

This section of the Draft Environmental Impact Report (Draft EIR; DEIR) discusses existing environmental conditions of the City of Pinole General Plan Update (GPU) Planning Area and identifies the methods used in analyzing the proposed project's potential to create hazards to the public health or the environment related to hazardous materials, substances, or waste. This section also identifies other potential hazards that may impact public safety, such as water and soil contamination, health hazards from existing or historic land uses that utilize or generate these materials, and improper disposal of these materials by businesses, industries, and individual households.

The reader is referred to Section 4.3, Air Quality, for information regarding air quality hazards, Section 4.9, Hydrology and Water Quality, for information regarding impacts associated with water quality and flooding, and Section 4.8, Geology and Soils, for information regarding impacts associated with geologic and seismic hazards.

4.6.1 EXISTING SETTING

HAZARDOUS MATERIALS DEFINED

Under Title 22 of the California Code of Regulations (CCR), the term hazardous substance refers to both hazardous materials and hazardous wastes, and both are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness, or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific CCR Title 22 criteria. While hazardous substances are regulated by multiple agencies, as described below in subsection 4.6.2, Regulatory Framework, cleanup requirements of hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the project.

Public health is potentially at risk whenever hazardous materials are, or will be, used. It is necessary to differentiate between the "hazard" of these materials and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to health and public safety is determined by the probability of exposure, in addition to the inherent toxicity of a material (DTSC, 2010a).

Factors that can influence the health effects when human beings are exposed to hazardous materials include the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

Transportation of Hazardous Materials

The transportation of hazardous materials within the Planning Area is subject to various federal, state, and local regulations, as described in subsection 4.6.2, Regulatory Framework. According to the California Code of Regulations, there are no approved transportation routes in Contra Costa County or in the GPU Planning Area for the transportation of explosives (CCR, Title 13, Div. 2). It is illegal to transport explosives or inhalation hazards on any public highway not

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designated for that purpose, unless the use of the highway is required to permit delivery or the loading of such materials (California Vehicle Code, Sections 31602(b) and 32104(a)).

The California Highway Patrol also designates through routes to be used for the transportation of inhalation hazards and may designate separate through routes for the transportation of inhalation hazards composed of any chemical rocket propellant (California Vehicle Code, Sections 32100 and 32102(b)). There are no approved routes in the GPU Planning Area for the transportation of poisonous inhalation hazards nor are there any approved routes in the Planning Area for the transportation of radioactive materials (CCR, Title 13, Div. 2).

HAZARDOUS MATERIAL AND WASTE SITES

Searches of the State of California Cortese List and CAL-SITE'S ASPIS, conducted in May 2010, identified several hazardous material sites in the Planning Area. These sites are summarized below and in **Table 4.6-1**. In addition, the location of each known hazardous material site within the Planning Area is shown in **Figure 4.6-1**.

TABLE 4.6.1
HAZARDOUS MATERIAL SITES WITHIN PLANNING AREA

Facility Name	Location	Type	Status
Texaco Refining	1599 Tara Hills Boulevard	Cleanup Program Site	Open – Inactive
Mercury Dry Cleaners (former)	2714 Pinole Valley Road	Cleanup Program Site	Open – Inactive
Anthony's Auto Wrecking	850 San Pablo Avenue	Cleanup Program Site	Completed – Case Closed
Pinole Valley Shopping Center	2700 Pinole Valley Road	Cleanup Program Site	Open – Inactive
Chevron	2695 Pinole Valley Road	LUST Cleanup Site	Completed – Case Closed
Exxon	2401 Appian Way	LUST Cleanup Site	Completed – Case Closed
Former Exxon 7-0272	16400 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
Rent A Rack	1271 Tara Hills Drive	LUST Cleanup Site	Open – Site Assessment
Time Oil Company	825 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
WCCCTA Bus Operation Maintenance	601 Walter Avenue	LUST Cleanup Site	Completed – Case Closed
BP #11153 (former)	2298 Appian Way	LUST Cleanup Site	Open – Site Assessment
Anthony Auto Wreckers Inc	850 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
ARCO # 06228	2747 Pinole Valley Road	LUST Cleanup Site	Open – Remediation
Shell	2690 Pinole Valley Road	LUST Cleanup Site	Completed – Case Closed
Square Deal Garage	2500 San Pablo Avenue	LUST Cleanup Site	Open – Site Assessment
Unocal	1718 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
Tosco – Facility #4754	2995 Pinole Valley Road	LUST Cleanup Site	Completed – Case Closed

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Facility Name	Location	Type	Status
Food & Liquor	1007 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
Shell	2301 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
Village Properties	2701 Pinole Valley Road	LUST Cleanup Site	Open – Site Assessment
Bradshaw Concrete	760 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
Chevron	550 San Pablo Avenue	LUST Cleanup Site	Open – Remediation
Texaco	1599 Tara Hills Drive	LUST Cleanup Site	Open – Site Assessment
Major Lines Gasoline	1390 San Pablo Avenue	LUST Cleanup Site	Completed – Case Closed
Beacon	2810 Pinole Valley Road	LUST Cleanup Site	Completed – Case Closed
Sugar City Building Materials Company	800 San Pablo Avenue	LUST Cleanup Site	Open – Site Assessment
Snow White Cleaners	610 San Pablo Avenue	Cleanup Program Site	Completed – Case Closed
Mercury Dry Cleaners	2714 Pinole Valley Road	Voluntary Cleanup	Certified/Operation & Maintenance
Montalvin Manor	Christine Drive	Historical	No Further Action
Pump House	700 Tennent Avenue	UST	Permitted
K Major Line	1390 San Pablo Avenue	UST	Permitted
Smart Stop	1007 San Pablo Avenue	UST	Permitted
Doctors Medical Center	2151 Appian Way	UST	Permitted
Pinole Vista Shell	1401 Fitzgerald Drive	UST	Permitted
Union #4754	2995 Pinole Valley Road	UST	Permitted
Pinole BP SS#11153	2298 Appian Way	UST	Permitted
Valero #7-142	2401 Appian Way	UST	Permitted
ARCO AM/PM #06228	2747 Pinole Valley Road	UST	Permitted
Ken Betts Pinole Chevron	2695 Pinole Valley Road	UST	Permitted
Western Contra Costa Transit	601 Walter Avenue	UST	Permitted

Source: Cortese and GEIMS databases accessed May 2010

In addition to these hazardous material sites, the city is underlain by a series of gas pipelines. The city's close proximity to regional energy facilities in west Contra Costa County that process, store and transport volatile gas and/or liquids makes the city susceptible to manmade hazards when pipeline development projects that support these energy facilities are proposed within the city limits.

