations are embodied in the California Health and Safety Code. The code includes regulations that govern safe drinking water, substances control, land reuse and revitalization, remediation, restoration, and methamphetamine contaminated cleanups.

California Code of Regulations Title 22 and Title 26

The California Code of Regulations (CCR) Title 22 provides state regulations for hazardous materials, and CCR Title 26 provides regulation of hazardous materials management. In 1996, Cal/EPA established the "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program) which consolidated the six administrative components of hazardous waste and materials into one program.

DATABASES

There is a broad list of federal and state databases that provide information for sites with varying potential for risk from the possible existence of hazardous materials. There are numerous redundancies among these various database listings. Below is a brief summary of each.

National Priorities List

The National Priorities List (NPL) of Superfund Sites is EPA's database of more than 1,200 sites designated for priority cleanup under the Superfund program. NPL sites may encompass relatively large areas.

RCRIS System

The Resource Conservation and Recovery Information System (RCRIS) is an EPA database that includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Identification on this list does not indicate that there has been an impact on the environment.

CERCLIS Data

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) is an EPA database that contains information on potential hazardous waste sites that have been reported to EPA by states, municipalities, private companies, and individuals, pursuant to Section 103 of CERCLA. CERCLIS contains sites that are either proposed for or on the NPL, as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.

CORRACTS

Corrective Action Report (CORRACTS) is an EPA database that identifies hazardous waste handlers with RCRA corrective action activity.

RAATS System

RCRA Administrative Action Tracking System (RAATS) is an EPA database that contains records based on enforcement actions issued under RCRA pertaining to major violators, and includes administrative and civil actions brought by EPA.

PADS System

PCB Activity Database System (PADS) is an EPA database that identifies generators, transporters, commercial storers, and/or brokers and disposers of polychlorinated biphynels (PCBs) who are required to notify EPA of such activities.

CHMIRS Data

The California Hazardous Material Incident Report System (CHMIRS) contains information on reported hazardous materials incidents (i.e., accidental releases or spills). The source of this information is the California Office of Emergency Services.

ERNS Sites

The Emergency Response Notification System (ERNS) provides records of reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

Cortese Database

The Cortese database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known hazardous substance migration. The source of this database is the California Environmental Protection Agency (CAL-EPA).

LUST Reports

The Leaking Underground Storage Tank (LUST) Incident Reports contain an inventory of reported leaking underground storage tank incidents. This information comes from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

UST Database

The Underground Storage Tank (UST) database lists registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The UST information comes from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

HIST UST Sites

The Hazardous Substance Storage Container Database is a historical listing of UST sites. The data source is the State Water Resources Control Board.

CA FID Information

The Facility Inventory Database (CA FID) lists active and inactive underground storage tank locations. This database is maintained by the State Water Resources Control Board.

HAZNET Database

The Hazardous Waste Information System (HAZNET) includes data extracted from the copies of hazardous waste manifests each year by the State Department of Toxic Substances Control.

FINDS Data

The Facility Index System (FINDS) contains both facility information and "pointers" to other sources of information that contain more detail (e.g., RCRA Info, Permit Compliance System [PCS], Aerometric Information Retrieval System [AIRS]). The source of this information is the U.S. EPA.

FTTS Database

The Federal Toxics Tracking System (FTTS) tracks administrative cases and pesticide enforcement actions/compliance activities related to the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA), Toxic Substances Control Act (TSCA), and Emergency Planning and Community Right-to-Know Act (EPCRA). The source of this data is the Environmental Protection Agency (EPA) Office of Prevention, Pesticides, and Toxic Substances.

CA SLIC Database

The statewide Spills, Leaks, Investigations, and Cleanups (CA SLIC) database includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites. The data source is the State Water Resources Control Board.

Notify 65 Records

Proposition 65 Notification Records (Notify 65) contain facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk. The State Water Resources Control Board maintains this database.

EMI Data

Emissions Inventory Data (EMI) is comprised of toxics and criteria pollutant emissions data collected by the state Air Resources Board and local pollution agencies.

