

4.7 HAZARDS AND HAZARDOUS MATERIALS

This section describes the environmental setting (existing conditions and regulatory setting) for hazards and hazardous materials relating to the proposed project, as well as possible impacts from hazards and hazardous materials that could result from project implementation.

A records search revealed only one release of hazardous materials in the project vicinity (which has since been remediated), and no releases on the project site. Given this finding, as well as existing federal, state, and local regulations, impacts of the proposed project with respect to hazards and hazardous materials would be less than significant, with the exception of the increased demand on the Cottonwood Fire Protection District. This impact can be mitigated by requiring the applicant to establish a funding mechanism to provide for additional personnel. With implementation of the recommended mitigation measure, hazards and hazardous materials impacts of the project would be less than significant.

4.7.1 ENVIRONMENTAL SETTING

A hazardous material records search was conducted by ENPLAN in May 2008. Sources consulted include the Regional Water Quality Control Board, Integrated Waste Management Board, Department of Toxic Substances Control, and U.S. Environmental Protection Agency.

One Active Underground Storage Tank was reported immediately adjacent to the Panorama Planned Development site. The tank is registered by Bill Guill Trucking, Inc., located at 4407 Locust Road. Two other Active Underground Storage Tanks were identified within a 1,000-foot radius of the Panorama Planned Development site. These tanks are located at the PG&E Cottonwood Substation at 21212 Trefoil Lane, and Precision Moulding Co., Inc. at 3308 Cyclone Court. No fuel releases have been reported at the Bill Guill Trucking or Precision Moulding sites. A fuel leak was previously reported at the PG&E Cottonwood Substation site; however, appropriate testing and/or remedial activities have been completed and the case has been closed; the site is not considered to pose a hazard with respect to the Panorama Planned Development project.

No Active, Leaking Underground Storage Tanks were identified within a 1,000-foot radius of the Panorama Planned Development project site, and the site is not on any of the reviewed regulatory agency lists of hazardous materials releases. No Solid Waste Information System, Solid Waste Assessment Test, Superfund, or Emergency Response Notification System sites were identified within a 1,000-foot radius of the project site. The Resource Conservation and Recovery Information System identified two facilities within a 1,000-foot radius of the Panorama Planned Development site as being Hazardous Waste Handlers: the PG&E Cottonwood Substation and the Georgia Pacific Corporation at 3383 Pacific Trail. However, inclusion on this list does not

indicate that releases of hazardous materials have occurred, only that such materials are handled on the site.

REGULATORY BACKGROUND

An overview of existing and proposed *Shasta County General Plan* land use classifications and *Shasta County Zoning Plan* designations for the project site is provided in Section 3.4: Panorama Planned Development Regulatory Setting. Hazardous materials handling is subject to numerous laws and regulations at all levels of government. A discussion of hazardous materials-related federal, state, and local regulations, as well as objectives and policies in the *Shasta County General Plan* that are pertinent to the hazardous materials analysis for the project, are included below.

Federal and State Regulations

Federal and State regulations described in this summary pertain primarily to construction activities, as well as the transportation of hazardous materials on nearby roads and on the Union Pacific Railroad located to the south and east of the project site.

Hazardous Materials Management. Federal and state laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed, and in the event that such materials are accidentally released, to prevent or mitigate injury to health and the environment. The Federal Emergency Planning and Community Right to Know Act (EPCRA) of 1986 imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires preparation of Hazardous Materials Business Plans and disclosure of hazardous materials inventories. A Business Plan includes an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee training in safety and emergency response procedures (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC), has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. These local agencies administer the laws and regulations.

Storage of hazardous materials in underground tanks is regulated by the State Water Resources Control Board (SWRCB), which has overall responsibility for implementing all regulations set forth in Title 23 of the California Code of Regulations (CCR). State standards cover installation and monitoring of new tanks, monitoring of existing tanks, and corrective actions for removed tanks. Implementation of state underground storage tank regulations, including permitting for all hazardous materials storage, is enforced locally by the Shasta County Environmental Health Division. Aboveground storage tanks are regulated by the California Environmental Protection Agency, and are covered under a facility's Hazardous Materials Business Plan.