The hazards associated with these facilities include underground storage tanks (USTs); leaking underground storage tanks (LUST); and spills, leaks, investigations, and cleanup programs. The

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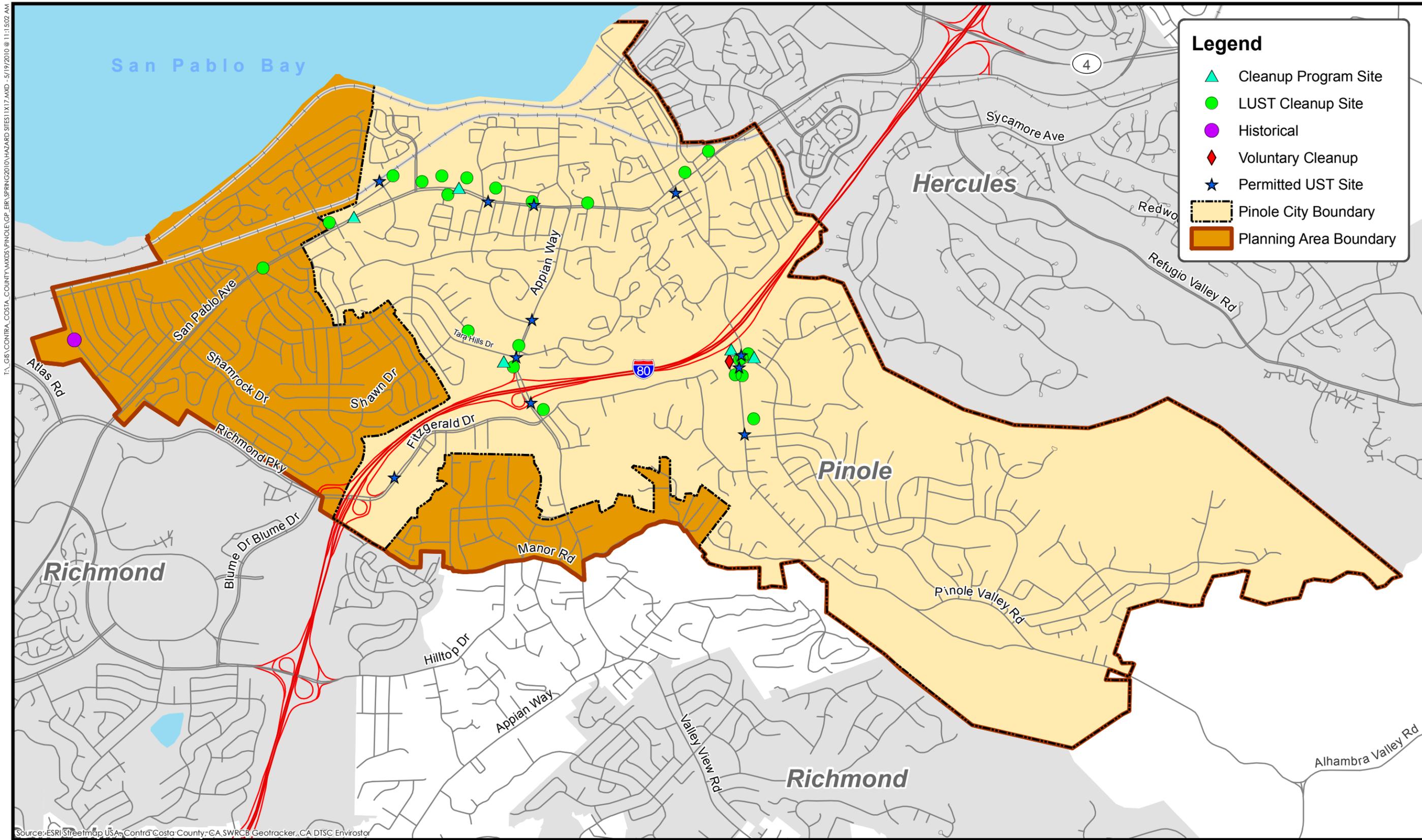
sites that typically have hazardous materials associated with them are past automobile-related facilities and tend to be located in proximity to Interstate 80 (I-80) and along San Pablo Avenue. The primary risk the sites pose is gasoline and diesel fuels, which contain hydrocarbons and related compounds that may leak into the soil and groundwater. Eleven of the identified sites have undergone successful remediation, which usually involves removal of the LUST and any contaminated soil. Several of the remaining LUSTs in the city have undergone interim remediation.

- The Geotracker database (described below): Twenty-two sites in the Planning Area have been identified where there are leaking underground storage tanks (LUSTs), six of which are classified "Open – Site Assessment" and two of which are classified "Open – Remediation." The remaining sites are classified "Completed – Case Closed." One site has been identified as a Voluntary Cleanup site. Eleven sites have been identified where there are permitted underground storage tank facilities.
- Solid Waste Information System (SWIS) Database: No solid waste facilities, operations, or disposal sites were identified within the Planning Area.

The State of California Hazardous Waste and Substances Site List (also known as the "Cortese List") is a planning document used by state and local agencies and developers to comply with California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CAL-EPA) to annually update the Cortese List. The CAL-EPA Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information that is part of the complete list. DTSC's Site Mitigation and Brownfields Reuse Program EnviroStor database provides DTSC's component of the Cortese List data by identifying State Response and/or Federal Superfund and backlog sites listed under Health and Safety Code Section 25356. In addition, DTSC's Cortese List includes Certified with Operation and Maintenance sites. **Table 4.6-1** shows the DTSC Site Mitigation and Brownfields Reuse Program information for the GPU Planning Area. Also included is DTSC's component of the Cortese List.

One hazardous materials site in the vicinity of the Planning Area was identified as a Voluntary Cleanup Site on the CAL-SITES database, and no hazardous materials sites were identified on the Cortese List database. The hazardous material site identified in the vicinity of the Planning Area has been known to handle and store hazardous materials and is associated with a hazardous-material-related release or occurrence.

In addition to EnviroStor, the CAL-SITES Abandoned Sites Information System (ASPIS) database, compiled by CAL-EPA, can also be used to identify and track potential hazardous waste sites. This source of information is regularly uploaded to the State's Geographic Environmental Information Management System (GEIMS) so that agencies and the general public can access information regarding a specific site. GeoTracker, the interface to GEIMS, uses commercially available software to allow users to access data from GEIMS over the Internet.



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Source: ESRI Streetmap USA, Contra Costa County, CA, SWRCB Geotracker, CA DTSC Envirostor



Figure 4.6-1
Hazardous Materials Sites



Known and Unknown Hazardous Materials in the Planning Area

Asbestos-Containing Building Materials

Structures constructed or remodeled between 1930 and 1981 have the potential to include asbestos-containing building materials (ACBM). These materials may include, but are not limited to, floor coverings, drywall joint compounds, acoustic-ceiling tiles, piping insulation, electrical insulation, and fireproofing materials. Asbestos is a general name for a group of naturally occurring minerals composed of small fibers and is common in many building materials. Various diseases have been associated with exposure to asbestos fibers, and the extensive use of asbestos in building materials has raised some concern about exposure in nonindustrial settings. Health hazards associated with ACBMs include increased risks of cancer and respiratory-related illnesses and diseases. The presence of asbestos in a building does not mean that the health of building occupants is endangered. As long as asbestos-containing materials remain in good condition and are not disturbed or damaged, exposure is unlikely. On the other hand, damaged, deteriorated, or disturbed asbestos-containing materials can lead to fiber release (exposure), and unauthorized removal or disturbance of asbestos materials could result in adverse health effects. Numerous buildings and structures within the Planning Area were constructed between 1930 and 1981. The potential safety hazards resulting from ACBMs are greatest during demolition activities.

Lead-Based Materials

Exposure to lead from older paint is possible when the paint is in poor condition or during paint removal. In construction settings, workers can be exposed to airborne lead during renovation, maintenance, or removal work. Lead-based paints were phased out of production in the early 1970s. Lead is a highly toxic metal that was used for many years in products found in and around homes. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Young children under six years of age are most at risk to health effects from lead exposure. Research suggests that the primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. Many of the buildings and structures within the Planning Area were constructed prior to the ban on lead-based paints; therefore it is likely that these materials are present throughout the Planning Area. Proper handling and disposal of lead-based materials significantly reduces potential environmental-related impacts.