Manufactured Gas Plant Database

This database includes records of coal gas plants (manufactured gas plants), which were in operation in the U.S. until the 1950s. Due to common past practices, the potential for on-site hazardous by-products (such as coal tar, sludge, oils, and chemical compounds) remains on such

sites, which could result in soil or groundwater contamination. These records are maintained by EDR, Inc., as part of its proprietary database.

SWEEPS Records

The Statewide Environmental Evaluation and Planning System (SWEEPS) UST list, which is no longer maintained or updated, was under the purview of the State Water Resources Control Board. Other agencies (e.g., as identified above) now maintain UST records.

LOCAL

Shasta County General Plan

The Shasta County General Plan contains numerous policies related to hazards, hazardous materials and safety. Relevant policies from the General Plan are identified below.

Section 5.4 Fire Safety and Sheriff Protection

FS-a All new land use projects shall conform to the County Fire Safety Standards.

FS-b Known fire hazard information should be reported as part of every General Plan amendment, zone change, use permit, variance, building site approval, and all other land development applications subject to the requirements of the California Environmental Quality Act (CEQA).

FS-c Fire Hazard Maps shall be kept on file by the County and used in conjunction with the adopted County Fire Safety Standards and other County development standards.

FS-e Development in areas requiring expanded levels of police and fire services shall participate in adopted County programs designed to offset the added costs for providing the expanded level of services.

FS-f The Sheriff's Office and Shasta County Fire Department should annually review the County's standard development conditions as they relate to the provision of police and fire services created as a result of new land use projects and recommend to the Planning Commission appropriate changes including the need to implement equitable property tax assessments to help defray the costs of providing new and/or expanded services.

Section 5.6 Hazardous Materials

HM-a The County shall make every effort to inform applicants for discretionary and nondiscretionary projects which are located within potential border zone property of known hazardous waste facilities that they must comply with State requirements regarding hazardous waste facilities. A map shall be prepared and maintained which identifies these areas.

HM-b Shasta County shall maintain an emergency preparedness plan for hazardous materials.

HM-c Shasta County shall adopt policies for hazardous materials use, transportation, storage and disposal as required by State laws.

HM-d Shasta County shall adopt policies for the protection of life and property from contact with hazardous materials through site design and land use regulations.

HM-e Any proposal for development of a disposal site for hazardous wastes in Shasta County shall be reviewed closely to ensure that no significant environmental impacts will result from the project. Review of such project may include a determination of what type of hazardous wastes may be disposed of at the site.

3.6.3 IMPACTS AND MITIGATION MEASURES

METHODOLOGY

The evaluation of impacts on the public and environment that could result from hazardous materials and other hazards was based on the results of the EDR® report, which includes a list of all known hazardous sites in the study area and is assumed to be a preliminary inventory of all existing hazardous sites (EDR®). The analysis is also based on the known presence of other health-threatening factors in the project vicinity. Evaluation of hazards, safety, fire, and emergency response impacts was conducted in consideration of the proposed project's location, the types of hazards typically associated with a cogeneration energy project, and the proximity to emergency response services.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed project will have a significant impact from hazards and hazardous materials if it will:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of 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 or handle hazardous or acutely hazardous materials, 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 or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

 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.

The Initial Study and Notice of Preparation (IS/NOP) prepared by Shasta County in July 2009 determined that the proposed would result in no impacts related to a hazardous materials site, impacts related to airport operations, or impacts related to wildfires. Therefore, these items are not addressed further in this Draft EIR.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: Creation of a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant with Mitigation)

Operation of the Sierra Pacific Industries proposed Cogeneration Project would not require treatment, or disposal of significant quantities of hazardous materials. The biofuel that will be burned in the cogeneration facility consists of wood pulp, sawdust and other natural un-treated wood waste that is generated onsite by the existing sawmill operations. Additionally, other sources of biofuel would be trucked to the project site from offsite locations. As described in the project description, the proposed cogeneration facility would burn only non-treated wood pulp and other by-products from the onsite sawmill and other regional SPI lumber facilities, agricultural fuels and untreated urban wood waste. Agricultural and timber wood wastes would include wood chips from trees, brush and slash from timber harvest operations or wildland fire fuel reduction projects, as well as wood chips from orchard removals, rice hulls or nut shells. Urban biomass fuel, or urban wood waste, would include chipped pallets and urban wood fuel from commercial and residential source separated material programs. Urban fuels would not include railroad ties or any other treated or painted wood. Construction debris may be used, but only if it is a clean source separated material, such as ground up wood that does not include such things as wallboard an general debris.

