

SECTION 4.6
HAZARDS AND HAZARDOUS MATERIALS

4.6 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the project on hazards and hazardous material. The primary focus of this section will be on potential fire hazards and the use and storage of hazardous materials. Section 4.3, Air Quality, discusses hazards associated with air pollutant emissions. Potential geologic hazards are discussed in Section 4.4, Geology and Soils. Potential flood hazards are described in Section 4.5, Hydrology and Water Quality. The impact analysis is based upon review of pertinent documents.

4.6.1 SETTING

WILDLAND FIRE HAZARD

The project is located in an area at risk for wildland fires. The Shasta County General Plan classifies the unincorporated areas as "moderate", "high" or "very high" fire hazard severity zones. The project site is within a "very high" zone. The main factors in classifying fire hazards in Shasta County are fuel load, climate and topography (Shasta County General Plan, 1998).

AIRFIELDS

A private airstrip is located in the southwestern corner of the project site. The airstrip, which is unimproved, extends in a northwest-southeast orientation past the southern boundary of the project site into the adjacent parcel. Given the orientation of the airstrip, planes would not fly over any activity areas proposed by the project.

HAZARDOUS MATERIALS

A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as follows:

"A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious, irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed" (CCR, Title 22, Section 66260.10).

Another definition of hazardous material is that it is a substance with certain chemical and physical properties that could pose a substantial present or future hazard to human health or the environment if improperly handled, stored, disposed or otherwise managed. Public health hazards from hazardous materials may occur through contamination of soils or groundwater or through airborne releases of vapors, fumes or dust. Exposure to hazardous materials and wastes could cause various short-term or long-term health effects. The health effects would be specific to each substance or combination of substances.

In 1985, the Regional Water Quality Control Board (RWQCB) received reports from employees at the lumber mill in operation on the project site at the time that toxic material had been dumped and

4.6 HAZARDS AND HAZARDOUS MATERIALS

buried at the mill site. After an investigation, the RWQCB found that there were several areas where 55-gallon drums had been buried, along with other soil contamination. The drums contained residues of solvents and other toxic materials. All of the contaminated material, including the drums and soil, was excavated and removed from the site. In 1996, RWQCB stated that the cleanup had been comprehensive and it was unlikely, although possible, that any significant amount of toxic material remained on the site.

The California Department of Toxic Substances Control (DTSC) maintains a list of hazardous waste and substances sites, also known as the "Cortese list". The list receives information from the CALSITES database of hazardous waste sites, the Leaking Underground Storage Tanks database, and the California Integrated Waste Management Board database of sanitary landfill sites with evidence of groundwater contamination. The most current list, from April 1998, had no sites located in the project vicinity. The nearest listed sites are the PG&E Service Center on Black Ranch Road and the Kwik Mart on Main Street in Burney. It must be noted that the Cortese list is currently undergoing revision, so some of the sites may not be on an updated list. Also, in the case of service stations, potential contamination may have been remediated as part of compliance with new State requirements concerning underground tanks.

4.6.2 REGULATORY FRAMEWORK

FEDERAL HAZARDOUS MATERIAL REGULATIONS

At the federal level, the Resource Conservation and Recovery Act (RCRA) creates a framework for the management of hazardous wastes. The U.S. Department of Transportation sets guidelines for the transport of hazardous materials.

The Superfund Amendments and Reauthorization Act (SARA), Title III, and the Clean Air Act of 1990 established a nationwide emergency planning and response program and imposed reporting requirements on businesses that store, handle or produce significant quantities of extremely hazardous materials. SARA, codified in 40 Code of Federal Regulations (CFR) Section 68.110 *et seq.*, requires states to implement a comprehensive system to inform local agencies and the public when a significant quantity of such materials is stored or handled at a facility.

STATE HAZARDOUS MATERIAL REGULATIONS

California Health and Safety Code Section 25531 *et seq.* incorporates the requirements of SARA and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local Administering Agency, and the U.S. Environmental Protection Agency (EPA) for review and approval. It must include the following:

- An evaluation of the potential impacts associated with an accidental release.
- The likelihood of an accidental release occurring.

4.6 HAZARDS AND HAZARDOUS MATERIALS

- The magnitude of potential human exposure.
- Any preexisting evaluations or studies of the material.
- The likelihood of the substance being handled in the manner indicated.
- The accident history of the material.

Since the project would not use any acutely hazardous materials, the RMP provisions do not apply to the project.

Title 8, California Code of Regulations, Section 5189, requires facility owners to develop and implement effective safety management plans to insure that large quantities of hazardous materials are handled safely. Articles 79 and 80 of the Uniform Fire Code contain provisions regarding the storage and handling of hazardous materials. Article 80 was revised in 1997. The Uniform Building Code also contains requirements regarding the storage and handling of hazardous materials.