In addition to lead associated with household uses, it is likely that aurally deposited lead is present along some of the roadways in the Planning Area. Aurally deposited lead is lead deposited within unpaved areas or formerly unpaved areas, primarily due to vehicle emissions. This is of primarily a concern along Interstate 80, where there are substantial traffic volumes. Aurally deposited lead is typically found within the top 1.97 feet of material in unpaved areas within heavily traveled roadway rights-of-way (Sonoma-Marín Area Rail Transit, 2005).

Radon

Radon isotope-222 is a colorless, odorless, tasteless radioactive gas that is a natural decay product of uranium. Uranium and radon are present in varying amounts in rocks and soil, and radon is present in background concentrations in the atmosphere. Current evidence indicates that increased lung cancer risk is directly related to radon-decay products. Radon potential of rocks and soils and indoor radon exposure levels in the United States are currently areas of intense research by governmental regulators as well as the geoscience and medical communities. At this time, the United States Environmental Protection Agency (USEPA) has

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recommended an “action” level for indoor radon concentrations at or exceeding 4 pico-curies per liter of air (pCi/l). The USEPA has extrapolated a 1 percent to 3 percent lung cancer mortality rate due to a lifetime exposure at 4 pCi/l; that is, one to three persons per 100 exposed to this concentration for life will die of lung cancer induced by radon. Of the 33 states participating in the study, California ranks as the third lowest for percentage of homes exceeding 4 pCi/l. Specific indoor radon information is not available, as the presence of radon can only be obtained through a sampling and testing program.

Polychlorinated Biphenyls (PCB) Transformers

In 1976, the United States Congress enacted the Toxic Substances Control Act (TSCA), which gave the USEPA the ability to track all industrial chemicals imported into and used in the United States. The USEPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human health hazard. The USEPA can ban the manufacture and import of those chemicals that pose an unreasonable risk. The TSCA directed the USEPA to ban the manufacture of polychlorinated biphenyls (PCBs) and regulated their use and disposal. The USEPA accomplished this by the issuance of regulation in 1978. Generally, sources of PCBs include fluorescent light ballasts and electric transformers. Both of these potential PCB-containing sources are located within existing city limits. The USEPA maintains the PCB Activity Database (PADS) that identifies generators, transporters, commercial storage, and brokers and disposers of PCBs. Electrical facilities developed after 1979 are unlikely to be associated with PCB-containing transformers. The actual levels of PCBs in specific equipment can only be confirmed by sampling and analysis of the mineral oil coolant within the considered equipment.

Pacific Gas & Electric (PG&E) provides electric service to the entire GPU Planning Area and is responsible for the operation, maintenance, and repair of transformers and electrical facilities. PG&E is subject to USEPA regulations regarding PCB transformers and is required to notify the USEPA of any PCB-related activities or incidents. It is PG&E's practice to routinely identify and replace all leaking and PCB-containing transformers within its service area boundaries (PG&E, 2009).

Electrical Facilities and Electromagnetic Fields

PG&E owns and operates the existing electrical facilities within the Planning Area. Several transmission lines exist throughout the Planning Area. Electromagnetic fields (EMF) are invisible lines of force surrounding any electrical wire or device. They have two components — the electric field resulting from voltage and the magnetic field resulting from current flow. Ordinary use of electricity produces magnetic and electric fields. These 60 Hertz fields (fields that go back and forth 60 times a second) are associated with electrical appliances, power lines, and wiring in buildings. EMF health and safety issues from power lines are preempted by the Public Utilities Commission (PUC) and therefore are typically not addressed in general plans.

The evidence that EMF from high voltage power lines can be hazardous to human health is not quantifiable and remains unresolved. Federal agencies working on establishing limits and health standards related to EMF include the National Institute for Occupational Safety and Health (NIOSH), U.S. Environmental Protection Agency (USEPA), Federal Communications Commission (FCC), Occupational Safety and Health Administration (OSHA), National Telecommunications and Information Administration (NTIA), and National Institutes of Health (NIH). At this time no standards apply to EMF.

AIRPORT OPERATIONS HAZARDS

There are no air-related facilities in the existing city limits or in the general vicinity of the GPU Planning Area. The nearest airport to the Planning Area is Buchanan Field Airport located on Sally Ride Drive in Concord, which is approximately 17 miles east of the Pinole city limits. Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the imaginary flight surfaces surrounding an airport.

RAILROAD OPERATIONS HAZARDS

Two railroad corridors are located within the Pinole GPU Planning Area, including the Union Pacific Railroad's (UPRR) Martinez Subdivision and Burlington Northern Santa Fe's (BNSF) Stockton Subdivision railroads. There are no rail yards or junctions in the city. The UPRR's Martinez Subdivision railroad is a double-track railroad located along the northern boundary of the city near the shoreline of San Pablo Bay. The BNSF's Stockton Subdivision is located south of the UPRR and at a slightly higher elevation. The number of freight trains traveling along these corridors can vary from day to day, depending on demand, and there are currently no hourly limitations pertaining to freight train travel. The UPRR is also used for Amtrak service. Approximately 32 Amtrak Capitol Corridor trains and 8 Amtrak San Joaquin trains use this corridor on a daily basis (Amtrak, 2010).

At-grade railroad crossings often contribute to traffic problems, delays, and accidents. Existing at-grade railroad crossings are located at Pinole Shores Road, Del Monte Drive, and Tara Hills Drive. Trains traveling on this rail line travel at average speeds between 65 and 70 miles per hour (mph). To promote safety, most at-grade crossings in the GPU Planning Area have a combination of warning devices, such as warning signs, flashing lights, and crossing arms. There are three grade-separated crossings within the GPA Planning Area. Both Del Monte Drive and Pinole Shores Drive traverse the BNSF tracks at the northeastern portion of the city. This same rail line also utilizes a railway overpass over Tennent Avenue at the northwestern border of the city.

4.6.2 REGULATORY FRAMEWORK

Although numerous federal, state, and local laws and regulations pertaining to hazardous waste management are applicable to remedial activities, conformance with these laws and regulations is addressed through separate environmental review and regulatory oversight specifically associated with the remedial projects. These activities are separate actions that are not part of the proposed project. **Table 4.6-2** lists federal, state, and local regulatory agencies that oversee hazardous materials handling and hazardous waste management, and the statutes and regulations they administer.

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**TABLE 4.6-2
SUMMARY OF HAZARDOUS MATERIALS REGULATORY AUTHORITY**

Regulatory Agency	Authority
Federal Agencies	
Department of Transportation (DOT)	Hazardous Materials Transport Act – Code of Federal Regulations (CFR) 49
Environmental Protection Agency (USEPA)	Federal Water Pollution Control Act Clean Air Act Resource Conservation and Recovery Act (RCRA) Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Superfund Amendments and Reauthorization Act (SARA) Federal Insecticide, Fungicide and Rodenticide Act
Occupational Safety and Health Administration (OSHA)	Occupational Safety and Health Act and CFR 29
State Agencies	
Department of Toxic Substances Control (DTSC)	California Code of Regulations
Department of Industrial Relations (CAL-OSHA)	California Occupational Safety and Health Act, CCR Title 8
State Water Resources Control Board and Regional Water Quality Control Board	Porter-Cologne Water Quality Act Underground Storage Tank Law
Health and Welfare Agency	Safe Drinking Water and Toxic Enforcement Act
Air Resources Board and Air Pollution Control District	Air Resources Act
Office of Emergency Services	Hazardous Materials Release Response Plans/Inventory Law
Department of Food and Agriculture	Food and Agriculture Code
State Fire Marshall	Uniform Fire Code, CR Title 19

Prior to August 1992, the principal agency at the federal level regulating the generation, transport and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, the California Department of Toxic Substances Control (DTSC) was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Response Compensation and Liability Act (CERCLA).