Operation of the biomass fuel boiler would generate additional fly ash and bottom ash. Ash residue would be collected using an automated system. Ash would be moved within the boiler using conveyor belts to an enclosed overhead ash bin. Ash from the bin would be gravity fed into a trailer for transport. The ash bin would need to be emptied approximately once every 19 hours.

The existing cogeneration facility generates approximately 4,300 tons/year of ash, which has been utilized on the adjoining agricultural fields as a soil amendment. When ash is added to the adjacent agricultural fields, it is trucked along existing private dirt roads using an SPI truck. The ash is deposited on the fields, spread uniformly, wetted with water and disked into the soil. Under the existing agricultural crop rotation, it has not been necessary for SPI to truck ash to the Anderson Landfill.

The proposed facility would generate approximately 11,155 tons/year of ash. Ash from the proposed facility would either be disked into the adjacent agricultural fields as a soil amendment, used as an amendment in bagged soil and compost products, as a cement amendment, or it would be sent to the Anderson Landfill. The project applicant estimates fewer than one (1) truck trip per month to dispose of ash at the landfill would be required.

The ash residue is not a hazardous material. Mitigation measures contained in Section 3.2, Air Quality, would ensure that the ash loads are properly covered during transport in order to reduce air quality impacts and the release of non-toxic particulate matter during transport to the landfill.

Limited amounts of common hazardous materials will be used, handled and stored as a part of operations of the proposed facility. These materials may include petroleum based fuels, oils, lubricants, etc. These materials would be used primarily to maintain the trucks and other pieces of heavy equipment used to move wood pulp and other biofuels around the interior of the project site. If these materials were handled improperly or containers leaked there is potential for a release of hazardous material. This impact is considered **potentially significant**.

MITIGATION MEASURES

Mitigation Measure 3.6-1: Prior to issuance of the conditional use permit, a Hazardous Materials Business Plan/Spill Prevention Control and Countermeasures (SPCC) Plan shall be prepared to avoid spills and minimize impacts in the event of a spill. A SPCC will be required from the contractor during construction and from the operator during operations. The purpose of the SPCC is to ensure that adequate containment would be provided to control accidental spills, that adequate spill response equipment and absorbents would be readily available, and that personnel would be properly trained in how to control and clean up any spills. The County will review and approve the SPCC prior to approval of a grading permit. The County will routinely inspect active portions of the project area to verify that the Best Management Practices (BMPs) specified in the SPCC are properly implemented and maintained, will immediately notify the contractor if there is a noncompliance issue, and will require compliance. The federal reportable spill quantity for petroleum products, as defined in EPA's guidelines (40 CFR 110) is any oil spill that: (1) violates applicable water quality standards; (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline; or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines. The SPCC will include the components listed below.

- a. The SPCC must include a discussion of hazardous materials management, including delineation of hazardous material and hazardous waste storage areas, prevention and response procedures, access and egress routes, and notification procedures.
- b. The SPCC will be provided to all contractors working on the proposed project, and one copy will be available on site at all times.
- c. The applicant and the applicant's contractors will store all paint, solvents, and any other hazardous materials in the manner specified by the manufacturer and in accordance with federal regulations and nationally and internationally recognized codes and standards.