Worker Safety. The California Occupational Safety and Health Administration (Cal-OSHA) and the Federal Occupational Safety and Health Administration (Fed-OSHA) are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. Pursuant to the Occupational Safety and Health Act of 1970, Fed-OSHA has adopted numerous regulations pertaining to worker safety, contained in the Code of Federal Regulations Title 29 (29 CFR). These regulations set standards for safe workplaces and work practices, including standards relating to hazardous material handling.

Cal-OSHA assumes primary responsibility for developing and enforcing state workplace safety regulations. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in 29 CFR. Cal-OSHA standards are generally more stringent than federal regulations. Cal-OSHA regulations concerning the use of hazardous materials in the workplace, as detailed in CCR Title 8, include requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal-OSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees at hazardous waste sites. The hazard communication program requires that Material Safety Data Sheets be available to employees and that employee information and training programs be documented.

Emergency Response to Hazardous Materials Incidents. California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this Plan. The Plan is administered by the state Office of Emergency Services (OES), which coordinates the responses of other State agencies.

Hazardous Materials Transport. The U.S. Department of Transportation regulates hazardous materials transportation between states. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads.

Hazardous Waste Management. The California Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the Federal Resource Conservation and Recovery Act and the State Hazardous Waste Control Law. Both laws impose comprehensive regulatory systems for handling hazardous waste in a manner that protects human health and the environment.

California Public Resources Code 4291. California Public Resources Code 4291 (CalFire, 2005) requires property owners in wildland areas and along wildland-urban interfaces to create 100 feet (or to the property line, whichever is closest) of defensible space, for fire protection, around their homes and buildings in the following manner: (1) by removing all flammable vegetation within 30 feet immediately surrounding a structure, and (2) by creating a fuel reduction zone in the remaining 70 feet by focusing on removing lower level vegetation components (i.e., shrub layer) and removing lower tree branches at least six feet from the ground.

Local Regulations

Shasta County Environmental Health Division. The Shasta County Environmental Health Division may respond to incidents involving any release or threatened release of hazardous materials. Threats to people, property and the environment are assessed, and then remedial action procedures are conducted under the supervision of Division staff or another agency. As part of this service, the Shasta County Environmental Health Division responds to requests for assistance from the Shasta County Hazardous Materials Response Team in identifying unknown materials.

Shasta County Fire Safety Standards. The Shasta County Fire Safety Standards (2005), administered by the County Fire Warden, include standards applicable to new development in Shasta County. The standards include requirements with regard to road and driveway design (including emergency fire escape roads), street signs, building numbering, fire protection water standards, hydrant spacing, building construction standards, vegetation clearing, and aboveground storage tanks.

Shasta County General Plan. Objectives

- FS-1 Protect development from wildland and non-wildland fires by requiring new development projects to incorporate effective site and building design measures commensurate with level of potential risk presented by such a hazard and by discouraging and/or preventing development from locating in high risk fire hazard areas.
- 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.

Policies

- 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).

4.7.2 THRESHOLDS OF SIGNIFICANCE

Criteria for determining the significance of impacts related to hazards and hazardous materials were based on the Environmental Checklist Form in Appendix G of the State CEQA Guidelines (Cal. Code Regs., Title 14, Section 15000 et seq.). An impact related to hazards and hazardous materials was considered significant if it would:

- 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 that 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.
- 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, result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, 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.

4.7.3 ENVIRONMENTAL IMPACTS AND MITIGATION

Impact HAZ-4.7-1 Routine Transport, Use, or Disposal of Hazardous Materials *(Less-than-Significant Impact)*

Exposure to potentially hazardous materials could occur during project construction and following occupancy of the residences. In addition, given the proximity of the Union Pacific Railroad, there is some potential for exposure of future residents to toxic materials that may be transported by rail.

Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. In addition, some potentially hazardous construction waste may be generated during the construction phase. Construction wastes from the site would be disposed of in accordance with the

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Standard Specifications in the California Code of Regulations. Compliance with federal and state laws would reduce the potential for hazards related to construction waste to a less-than-significant level.