FEDERAL

USEPA Hazardous Materials Handling

At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is the USEPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by the USEPA. Under the RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous

substances. The RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments of 1984 (HSWA), which specifically prohibit the use of certain techniques for the disposal of various hazardous substances. The Federal Emergency Planning and Community Right to Know Act of 1986 imposed hazardous materials planning requirements to help protect local communities in the event of accidental release. The USEPA has delegated much of the RCRA compliance to the Department of Toxic Substances Control (DTSC).

CERCLA Hazardous Materials Releases

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980 (U.S. Code, Title 42). This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, \$1.6 billion was collected and the tax went into a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The law authorizes two kinds of response actions: (1) short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response; and (2) long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on the USEPA's National Priorities List (NPL). CERCLA also enabled the revision of the National Contingency Plan (NCP), which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

CERCLA created the Superfund Program in order to clean up uncontrolled or abandoned hazardous waste sites and to respond to accidents, spills, and other emergency releases of pollutants and contaminants. Section 101 of CERCLA defines a list of hazardous chemicals for which the USEPA must establish regulations. Releases of CERCLA hazardous substances in amounts greater than their "reportable quantity" must be reported to the National Response Center and to state and local government officials. Hazardous substances identified in CERCLA include all chemicals on the following regulatory lists: Clean Air Act list of hazardous air pollutants (HAPs), Clean Water Act list of hazardous substances and priority pollutants, Solid Waste Disposal Act list of hazardous wastes, and Toxic Substances Control Act list of imminent hazards.

OSHA Worker Safety Requirements

The U.S. Department of Labor Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

CFR Federal Aviation Regulations

The Code of Federal Regulations, Title 14, Volume 2 revised as of January 1, 2004 (14CFR77.1) pertains to aeronautics and space. Chapter 1 specifically includes the Federal Aviation Administration regulations and Part 77 (Federal Aviation Regulation or FAR Part 77) pertains to

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objects affecting navigable airspace. FAR Part 77 establishes standards for determining obstructions in navigable airspace, sets forth the requirements for notice to the administrator of certain proposed construction or alteration, provides for aeronautical studies of obstructions to air navigation in order to determine their effect on the safe and efficient use of airspace, provides for public hearings on the hazardous effects of proposed construction or alteration on air navigation, and provides for the establishment of antenna farm areas.

STATE

California Environmental Protection Agency

The California Environmental Protection Agency (CAL-EPA) was created in 1991 by Governor's Executive Order. The six boards, departments, and office were placed within the CAL-EPA "umbrella" to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources (CAL-EPA, 2010).

Title 27, California Code of Regulations (CCR), effective May 13, 2007, contains information, collection, and reporting standards for the CAL-EPA Unified Program. The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. The state agencies responsible for these programs set the standards, while local governments implement the standards. CAL-EPA oversees the implementation of the program as a whole. The CCR, along with Health and Safety Code Division 20, Chapter 6.11, outlines the requirements for the Unified Program for hazardous materials and hazardous waste management. This division integrates requirements established pursuant to:

- The Hazardous Waste Generator (HWG) program and the Hazardous Waste Onsite Treatment activities;
- The Aboveground Storage Tank (AST) program Spill Prevention Control and Countermeasure Plan requirements;
- The Underground Storage Tank (UST) program;
- The Hazardous Materials Release Response Plans and Inventory (HMRRP) program;
- California Accidental Release Prevention (CalARP) program; and
- The Hazardous Materials Management Plans and the Hazardous Materials Inventory Statement (HMMP/HMIS) requirements.

The Unified Program requires all counties to apply to the CAL-EPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements within the county. Most CUPAs have been established as a function of a local environmental health or fire department.

The Contra Costa County Health Services Department, Hazardous Materials Division, which is the Certified Unified Program Agency (CUPA) for the City of Pinole, issues permits to and conducts inspections of businesses that use, store, or handle quantities of hazardous materials and/or waste greater than or equal to 55 gallons, 500 pounds, or 200 cubic feet of a compressed gas at

any time. The division implements the Hazardous Material Management Plans (Business Plans) that include an inventory of hazardous materials used, handled, or stored at any business in the City of Pinole. The division also issues permits to and inspects businesses that handle acutely hazardous materials, such as those used in research and development facilities, and helps local fire departments respond to emergencies involving hazardous materials.

DTSC – Hazardous Materials Handling

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 Hazardous Materials 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, DTSC has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies administer these laws and regulations, and may enforce on-site waste management requirements applicable to hazardous chemical waste generators, such as requirements for secondary containment around stored wastes to prevent environmental contamination in the event of a spill. DTSC permits and oversees hazardous chemical waste treatment, long-term storage, and disposal facilities.

Cal-OSHA Worker Safety Requirements

The California Occupational Safety and Health Administration (Cal-OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within California. Cal-OSHA regulations pertaining to 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 (MSDS) 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 managed by the State Office of Emergency Services (OES), which coordinates the responses of other agencies including CAL-EPA, the California Highway Patrol (CHP), California Department of Fish and Game (CDFG), San Francisco Bay Regional Water Quality Control Board (RWQCB), Contra Costa County Sheriff's Department, and the City of Pinole Police and Fire departments.

USDOT Hazardous Materials Transport

The U.S. Department of Transportation (USDOT) 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

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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.

It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading, of such materials (California Vehicle Code, Sections 31602(b) and 32104(a)). When transporting explosives through or into a city for which a route has not been designated by the Highway Patrol, drivers must follow routes as may be prescribed or established by local authorities (California Vehicle Code, Section 31614(a)). The transportation of explosives in quantities of 1,000 pounds or less, or other than on a public highway, is subject to the California Health and Safety Code (California Vehicle Code, Section 31601(a)).

LOCAL

Contra Costa County Hazardous Waste Management Plan

The Contra Costa County Hazardous Waste Management Plan (HWMP) was established to provide a comprehensive approach for the management of hazardous wastes in the county. The plan includes criteria for new waste management facilities, educational and enforcement efforts to minimize and control the waste stream, and maintenance of a unified database on waste generators. In addition, the HWMP emphasizes waste reduction and recycling, educational processes, coordinated identification of hazardous materials, permitting and inspection of waste generators, and creation of a permanent facility for deposit of household hazardous waste. A major feature of the plan is the identification of sites suitable for various types of hazardous waste management facilities.

City of Pinole Emergency Operations Plan

In May 2006, the City updated and adopted an Emergency Operations Plan (EOP). The goal of the EOP is to effectively and efficiently organize and coordinate the City's response to major emergencies. The EOP is designed to be implemented and exercised prior to an emergency. The EOP identifies four phases of emergency management including preparedness, mitigation, response, and recovery. To ensure preparedness for an emergency, the EOP identifies the responsibilities for the following departments in an emergency situation: the Fire, Police, Public Works, and Finance departments, the City Manager's Office, the Community Development Group, Administrative Services, and the Emergency Operations Center. This plan is compatible with the State of California and the Office of Emergency Services.