The Aboveground Petroleum Storage Act requires owners or operators of aboveground petroleum storage tanks to file a storage statement, pay a fee by July 1, 1990, and implement measures to prevent spills. The storage statement must include a name and address of the tank facility, a contact person for the facility, and the total storage capacity of all petroleum storage tanks on the facility. The facility must also prepare a Spill Prevention Control and Countermeasure (SPCC) plan that complies with EPA regulations on oil pollution prevention (California State Water Resources Control Board, 1998). A Registered Professional Engineer must certify the SPCC plan, and a complete copy of the plan must be maintained on site (Zaitz, 2000). Underground storage tanks were required to comply with new State standards, resulting from Federal law, as of December 22, 1998. These new standards include double lining of tanks and leak detection equipment (Hearden, 1998). Sites with single aboveground storage tanks exceeding 660 gallons or a cumulative storage capacity of greater than 1,320 gallons are subject to the provisions of this act.

SHASTA COUNTY ENVIRONMENTAL HEALTH DIVISION

The Shasta County Environmental Health Division is the primary agency responsible for overseeing the commercial use and storage of hazardous materials within the County. Among its activities are the following:

- Reviewing, approving and monitoring "business plans", which are required by Chapter 6.95 of the California Health and Safety Code. The plans must be filed by every business that utilizes hazardous materials. Included in each plan is a listing of materials, storage facilities and any particular handling requirements. Facilities storing or handling hazardous materials of at least 55 gallons, 500 pounds, or 200 cubic feet of gas at standard temperature and pressure are required to submit a business plan.
- Monitoring the installation, removal and leakage of both aboveground and underground tanks.
- Administering the Waste Generator Treatment Program, required by Chapter 6.5 of the Health and Safety Code.

4.6 HAZARDS AND HAZARDOUS MATERIALS

The Environmental Health Division indicates that it is being equipped to provide hazardous materials identification services in Shasta County. As part of this service, the County will be able to respond to requests for assistance in identifying unknown materials to determine if they are dangerous.

OTHER AGENCIES

The Shasta County Air Quality Management District (SCAQMD) has regulations concerning the emission of certain substances. Large cases of hazardous material contamination and violations are referred to the Regional Water Quality Control Board (RWQCB) and the California Department of Toxic Substances Control (DTSC). The DTSC is responsible for much of the state regulations pertaining to hazardous materials and wastes. The Shasta County Fire Department has requirements pertaining to the containment of onsite hazardous materials.

SHASTA COUNTY GENERAL PLAN

The County General Plan contains the following objectives and policies concerning hazards and hazardous materials that pertain to the project:

Fire Safety and Sheriff Protection

Objectives

FS-1 Protect development from wildland and non-wildland fires by requiring development to incorporate design measures responsive to the risk from this hazard and by encouraging development to locate in moderate fire hazard areas.

Policies

FS-a All land divisions and developments shall be required to conform to 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 environmental assessment.

Hazardous Materials

Objectives

HM-1 Protection of life and property from contact with hazardous materials through site design and land use regulations and storage and transportation standards.

HM-2 Protection of life and property in the event of the accidental release of hazardous materials through emergency preparedness planning.

4.6 HAZARDS AND HAZARDOUS MATERIALS

Policies

- 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.

4.6.3 IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Appendix G of the CEQA Guidelines indicates that a project may have significant impacts on hazards and hazardous materials if it does any of the following:

- 1) Creates a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.
- 2) Creates 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) Emits hazardous emissions or handles hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.
- 4) Is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment (The "Cortese list" is compiled pursuant to Government Code Section 65962.5).
- 5) Exposes 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.
- 6) For a project within the vicinity of a private airstrip, results in a safety hazard for people residing or working in the project area.

METHODOLOGY

PMC staff reviewed all pertinent documents for information about hazards and hazardous materials. The hazardous material history of the site was provided by a hydrogeologic study conducted by

4.6 HAZARDS AND HAZARDOUS MATERIALS

CH2M Hill in 1986. The Cortese list, a list of hazardous material sites compiled by the California Department of Toxic Substances Control, was consulted to determine if there are existing hazardous material sites in the area.

PROJECT IMPACTS AND MITIGATION MEASURES

**Impact 4.6.1 The project would be located in a very high wildland fire hazard area.
[SM]**

As described in the Setting, the project would be located in a “very high” fire hazard area, as identified in the Shasta County General Plan. For the project site, the main influences on fire hazards are the generally wooded landscape and the dry summer weather. Since many of the structures proposed for the project would be located near trees and open space, this impact is *significant and subject to mitigation*.

