

## 3.8 Hazardous Materials and Safety

This section presents the environmental setting, impact analysis, and mitigation measures for safety and hazardous materials within the Hillcrest Station Area Specific Plan area. Hazardous materials conditions, wildland fire hazards, high-pressure pipeline hazards, and emergency response planning with the potential to affect human health and the environment are described. As the Planning Area is not located within an airport land use plan, near a private airstrip, or within two miles of an airport, these safety considerations are not evaluated in this section. In addition, there is no indication that the proposed Specific Plan or pursuant development would interfere with the implementation of the Antioch Emergency Plan, so the potential impacts have not been evaluated.

### **ENVIRONMENTAL SETTING**

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Past and present land uses at the Planning Area comprise a variety of uses including industrial, utility, residential, and agricultural uses. Activities associated with these land uses may pose potential environmental, health, and safety risks. These risks include accidents involving vehicles transporting hazardous materials or hazardous wastes, accidental spills or leaks, and improper use, handling, storage, transport, and disposal of hazardous materials. For the purposes of this analysis, *hazardous materials* are the toxic raw materials that go into production, and *hazardous waste* is the waste generated by facilities and businesses or waste material remaining on-site as a result of past activities.

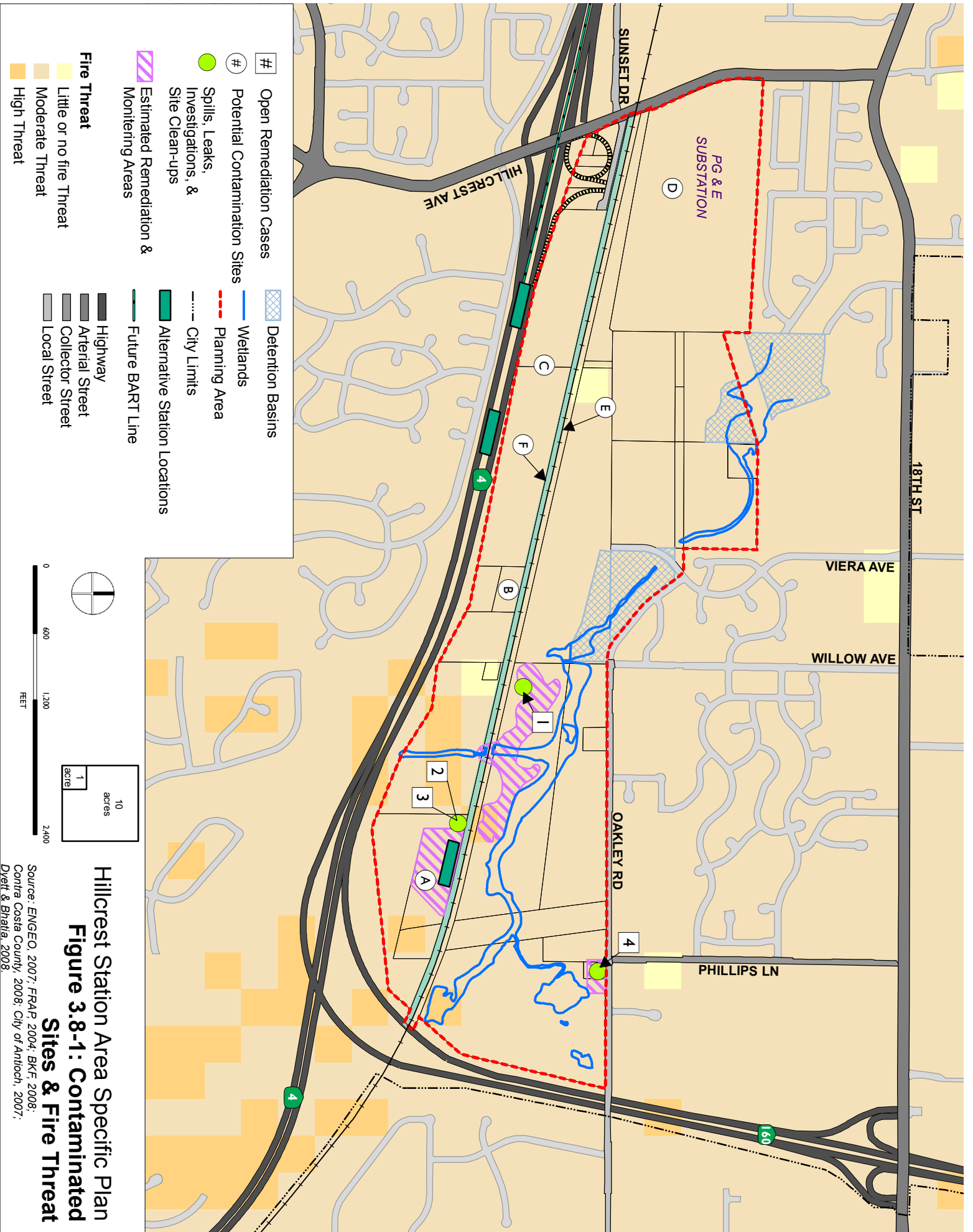
### **PHYSICAL SETTING**

#### **Hazardous Materials**

Properties in which historic or on-going activities have resulted in a reported release of hazardous materials into soil and groundwater are shown on Figure 3.8-1. It is important to note that listed properties do not necessarily represent a potential risk to human health unless otherwise specified.

#### ***Contaminated Sites***

A search of regulatory agency databases listing hazardous material sites in and near the Planning Area confirmed the findings of a Phase One Environmental Site Assessment (ESA) report published in conjunction with the proposed development of the property by Engeo Incorporated in October 2007. (Engeo Inc., 2007) The report concludes that based on site reconnaissance and records review there is evidence of significant soil and groundwater contamination in the Planning Area. Groundwater monitoring is on-going on multiple parcels. Known and potentially contaminated sites within the Planning Area are listed in table 3.8-1 and mapped on Figure 3.8-1.



**Hillcrest Station Area Specific Plan**  
**Figure 3.8-1: Contaminated Sites & Fire Threat**

**Table 3.8-1 Contaminated Sites**

<i>Open Remediation Case Sites</i>	<i>Potential Contamination Sites</i>
1 - Former Hickson-Kerley (FKP) Property	A - PDQ Products
2 - Chevron Old Valley Pipeline	B - Esver Property
3 - TAOC New Love Pump Station Site	C - Former Orchards