Aside from the Fire Department participating in the Contra Costa County Mutual Aid System, the City also participates in the County-led regional emergency plan which allows for the mobilization of resources to and from emergency response agencies, local governments, operational areas, regions, and the state, with the intent of providing adequate resources to requesting agencies. The City of Pinole is in the Contra Costa County Operational Area. For more information on emergency response issues, please see the City's EOP. The City's EOP can be obtained by sending a request to the City Planning Department at planning@ci.pinole.ca.us.

4.6.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Based on criteria derived from Appendix G in the CEQA Guidelines, the proposed General Plan would result in a significant impact to the environment or to human health and safety if the project would:

- 1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- 3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- 4) Be located on a site that is included on a list of hazardous materials sites compiled by Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- 5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- 6) For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- 7) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

METHODOLOGY

This section analyzes the impacts associated with the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update), including the risk of upset due to potential hazardous substances, such as hazardous materials and/or hazardous waste within the Planning Area, and other hazards to public safety. This evaluation of the proposed project's potential to create hazards to the public health or the environment related to hazardous substances is based on database research, review of the City's updated General Plan, consultation with relevant agencies, and review of public comment letters. There are no public or private airstrips in the Planning Area. Therefore, criteria 5 and 6 would result in no impact and will not be discussed further. Only those policies and action items that contain specific enforceable requirements or restrictions and corresponding performance standards that address an impact have been included under each impact discussion below.

4.6 HUMAN HEALTH/RISK OF UPSET

PROJECT IMPACTS AND MITIGATION MEASURES

Transportation of Hazardous Materials (Standard of Significance 1)

Impact 4.6.1 Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could include the routine transportation, use, or disposal of hazardous materials on the Planning Area transportation network. This is a **less than significant impact**.

General Plan Update

According to the California Highway Patrol, there are no approved routes in the Planning Area for the transportation of explosives. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery or the loading of such materials (California Vehicle Code, Sections 31602(b) and 32104(a)). The transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act), and Caltrans, and use of these materials is regulated by DTSC (22 California Code of Regulations, Section 66001 et seq.). The use, storage, and transport of hazardous materials by developers, contractors, business owners, industrial businesses, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. The California Highway Patrol also designates through routes to be used for the transportation of inhalation hazards and may designate separate through routes for the transportation of inhalation hazards composed of any chemical rocket propellant (California Vehicle Code, Sections 32100 and 32102(b)). Interstate 80 is an approved highway transportation route in the Planning Area for the transportation of poisonous inhalation hazards and radioactive materials. The CHP does not regulate the transport of hazardous materials along non-highway and local roads.

Two rail corridors in the Planning Area could potentially serve as transportation for hazardous materials. However, any such transportation would be required to remain in compliance with state and federal laws for the transportation of hazardous materials on railroads.

It would not be possible to identify the roads that could be used for local delivery of hazardous materials, since any delivery of swimming pool chlorine would be considered transportation of an inhalant hazard. However, all existing and future development would be required to comply with federal, state, and local regulations regarding the handling and transport of hazardous materials. In addition, hauling companies that transport hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards. Implementation of proposed General Plan policies would provide further protections against this impact, resulting in a **less than significant** determination.

Three Corridors Specific Plan

The Three Corridors Specific Plan identifies opportunity sites for infill mixed-use development along the city's commercial corridors in close proximity to transit and other amenities. This development could increase the risk associated with the transportation, use, or disposal of hazardous materials. Though all existing and future development would be required to comply with federal, state, and local regulations regarding the handling and transport of hazardous materials, and hauling companies that transport hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards, the potential would exist for the accidental release of hazardous materials during transport. Implementation of proposed

General Plan policies would reduce this impact to a **less than significant** impact as discussed below.

Zoning Code Update

Adoption of the updated General Plan would require amendments to the Zoning Code for consistency with the General Plan land use designations and various General Plan policies. The City therefore plans to update its Zoning Code as part of the proposed General Plan Update project. These updates would involve the deletion, addition, and modification of certain zoning districts and development standards in order to make the Zoning Code consistent with the updated General Plan (see Section 3.0, Project Description, for more details). These updates would not result in any development activities beyond those analyzed for the proposed GPU. Therefore, the Zoning Code Update would have an impact similar to that for the General Plan Update as discussed above.

Proposed General Plan Policies and Action Items that Address Transportation of Hazardous Materials

The proposed General Plan contains the following policy that is intended to address the transportation of hazardous materials.

Policy HS.3.6 Support measures to responsibly manage hazardous waste to protect public health, safety and the environment, and support state and federal safety legislation to strengthen requirements for hazardous materials transport.

In addition, Three Corridors Specific Plan Circulation Policy 5 discourages through traffic and truck traffic for those roadway segments that are not designed to handle such traffic.

Implementation of the proposed General Plan and Specific Plan policies described above, as well as adherence to all federal, state, and local regulations regarding the transportation of hazardous materials, would continue to reduce the environmental impacts associated with the routine transportation and handling of hazardous materials on Planning Area roadways to **less than significant** levels.

Mitigation Measures

None required.

Release and Exposure to Hazardous Materials (Standards of Significance 2 and 4)

Impact 4.6.2 Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could include land uses that have the potential to result in an increased risk of release of hazardous materials. This is considered a **less than significant** impact.

General Plan Update

The proposed General Plan Update would allow for the expansion of urbanization in currently undeveloped areas and for the intensification of high-density residential and commercial uses within the Planning Area. This in turn would involve the storage, use, and transport of hazardous materials (e.g., gasoline fuels, demolition materials, asphalt, lubricants, toxic solvents, pesticides, and herbicides) during construction, demolition, and landscaping activities. In addition, certain

4.6 HUMAN HEALTH/RISK OF UPSET

commercial uses, including water treatment plants, swimming pool facilities, gas stations, and dry cleaners that store, use, and routinely transport hazardous material to and from their facilities, could pose a potential hazard to the environment. Hazardous materials used during construction and operational activities throughout the Planning Area may expose nearby residents and local schools to toxic emissions. Electrical transformers and industrial products containing polychlorinated biphenyls and heavy metals, as well as persistent residual chemicals including pesticides, herbicides, and fertilizers, have the potential to pose a health and safety risk via accidental release or misuse in the Planning Area.

Development under the proposed General Plan Update could also involve ground disturbance for new construction. Soils in the area may contain contaminants including asbestos and lead-based paint in structures associated with former land uses, and contaminants associated with septic systems.

The use, storage, and transport of hazardous materials by developers, contractors, business owners, industrial businesses, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases.

Previous discussion in subsection 4.6.1, Existing Setting, above explains that searches of GEIMS and Cortese databases reveal 22 leaking underground fuel tanks sites (8 of which are open), and 11 sites with permitted UST facilities within the Planning Area. Due to unknown underlying conditions, there is the potential for discovering USTs within the General Plan Planning Area. If UST(s) are discovered during any phase of a project, removal is required prior to additional site preparation or development activities (California State Water Resources Control Board Underground Storage Tank Program and California Health and Safety Code, Section 25281, et seq.). All UST removal and remediation efforts must comply with Contra Costa Environmental Health Department standards. If discovered, the tanks would require removal prior to any development activities. If subsurface contamination occurred as a result of tank leakage or overfilling, the contamination would require assessment and remediation in compliance with Contra Costa Environmental Health Department regulations.

In addition to the presence of hazardous material sites, the city is underlain by a series of gas pipelines. The city's close proximity to regional energy facilities in west Contra Costa County that process, store and transport volatile gas and/or liquids makes the city susceptible to manmade hazards when pipeline development projects that support these energy facilities are proposed within the city limits. Chapter 17.36 of the Pinole Zoning Code requires use permits for the production of oil, gas, or hydrocarbons pipeline development projects. The use permit process enables the City to more closely analyze potential pipeline development projects that facilitate the transport of hazardous or volatile gasses or liquids within Pinole and determine appropriate conditions to minimize potential risks to public health, safety, and welfare.