Mitigation Measures

The following mitigation measure was identified by the Initial Study for the project:

MM 4.6.1a The project applicant shall comply with the standard requirements and recommendations of the Shasta County Fire Department, as described in the letter from Bob Vanderhyde, County Fire Marshall, to James W. Cook, Planning Division Manager, dated August 17, 1999 (see Appendix F of this document). These standards and requirements shall be incorporated into the conditions of approval for the use permit, and include the following:

- Fire department apparatus shall have access to within 150 feet walking distance of any portion of the exterior of each structure constructed as a part of Use Permit 99-17 by means of an all-weather access road of not less than 18 feet of unobstructed width.
- Non-residential roadways, driveways and turnarounds shall be in accordance with Section 6.12 of the Fire Safety Standards prior to the final inspection by the Shasta County Building Division for any new structures constructed as part of Use Permit 99-17.
- Bridges and culverts shall be designed and constructed in accordance with the Fire Safety Standards and shall be capable of supporting a 40,000 pound vehicle load.
- Facility shall be provided with street address markers located with respect to the nearest roadway and to be clearly visible at all times. Numbers shall be a minimum of four inches in height, reflectorized, and shall contrast in color with the background.

4.6 HAZARDS AND HAZARDOUS MATERIALS

- Untreated wood shake and shingle roofing is prohibited. Roofing shall have a Class A or Class B classification as specified in Section 1503 of the Uniform Building Code.
- A centralized water system providing fire hydrants, as specified by the Fire Safety Standards, is required for Use Permit 99-17. The water system and fire hydrants shall be installed and in service, or bonded for, prior to the delivery of combustible or flammable liquids or gases. Improvement plans shall be submitted to the California Division of Forestry and Fire Protection /Shasta County Fire Department (CDF/SCFD) for review and approval prior to issuance of the building permit and construction of the fire hydrant system. At least one fire hydrant with a 1,000 gallon per minute (gpm) minimum shall be located within 300 feet walking distance of the asphalt plant and the crushing and screening operation.
- The project applicant shall dispose of any vegetation cleared for construction and/or land development purposes prior to the final inspection by the Shasta County Building Division. Disposal shall be in accordance with Shasta County Air Quality Management District regulations and State or local Fire Department building permit regulations.
- Storage, use and dispensing of flammable/combustible liquids and other hazardous materials shall be in accordance with the adopted edition of the Uniform Fire Code. Plans shall be submitted to CDF/SCFD for review and approval prior to construction, storage or use.
- Portable fire extinguishers shall be provided in accordance with the adopted edition of the Uniform Fire Code.
- All welding and storage of cylinders shall be in accordance with the adopted edition of the Uniform Fire Code.
- Accumulations of waste paper, weeds, combustible waste material, waste petroleum products, tires or rubbish of any type shall be prohibited.
- Rags, cloth or paper towels saturated with oil, solvent or petroleum products shall be kept in a metal can with a tight-fitting cover.
- In accordance with Public Resources Code 4291(a), the project applicant shall provide “defensible space” by removing all flammable vegetation from around all buildings for a minimum of 30 feet.
- All mobile and stationary equipment with non-turbo charged internal combustion engines shall be equipped with a properly functioning, approved spark arrester.
- Each vehicle shall be equipped with a portable fire extinguisher.

4.6 HAZARDS AND HAZARDOUS MATERIALS

Timing/Implementation: Prior to commencement of project or during project operations, as appropriate.

Enforcement/Monitoring: California Division of Forestry and Fire Protection/Shasta County Fire Department, Shasta County Department of Resource Management - Building Division.

MM 4.6.1b

If the project applicant installs an automatic fire extinguishing system in the facility, plans shall be submitted to CDF/SCFD for review.

Timing/Implementation: Prior to commencement of the project or during project operations as appropriate.

Enforcement/Monitoring: California Division of Forestry and Fire Protection/Shasta County Fire Department, Shasta County Department of Resource Management - Building Division.

Implementation of the mitigation measure would reduce the potential threat of fire to structures on the project site. Impacts after mitigation would be *less than significant*.

Impact 4.6.2 The project may interfere with airstrip activities. [SM]

The Initial Study for the project stated that some of the mobile equipment associated with the project could interfere with or block the airstrip. This would create a potential safety hazard involving both airstrip users and equipment operators. This impact is *significant and subject to mitigation*.

Mitigation Measures

The following mitigation measure was proposed by the Initial Study for the project:

MM 4.6.2a

When in operation, the boundaries of the airstrip shall be clearly flagged or otherwise marked to make them obvious to equipment operators and to prevent unintentional encroachment by equipment and other vehicles onto the airstrip.