Operation of the project would not include the use or transportation of significant amounts of potentially hazardous materials, including fuels or other hazardous liquids. The project would therefore not result in a significant hazard to workers, the public, or the environment through the routine transport, use, or disposal of hazardous materials. Compliance with applicable regulations and hazardous materials plans sufficiently minimizes potential exposure and risk. This is considered a less-than-significant impact. No mitigation is required.

With regard to the potential release of hazardous materials transported on the Union Pacific Railroad, such transportation is required to meet all applicable laws and regulations governed by the U.S. Department of Transportation. Regulations regarding the safe transport of hazardous materials and hazardous wastes are found in the state and federal law. Therefore, no significant exposure of future residents or the environment is expected as a result of the project's proximity to the Union Pacific Railroad.

No mitigation measures are necessary for this less-than-significant impact.

Impact HAZ-4.7-2 Release of Hazardous Materials into the Environment (*Less-than-Significant Impact*)

Construction of the proposed project could expose construction workers, the public, or the environment to hazardous materials through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site. Accidental releases of these substances could potentially contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard.

One known potential hazard on the project site is the presence of underground and aboveground utility transmission lines. Construction activities will be in accordance with Cal-OSHA and federal standards for work in the proximity of transmission lines, the storage and handling of fuels, flammable materials, and construction-related hazardous materials. Compliance with standard safety procedures and hazardous materials handling regulations will reduce any impacts to a less-than-significant level.

No mitigation measures are necessary for this less-than-significant impact.

Impact HAZ-4.7-3 Hazardous Emissions, Materials, Substances, or Waste within ¼ Mile of a School (No Impact)

The proposed project site is not within one-quarter mile of a school, and would create no impact with regard to hazardous emissions, materials, substances, or waste within the vicinity of a school.

There is no impact with regard to hazardous emissions, materials, substances or waste within ¼ mile of a school.

Impact HAZ-4.7-4 Located on a Hazardous Materials Site (Less-than-Significant Impact)

As discussed above, the hazardous materials records search showed no known releases on the project site. Of the Underground Storage Tanks identified in the project vicinity, only one has been reported to have had a release. This case was at the PG&E Cottonwood Substation (21212 Trefoil Lane); the case is now closed and does not represent a hazard to future workers and/or residents of the project.

Construction of the proposed site requires excavation and movement of soils. Unknown hazardous sites could potentially be encountered during earth-work. If encountered, such sites could have the potential to create a significant hazard to construction workers, the public, and the environment. Sites could include chemicals or other hazardous waste products. Some minor potential for encountering previously unreported releases of hazardous materials exists. If encountered, as described in this section, the Shasta County Division of Environmental Health must be contacted. Impacts resulting from hazardous materials sites would be less than significant, given existing regulations described in this section.

No mitigation measures are necessary for this less-than-significant impact.

Impact HAZ-4.7-5 Project Area within an Airport Land Use Plan, Resulting in a Safety Hazard for People in the Project Area (No Impact)

The nearest public airport to the project area is the Redding Municipal Airport, located approximately six miles to the north.

As the project is not located within the vicinity of a public airport, there would be no impact with respect to aviation-related safety hazards.

Impact HAZ-4.7-6 Project within the Vicinity of a Private Airstrip, Resulting in a Safety Hazard for People in the Project Area (No Impact)

The nearest private airport to the project area is the Lake California Airport, located approximately three miles to the southeast.

As the project is not located within the vicinity of a private airstrip, there would be no impact with respect to aviation-related safety hazards.

Impact HAZ-4.7-7 Interferes with an Adopted Emergency Response Plan or Emergency Evacuation Plan *(No Impact)*

No emergency response plan or emergency evacuation plan would be affected by the proposed project. Therefore, there would be no impact with respect to such plans.