As discussed under Impact 4.6.1, the transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act), and Caltrans, and use of these materials is regulated by DTSC (22 California Code of Regulations, Section 66001 et seq.). The use, storage, and transport of hazardous materials by developers, contractors, business owners, industrial businesses, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. As previously mentioned, the Contra Costa County Health Services Department, Hazardous Materials Division, which is the Certified Unified Program Agency (CUPA) for Pinole, issues permits to and conducts inspections of businesses that use, store, or handle quantities of hazardous

materials and/or waste greater than or equal to 55 gallons, 500 pounds, or 200 cubic feet of a compressed gas at any time. The division implements the Hazardous Material Management Plans (Business Plans) that include an inventory of hazardous materials used, handled, or stored at any business in Pinole. The division also issues permits to and inspects businesses that handle acutely hazardous materials, such as those used in research and development facilities, and helps local fire departments respond to emergencies involving hazardous materials. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. All existing and future projects in the GPU Planning Area would be required to comply with federal, state, and local regulations regarding the handling, transportation, disposal, and cleanup of hazardous materials. In addition, Pinole Fire Department responds to hazardous material incidents to provide initial identification, isolation, and decontamination. The Hazardous Materials Division provides specialized hazardous material response. This impact is considered **less than significant**.

Three Corridors Specific Plan

The Three Corridors Specific Plan also identifies opportunity sites for infill mixed-use development along the city's commercial corridors in close proximity to transit and other amenities. Located close to transportation corridors, new development within the Specific Plan area might be exposed to hazards through upset or accident, which can occur even if all applicable federal, state, and local laws are followed. The City of Pinole participates in the Hazardous Materials Program which serves area residents by responding to emergencies and monitoring hazardous materials.

As shown in **Figure 4.6-1**, multiple hazardous sites are adjacent to the Specific Plan area. Such sites could potentially release hazardous materials onto the Specific Plan area. If UST(s) are discovered during any phase of a project, removal is required prior to additional site preparation or development activities. All UST removal and remediation efforts must comply with Contra Costa Environmental Health Department standards. If discovered, the tanks would require removal prior to any development activities. If subsurface contamination occurred as a result of tank leakage or overfilling, the contamination would require assessment and remediation in compliance with Contra Costa Environmental Health Department regulations (California State Water Resources Control Board Underground Storage Tank Program and California Health and Safety Code, Section 25281, et seq.).

As discussed under Impact 4.6.1, the transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act), and Caltrans, and use of these materials is regulated by DTSC. The use, storage, and transport of hazardous materials by developers, contractors, business owners, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. All existing and future projects pertaining to the Specific Plan would be required to comply with federal, state, and local regulations regarding the handling, transportation, disposal, and cleanup of hazardous materials. This impact is considered **less than significant**.

Zoning Code Update

Adoption of the updated General Plan would require amendments to the Zoning Code for consistency with the General Plan land use designations and various General Plan policies. The City therefore plans to update its Zoning Code as part of the proposed General Plan Update project. These updates would involve the deletion, addition, and modification of certain zoning

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districts and development standards in order to make the Zoning Code consistent with the updated General Plan (see Section 3.0, Project Description, for more details). These updates would not result in any development activities beyond those analyzed for the proposed GPU. Therefore, the Zoning Code Update would have an impact similar to that for the General Plan Update as discussed above.

Proposed General Plan Policies and Action Items that Address Release and Exposure to Hazardous Materials

The following proposed General Plan policies and action items address issues associated with the accidental release and exposure to hazardous materials and contamination.

- | | |
|-----------------|---|
| Policy CS.2.1 | The Police Department will strive to provide on-scene response to emergency incidents in the city within 5 minutes. |
| Action CS.2.3.1 | Continue working with members of Battalion 7 and other emergency services providers to optimize the allocation of resources and most efficiently provide mutual aid in Pinole and surrounding communities. |
| Action CS.2.3.5 | The Fire Department will strive to provide on-scene response to emergency incidents in the city within 5 minutes 90% of the time as funding is available. |
| Action CS.2.3.6 | The City will develop a Fire Safety Operations Assessment that identifies and compares different approaches to the provision of emergency services and identifies needed facilities and an appropriate organizational structure to provide cost-effective fire and emergency medical services. |
| Policy HS.3.5 | Require proper handling, storage, disposal and cleanup of hazardous materials to prevent leakage, potential explosions, fires or the escape of harmful gases and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal. |
| Action HS.3.5.1 | Work with Contra Costa County and other regional partners to implement the County Hazardous Waste Management Plan and notify the public about locations and opportunities to properly dispose of household hazardous materials. |
| Action HS.3.5.3 | A comprehensive investigation of hazardous materials storage tanks should be undertaken for specific sites when development is proposed. The potential hazard of any tanks or former tank sites found should then be evaluated using California EPA and local regulatory guidelines, and sites shall be remediated as needed. |
| Action HS.3.5.4 | At the time of new development, any known or discovered hazardous material should be cleaned up and any impacts mitigated as required by the governing law. |

In addition, guideline 7.3.10.g in Chapter 7.0, *Private Realm Design Guidelines*, of the Three Corridor Specific Plan contains a design guideline encouraging the use of less hazardous and recycled building materials during construction.

Implementation of the above proposed General Plan policies and associated actions, as well as guideline 7.3.10.g of the Three Corridor Specific Plan, and adherence to all federal, state, and local regulations regarding the storage and handling of hazardous wastes and the use and removal of underground storage tanks, as well as the cleanup and remediation of leaking contaminants and hazardous wastes and hazardous substances, would reduce potential impacts to the environment and to public health and safety associated with the accidental release of and exposure to hazardous substances to **less than significant**.

Mitigation Measures

None required.

Release and Exposure to Hazardous Materials onto School and Residential Sites (Standards of Significance 2, 3, and 4)

Impact 4.6.3 Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could consist of land uses having the potential to result in an increased risk of release of hazardous materials. Implementation of the proposed project could have a **less than significant** impact.

General Plan Update

As noted in **Table 4.6-1**, there are a number of closed and open hazardous sites already in existence in the Planning Area. Hazardous materials used during construction and operational activities throughout the Planning Area may expose nearby residents and other sensitive receptors to toxic emissions. Electrical transformers and industrial products containing polychlorinated biphenyls and heavy metals, as well as persistent residual chemicals including pesticides, herbicides, and fertilizers, have the potential to pose a health and safety risk via accidental release, misuse, or historic use in the Planning Area (the reader is referred to Section 4.9, Hydrology and Water Quality, regarding water quality and pesticide, herbicide, and fertilizer concerns). The potential for exposure to toxic air contaminants is addressed in Section 4.3, Air Quality.

In addition, future residents and sensitive receptors could be placed in close proximity to sources of electromagnetic fields (EMF) such as high voltage power lines. Reports by the National Research Council/National Academy of Sciences, American Medical Association, American Cancer Society, National Institute of Environmental Health Sciences, World Health Organization – International Agency for Research on Cancer, and the California EMF Program conclude that insufficient scientific evidence exists to warrant the adoption of specific health-based EMF mitigation measures. The medical and scientific communities generally agree that the available research evidence has not demonstrated that electromagnetic fields create a health risk. Given that current data has not demonstrated health risks associated with EMF exposure, EMF exposure impact is considered less than significant.