Timing/Implementation: During project operations.

Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.

Implementation of the mitigation measure would eliminate potential safety hazards by ensuring that equipment operators know when the airstrip is being used, thus allowing them to avoid the airstrip. Impacts after mitigation are *less than significant*.

Impact 4.6.3 Activities associated with the project would use hazardous materials. [SM]

4.6 HAZARDS AND HAZARDOUS MATERIALS

Hazardous materials which are proposed to be transported to and used on the project site include diesel fuel, lubricants, solvents and liquid asphalt cement. Liquid asphalt cement is a naturally occurring petroleum product, one of the heaviest and most viscous parts of petroleum. Asphalt cement cannot travel over the ground more than a few feet if spilled, unless its temperature is at least 250°F. It would not penetrate the soil more than two inches before solidifying. Asphalt cement does not mix with or become soluble in water (National Asphalt Pavement Association, undated). Furthermore, the tank in which the liquid asphalt cement would be stored must be in compliance with all regulations pertaining to tanks storing hazardous materials.

The diesel fuel would be stored in a 10,000-gallon tank. Cleaning solvent would be stored in a tank with a volume of less than 55 gallons. Lubricants would be stored in various sized containers, with a total storage of 250 gallons. The total amount of liquid asphalt cement to be stored would be 30,000 gallons. The project would be required to comply with Federal, State and local regulations concerning the use and storage of hazardous materials, including the storage tanks to be used. Nevertheless, there remains the possibility of spillage, mainly from the fueling and maintenance of vehicles. While the quantities of spillage involved with these activities are likely to be small, this impact is considered *significant and subject to mitigation*.

Mitigation Measures

Because of the quantities of hazardous materials that would be used or stored on the site, the project would be subject to the provisions of the Aboveground Petroleum Storage Act. For the same reason, the project would also be required to submit a Business Plan for Emergency Response to the County Environmental Health Division.

The following mitigation measure was proposed by the Initial Study for the project:

MM 4.6.3a The project applicant shall construct a durable impermeable pad, such as a concrete pad, adjacent to the fuel storage tank areas where vehicles are fueled, in order to catch any spilled fuel, oil, antifreeze or other motor vehicle fluids and to direct it to a sump. The design of the pad, drainage system and sump shall be reviewed by the Regional Water Quality Control Board prior to construction.

Timing/Implementation: Prior to issuance of building permit.

Enforcement/Monitoring: Shasta County Department of Resource Management - Planning Division.

In addition, Mitigation Measure 4.7.1a in Section 4.7, Hydrology and Water Quality, would further reduce potential contamination of groundwater by hazardous material spills. Implementation of the described mitigation measures, in conjunction with standard requirements for the storage and handling of hazardous materials, would minimize the potential environmental damage that may

4.6 HAZARDS AND HAZARDOUS MATERIALS

result from a spill of hazardous materials related to on-site activities. Impacts after mitigation would be *less than significant*.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Impact 4.6.4 **Hazardous material usage in the vicinity would mainly be limited to the project site. [LS]**

Most of the land surrounding the project site is National Forest land or State park land. The project site is one of the few parcels in the vicinity on which land use activities that typically use hazardous materials are permitted. The residential units in the vicinity of the project site may use hazardous materials, but the amounts used, both individually and in total, are not significant. It is not expected that there will be more development in the area which would use a significant amount of hazardous materials. Conformance with standard regulatory requirements along with recommended mitigation would reduce project related impacts to less than significant. Therefore, cumulative impacts are *less than significant*.

REFERENCES

- California Department of Toxic Substances Control. *Hazardous Waste and Substances Sites List*. April 1998.
- California Water Resources Control Board. *Information on the Aboveground Petroleum Storage Tank Program*. Sacramento, Calif., 1998.
- Fritz R. Carlson, CH2M Hill. *Hydrogeologic Investigation at Louisiana-Pacific Lumber Mill, Burney, California*. Redding, Calif., November 1986.
- Tim Hearden. "Businesses Rush to Meet Gas Tank Deadline," *Redding Record-Searchlight*, December 20, 1998.
- National Asphalt Pavement Association. "Modern Asphalt Plants Are Designed to Operate in a People Environment." Undated.
- Scott A. Zaitz, California Regional Water Quality Control Board, Central Valley Region. "Notice of Preparation (NOP) for the Zone Amendment 99-05, Use Permit 99-05 and 99-17, Reclamation Plan Number 99-01, Hat Creek Construction, Inc., 24339 Highway 89 North, Burney, Shasta County." Letter to Bill Walker, Shasta County Department of Resource Management, Planning Division, dated July 27, 2000.