Impact HAZ-4.7-8 Exposes People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires *(Less-than-Significant Impact with Mitigation Incorporated)*

Fire protection services for the project area are provided by the Cottonwood Fire Protection District (CFPD), located in Cottonwood, and the California Department of Forestry and Fire Protection (CalFire), based in the Redding area. The Shasta County Fire Department (SCFD) contracts with CalFire to manage and oversee the operation of SCFD. Both the SCFD/CalFire and CFPD maintain automatic and mutual aid agreements with adjacent fire districts, including the Anderson Fire Protection District. Additional information regarding fire protection services is provided in Section 4.13: Public Services and Fiscal Impacts

Approximately 95 percent of the project site is located in a “High” Fire Hazard Severity Zone, according to the Shasta County Fire Hazard Severity Map adopted by CalFire in November 2007. This portion of the project site is considered to be at risk for wildland fires due to the rural character of the project site and existing on-site woodlands. The remaining 5 percent of the project site is outside of the state responsibility area, and does not have a fire hazard severity zone designation.

According to Jim Diehl, Shasta County Fire Marshal and Battalion Chief with CalFire/Shasta County Fire Department (2008), project implementation would not significantly affect the Shasta County Fire Department or CalFire. Mr. Diehl noted that development generally reduces fuels, and therefore fire hazards; however, the increased population would increase the potential for fires to be started. He noted that most fires are human caused (with the exception of the unusually high number of lightning strikes in the North State in 2008).

James Flaherty, the Cottonwood Fire Protection District Chief, stated that a new development of the size of the Panorama Planned Development would not put an undue burden on the CFPD, provided that the following provisions are implemented (2009):

- Access is provided to the many trails and greenbelt areas for fire suppression/prevention and emergency medical services.
- Adequate water supply and hydrants are provided for fire protection, meeting volume and fire flow standards. Fire hydrants must meet Shasta County Fire Safety Standards as well as NFPA standards for placement, type, color, and flows.
- A through road system is provided, as shown on the initial site plans.

- A Community Facilities District, with CFPD as the lead agency, is established to provide funding for additional Fire Department personnel needed to serve the increased population.

Cottonwood Fire Protection District personnel (2009) have confirmed that access points to the trails and greenbelts as shown on current project plans are acceptable, and previously confirmed that the proposed through road system is sufficient to meet their needs. With provision of the proposed water system improvements, including construction of a one-million-gallon storage tank and a booster pump station, adequate water supply and fire flows would be available (PACE, 2009). Details regarding fire hydrant spacing, type, color, and flows would be determined during the final design review phases for the project. Given the proposed project plans and existing standards, impacts potentially associated with the first three bullets listed above would be less than significant.

Project plans and existing plans include a number of measures to reduce fire hazards. All Panorama Planned Development roadways, driveways, and buildings would be constructed in accordance with the Shasta County Fire Safety Standards. These standards also require the clearing of combustible vegetation around all structures for a distance of not less than 30 feet on each side, or to the property line. The California Public Resources Code 4291 includes a "Defensible Space" requirement of clearing 100 feet around all buildings, or to the property line, whichever is less. In addition, the applicant has prepared a Wildland-Fuel Vegetation Management Plan to address on-site vegetation management in both areas within 100 feet of structures, and in open space areas.

Nonetheless, the increased demand on the Cottonwood Fire Protection District and need for additional staffing is a potentially significant impact as it could lead to an increased potential for loss, injury, or death involving wildland fires. Principal funding sources currently available to the District include ad valorem property taxes; a Development Impact Fee, which is a one-time fee collected at the time new building permits are issued and can be used for capital facilities improvements only; and an annual benefit assessment, which is collected from every parcel within the District and is devoted to operation and maintenance costs. A study adopted by the Cottonwood Fire Protection District noted that a Community Facilities District (CFD) or similar funding mechanism would be needed to generate a "service" revenue stream associated with new development within the District (Pacific Municipal Consultants, 2007). The exact amount of revenue from the CFD would be determined at the time of formation and as annexations occur through the years.

The following mitigation is necessary for the above potentially significant impact:

MM HAZ-4.7-8. The project applicant shall provide funding for increased staffing of the Cottonwood Fire Protection District. Funding levels shall be determined through an appropriate study in compliance with the Mitigation Fee Act (Gov Code Sec. 66000 et seq.). Funding shall be provided through a Community Facilities District or other funding mechanism acceptable to Shasta County and the Cottonwood Fire Protection District.

4.7.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Following implementation of the above mitigation measure (Mitigation Measure HAZ-4.7-8), impacts with respect to hazards and hazardous materials impacts would be reduced to a less-than-significant level.

End of Section.