As discussed under Impact 4.6.1, the transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act), and Caltrans, and use of these materials is regulated by DTSC (22 California Code of Regulations, Section 66001 et seq.). The use, storage, and transport of hazardous materials by developers, contractors, business owners, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory

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agency standards designed to avoid hazardous waste releases, thus substantially reducing hazardous material impacts to residential uses and sensitive receptors.

Both Pinole Valley High School and Pinole Middle School are within 0.25 miles of an existing open-case LUST site. To site and construct a state-funded school, a public school district must complete an extensive and independent statutory review process in accordance with the siting requirements of the California Department of Education. In addition to CEQA review and in order to ensure that each new school site is safe from toxic hazards, new school sites may be subject to review from the following agencies: the Department of Toxic Substances Control; the State Allocation Board, which administers and allocates funding requests; and the Division of the State Architect, which reviews the design, plans, and construction of public-funded schools. These review processes are most typically done on a site-specific basis. The selection of new public school sites must comply with the California Education Code (including Section 17521, requiring the governing board of the school district to adopt a resolution in connection with consideration of proposal for occupancy of a building to be constructed on its property and to conduct a public meeting), and the California Code of Regulations (CCR), Title 5, Sections 14001 through 14012, which outlines the powers and duties and establishes standards with which the California Department of Education, and all public school districts, must comply in the selection of new school sites. Because any future siting of schools within the Planning Area will have to comply with state statutory and regulatory requirements addressing public and environmental health as well as safety from hazards, including hazardous substances, impacts from siting schools in the vicinity of such hazards are not evaluated further in this document.

At this time, any further analysis of this impact would be speculative. Implementation of proposed General Plan policies would reduce this impact to a **less than significant** impact.

Three Corridors Specific Plan

Implementation of the proposed Three Corridors Specific Plan would consist of the revitalization of the San Pablo Avenue, Pinole Valley Road, and Appian Way corridors, which could include new development and/or redevelopment of various urban uses. The Three Corridors Specific Plan is intended to establish more housing choices and job opportunities within the city's commercial corridors. Due to the city's small supply of developable land, the updated General Plan and the Three Corridors Specific Plan direct the majority of the city's future growth to sites designated for mixed and multiple-family use in the San Pablo Avenue, Pinole Valley Road, and Appian Way corridors. The Three Corridors Specific Plan also identifies opportunity sites for infill mixed-use development along the city's commercial corridors in close proximity to transit and other amenities.

As discussed above, the use, storage, and transport of hazardous materials by developers, contractors, business owners, and others are required to be in compliance with local, state, and federal regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases, thus substantially reducing hazardous material impacts to residential uses and sensitive receptors. In addition, any future siting of schools within the Planning Area, including within the Specific Plan area, will have to comply with state statutory and regulatory requirements addressing public and environmental health as well as safety from hazards, including hazardous substances, impacts from siting schools in the vicinity of such hazards are not evaluated further in this document. At this time, any further analysis of this impact would be speculative. Implementation of proposed General Plan policies would reduce this impact to a **less than significant** impact.

Zoning Code Update

Adoption of the updated General Plan would require amendments to the Zoning Code for consistency with the General Plan land use designations and various General Plan policies. The City therefore plans to update its Zoning Code as part of the proposed General Plan Update project. These updates would involve the deletion, addition, and modification of certain zoning districts and development standards in order to make the Zoning Code consistent with the updated General Plan (see Section 3.0, Project Description, for more details). These updates would not result in any development activities beyond those analyzed for the proposed GPU. Therefore, the Zoning Code Update would have an impact similar to that for the General Plan Update as discussed above.

Proposed General Plan Policies and Action Items that Address the Release and Exposure to Hazardous Materials onto School and Residential Sites

The following proposed General Plan policies and action items address issues associated with the accidental release and exposure of school and residential sites to hazardous materials and contamination.

- Policy CS.2.1 The Police Department will strive to provide on-scene response to emergency incidents in the city within 5 minutes.

- Action CS.2.3.1 Continue working with members of Battalion 7 and other emergency services providers to optimize the allocation of resources and most efficiently provide mutual aid in Pinole and surrounding communities.

- Action CS.2.3.5 The Fire Department will strive to provide on-scene response to emergency incidents in the city within 5 minutes 90% of the time.

- Action CS.2.3.6 The City will develop a Fire Safety Operations Assessment that identifies and compares different approaches to the provision of emergency services and identifies needed facilities and an appropriate organizational structure to provide cost-effective fire and emergency medical services.

- Policy HS.3.5 Require proper handling, storage, disposal, and cleanup of hazardous materials to prevent leakage, potential explosions, fires or the escape of harmful gases and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal.

- Action HS.3.5.1 Work with Contra Costa County and other regional partners to implement the County Hazardous Waste Management Plan and notify the public about locations and opportunities to properly dispose of household hazardous materials.

- Action HS.3.5.3 A comprehensive investigation of hazardous materials storage tanks should be undertaken for specific sites when development is proposed. The potential hazard of any tanks or former tank sites found should then be evaluated using California EPA and local regulatory guidelines, and sites shall be remediated as needed.

4.6 HUMAN HEALTH/RISK OF UPSET

Action HS.3.5.4 At the time of new development, any known or discovered hazardous material should be cleaned up and any impacts mitigated as required by the governing law.

Implementation of the above proposed General Plan policies and associated action items and adherence to all federal, state, and local regulations regarding the storage and handling of hazardous wastes and the use and removal of underground storage tanks, as well as the cleanup and remediation of leaking contaminants and hazardous wastes and hazardous substances, would reduce potential impacts to the environment and to public health and safety associated with the accidental release of and exposure of school and residential sites to hazardous substances to **less than significant**.

Mitigation Measures

None required.

Interfere with Emergency Response Plans (Standard of Significance 7)

Impact 4.6.4 Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) could impair implementation of or physically interfere with the City's Emergency Operations Plan (EOP). This is considered a **less than significant** impact.

General Plan Update

An efficient roadway and circulation system is vital for the evacuation of residents and the mobility of fire suppression, emergency response, and law enforcement vehicles. Implementation of the General Plan Update would result in increased intensities in land uses within the Planning Area. The resulting changes in land use patterns associated with buildout of the proposed GPU, with the consequent increase in traffic, could increase the potential for conflicts with existing emergency response and/or emergency evacuation plans by making implementation of emergency response activities more difficult. This increased difficulty could place more people at risk of serious injury or death and property at greater risk of serious damage.

However, such development would also include roadway improvements to ensure that adequate access is provided to and within these areas. Such development would also require further, project-level environmental review prior to its implementation which would consider potential impacts to emergency access. In addition, the City periodically updates its Emergency Operations Plan (see the Regulatory Framework subsection above) to reflect current conditions within the Planning Area. As such, this impact is considered **less than significant**.

Three Corridors Specific Plan

Increased development could increase the potential for conflicts with existing emergency response and/or evacuation plans by making implementation of emergency response activities more difficult. However, such development would also include roadway improvements to ensure that adequate access is provided to and within these areas. Such development would also require further, project-level environmental review prior to its implementation which would consider potential impacts to emergency access. The City Engineer requires that construction requiring road closure be planned and emergency service providers notified of the temporary closure (Dean, 2010). In addition, the City periodically updates its Emergency Operations Plan (see

the Regulatory Framework subsection above) to reflect current conditions within the Planning Area. As such, this impact is considered **less than significant**.