Small spray cans of carburetor fluid and other hazardous materials will be stored in an enclosed area in the pre-existing fuel storage building. A material safety data sheet will be stored with each material.

d. All employees must be properly trained in the use and handling of these materials.

e. Should a spill of hazardous material occur, EHD and DTSC, which have spill response and cleanup ordinances to govern emergency spill response, will be notified immediately. A written description of reportable releases will be submitted to the Central Valley Water Board. This submittal will include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases will be documented on a spill report form. If a reportable spill has occurred and it is determined that project activities have adversely affected surface or groundwater quality in excess of water quality standards, a detailed analysis will be performed by a Registered Environmental Assessor to identify the likely cause of contamination. This analysis will conform to ASTM standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the County and its contractors will select and implement measures to control contamination, with a performance standard that water quality will be returned to baseline conditions. These measures will be subject to approval by EHD and DTSC.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.6-1 would reduce this impact to a **less than significant** level.

Impact 3.6-2: Creation of significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (Less than Significant with Mitigation).

The proposed project would not generate hazardous materials as a result of operations. The proposed cogeneration plant would produce steam and electricity as its main product. Potential for emissions of air quality pollutants also exist through operation of the proposed fuel boiler and the proposed cooling tower. Issues related to toxic air pollutant emissions are described in Section 3.2, Air Quality, of this Draft EIR. The main substances that would be handled are organic materials such as wood waste, which would be from clean, nonhazardous sources, as under current conditions. The ash residue generated by the boiler is not a hazardous material.

However, operation of the Sierra Pacific Industries Proposed Cogeneration Project has the potential for reasonably foreseeable upset and accident conditions due to the relatively high temperatures associated with the operation of the boiler and the high pressures associated with the generation and transport of steam to turn the turbine. There is the potential that operation of the proposed facility could result in an accidental explosion, which could pose a fire and health risk

to the rest of the SPI site and the surrounding properties. This is considered to be a **potentially significant** impact.

MITIGATION MEASURES

Mitigation Measure 3.6-2: Prior to issuance of the conditional use permit, an Emergency Response Plan will be prepared for the review and approval by Shasta County. This plan will address potential accidents or emergencies involving fires or explosions at the proposed cogeneration facility. The Emergency Response Plan will be prepared in accordance with the Integrated Contingency Planning Guidelines (sometimes referred to as the "One Plan" guidelines) issued by the National Response Team. The Plan will consist of three sections: an Introduction, a Core Plan, and Annexes. The Introduction and Core Plan should be brief and contain only essential ("high level") information. The Introduction will describe the scope of the Emergency Response Plan, key names and addresses of contacts for an emergency, a description of processes, and the general facility hazards information. The Core Plan will describe how to identify an emergency, how and who to alert if an emergency occurs, roles during an emergency, how the emergency will be controlled, and how to terminate the incident.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure 3.6-2 would reduce this impact to a **less than significant** level.

Impact 3.6-3: Project implementation could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Less than Significant).

As described above, operations of the Sierra Pacific Industries Proposed Cogeneration Project have the potential for hazardous emissions releases and pose a risk of explosion or other accident on the project site. Implementation of Mitigation Measures 3.6-1 and 3.6-2 would reduce the risk associated with these potential impacts.

However, the proposed project location is not located within one-quarter mile of an existing or proposed school. The nearest school to the project site is Verde Vale Elementary School, which is located approximately 0.38 miles to the southwest of the proposed cogeneration facility. Therefore, project implementation would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a one-quarter mile radius of an existing or proposed school. This is a **less than significant** impact, and no further mitigation is required. The potential for air quality impacts to sensitive receptors, including schools, in the project vicinity are addressed in Section 3.2, Air Quality, of this Draft EIR.

Impact 3.6-6: Project implementation could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (No Impact).

The Shasta County General Plan includes policies that require the County to maintain emergency access routes that are free of traffic impediments. The proposed project does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. As described in Section 3.10, Transportation and Circulation, implementation of the proposed project would not result in significant impacts to local roadways that could interfere with emergency access routes in the vicinity of the project site. Furthermore, the proposed project would not result in population growth that would increase the demand for emergency services during disasters. Mitigation Measure 3.6-2 requires the project applicant to prepare an Emergency Response Plan that would include requirements to be implemented in the event of an explosion or other accident on the site. Implementation of the proposed project would result in **no impact** on this environmental topic.

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