Zoning Code Update

Adoption of the updated General Plan would require amendments to the Zoning Code for consistency with the General Plan land use designations and various General Plan policies. The City therefore plans to update its Zoning Code as part of the proposed General Plan Update project. These updates would involve the deletion, addition, and modification of certain zoning districts and development standards in order to make the Zoning Code consistent with the updated General Plan (see Section 3.0, Project Description, for more details). These updates would not result in any development activities beyond those analyzed for the proposed GPU. Therefore, the Zoning Code Update would have an impact similar to that for the General Plan Update as discussed above.

Proposed General Plan Policies and Action Items that Address Interference with Emergency Response Plans

The following proposed General Plan policies and action items address issues associated with emergency response plans.

- Action HS.4.1.1 Maintain and implement the Emergency Operations Plan (EOP), including periodic training exercises.
- Action HS.4.1.2 Continue working with Contra Costa County and other concerned agencies to adopt a regional Emergency Response Plan (ERP).
- Action HS.4.1.3 The City Fire Department staff shall review newly proposed or modified roadway designs (e.g., median modifications and speed humps) to ensure that they do not significantly impair movement of emergency vehicles and equipment.
- Action HS.4.1.4 Locate and design emergency buildings and vital utilities, communication systems and other public facilities so that they remain operational during and after an emergency or disaster.
- Action HS.4.2.2 Develop and adopt a pre-disaster ordinance for post-disaster recovery and reconstruction that includes provisions for debris clearance, damage assessment, demolitions, re-occupancy and building moratorium criteria, fee waivers and deferrals, and expedited permitting procedures for repair and reconstruction.
- Action CE.2.1.3 Work with emergency service providers to ensure the transportation system facilitates efficient service delivery and protects public safety.

In addition, Chapter 7.0, *Private Realm Design Guidelines*, of the proposed Three Corridor Specific Plan requires site circulation to allow for and facilitate emergency access to the site and all buildings.

Implementation of the proposed General Plan policies and actions, as well as the Specific Plan guideline, described above, as well as adherence to all federal, state, and local regulations

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regarding emergency response plans, would ensure impacts related to interfering with emergency response plans are **less than significant**.

Mitigation Measures

None required.

4.6.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

CUMULATIVE SETTING

The setting for this cumulative analysis includes existing, proposed, approved, and planned projects in the Planning Area and surrounding portions of unincorporated Contra Costa County (see **Table 4.0-1**) as well as full buildout of the GPU Planning Area as proposed under the project. Development in the GPU Planning Area would change the intensity of land uses in the region. In particular, this cumulative development scenario would provide additional housing, employment, and shopping opportunities. These potential changes could have impacts from the handling, storage, and transport of hazardous material, though impacts from hazards are generally site-specific and not cumulative by nature. Growth in the region could lead to increased transport of hazardous materials on the state highways and interstates that also serve the Planning Area. In addition, development elsewhere in the region could have a greater effect on the transport and accidental release of hazardous materials. Therefore, the cumulative setting for the discussion of hazardous materials and risk of upset impacts includes not only the Planning Area but the remainder of Contra Costa County as well.

The potential cumulative impacts due to the increased use of hazardous materials resulting from proposed development under the proposed project include, but are not limited to, air quality, noise, water quality, flooding, and fire, as well as exposure to multiple contaminants. The cumulative impacts associated with affected resources, such as air and water, are analyzed in the applicable technical sections of this Draft EIR.

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Hazards and Health Risks

Impact 4.6.5 Implementation of the proposed project (General Plan Update, Three Corridors Specific Plan, and Zoning Code Update) would not cumulatively contribute to regional hazards. This is considered a **less than cumulatively considerable** impact.

The cumulative effects from land uses proposed in association with the General Plan Update, Three Corridors Specific Plan, and Zoning Code Update could create a risk to public health from exposure to hazards and hazardous materials from existing contamination conditions as well as future land use operations (transportation, handling, and storage). As discussed under Impact 4.6.2, implementation of the proposed project may involve the development of land on previously contaminated sites. Contamination from hazardous waste sites and leaking underground storage tanks has the potential to contaminate soils and/or groundwater and present public health hazards. However, as previously mentioned, any UST(s) discovered during any phase of a project are required to be removed prior to additional site preparation or development activities by the California State Water Resources Control Board Underground Storage Tank Program and California Health and Safety Code, Section 25281, et seq. All UST removal and remediation efforts must comply with Contra Costa Environmental Health

Department standards. If discovered, the tanks would require removal prior to any development activities. If subsurface contamination occurred as a result of tank leakage or overfilling, the contamination would require assessment and remediation in compliance with Contra Costa Environmental Health Department regulations. This is a **less than cumulatively considerable** impact.

Transportation of hazardous materials on area roadways is regulated by the CHP, U.S. Department of Transportation (Hazardous Materials Transportation Act), and Caltrans, and use of these materials is regulated by DTSC (22 California Code of Regulations, Section 66001 et seq.). The use, storage, and transport of hazardous materials by developers, contractors, business owners, and others are required to be in compliance with local, state, and federal regulations during project construction and operation, thus substantially reducing hazardous material impacts to residential uses and sensitive receptors.

New school sites may also be subject to review from the following agencies: the Department of Toxic Substances Control; the State Allocation Board, which administers and allocates funding requests; and the Division of the State Architect, which reviews the design, plans, and construction of public-funded schools. These review processes are most typically done on a site-specific basis. The selection of new public school sites must comply with the California Education Code (including Section 17521, requiring the governing board of the school district to adopt a resolution in connection with consideration of proposal for occupancy of a building to be constructed on its property and to conduct a public meeting), and the California Code of Regulations (CCR), Title 5, Sections 14001 through 14012, which outlines the powers and duties and establishes standards with which the California Department of Education, and all public school districts, must comply in the selection of new school sites.

Proposed General Plan Policies and Action Items that Address Cumulative Hazards and Health Risks

The proposed General Plan Update contains several goals, policies, and action items that would further reduce impacts to hazards and human health risks. The following list contains those policies and action items that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that assist in reducing this impact. Since these policies and action items have been described in detail in prior impact discussions for this section, the following is limited to only listing the policy and action item numbers.

Community Services and Facilities Element

Policy CS.2.1, Action CS.2.3.1, Action CS.2.3.5, Action CS.2.3.6

Health and Safety Element

Policy HS.3.5, Action HS.3.5.1, Action HS.3.5.3, Action HS.3.5.4, Policy HS.3.6, Action HS.4.1.1, Action HS.4.1.2, Action HS.4.1.3, Action HS.4.1.4, Action HS.4.2.2

In addition, Chapter 7.0, *Private Realm Design Guidelines*, of the Three Corridor Specific Plan contains a design guideline encouraging the use of less hazardous and recycled building materials during construction. The GPU policies and action items, as well as the Specific Plan guideline, listed above would improve the response time of emergency agencies to hazardous material incidents, leading to a faster resolution of such incidents and reducing the potential for exposure. The policies would expedite any necessary evacuations of residents and workers, thereby protecting their health and safety. The policies and action items listed above would require the evaluation and identification of potential health hazards, including hazardous

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materials. These policies, along with compliance with applicable federal, state, and local regulations related to hazardous material transport, would reduce or eliminate potential health hazards, reduce or eliminate the potential release of hazardous materials in the environment, and reduce or eliminate exposure of people to these materials. As such, the proposed project's contributions to cumulative hazardous material impacts and other hazards to public safety are considered **less than cumulatively considerable**.

Mitigation Measures

None required.

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