4 - PG&E Oakley Metering Station	D - PG&E Substation
	E - Railroad Right-of-Way
	F - Petroleum Pipeline Alignments

Source: Engeo, 2008.

*1. Former Hickson-Kerley (FKP) Property (Spills, Leaks, Investigations and Clean-ups, SLIC)*

The FKP site is 153 acres of mostly undeveloped land. An agricultural chemical/fertilizer and Zinkite manufacturing facility was operated on seven acres (APN: 052-051-034) between 1962 and 1995. The site included a pond which received stormwater runoff from the manufacturing plant. The buildings were demolished when manufacturing ceased. The tanks and piping were removed in 1996. After demolition, between 1996 and 1999, extensive site characterization, interim soil remediation, and groundwater investigation activities were conducted under the oversight of the Contra Costa County Health Services Development and the California Regional Water Quality Control Board (RWQCB).

Groundwater monitoring wells and extraction wells were installed in 1999 and 2000. The extraction wells discharge directly to the Delta Diablo Sanitation District under Special Discharge Permit SDP-0606-778. Groundwater monitoring and extraction continues to date. The extraction system has been shown to be effective in the mass reduction of ammonia, sulfates, nitrates, and manganese. The property owner requested discontinuance of the Groundwater Monitoring and Reporting Program in March 2005; however, the RWQCB has required continued monitoring and extraction.

*2. Chevron Old Valley Pipeline (OVP) (SLIC)*

Six active or former petroleum pipelines are located within and parallel to the Union Pacific Railroad right-of-way (UP ROW). One of these pipelines is ChevronTexaco's predecessor pipeline, commonly referred to as the Old Valley Pipeline (OVP) that transported heavy petroleum (crude oil and Bunker C fuel oil). Soil and groundwater investigations on the FKP property revealed the presence of petroleum-based products in the soil and groundwater attributable to releases from the pipelines. Numerous investigations have been conducted starting in 1995, including soil borings and the installation of groundwater monitoring wells. The case is under the oversight of the RWQCB. Groundwater monitoring was conducted intermittently between 1995 and 2001, and quarterly monitoring and sampling began in February 2002. Groundwater monitoring was reduced to semi-annual events starting in February 2007, and a revised monitoring and reporting plan for the site was subsequently issued by RWQCB.

Chevron is currently conducting additional investigative work to delineate the western extent of the petroleum hydrocarbon plume. Chevron will be preparing a health risk assessment and a soil/groundwater management plan to address future development on and near the site. Chevron

has acknowledged responsibility for the noted contamination and associated regulatory compliance.

### *3. TAOC New Love Pump Station Site*

The Tidewater Associated Oil Company (TAOC) New Love Pump Station was used as a booster/heater station to heat crude oil for transport from the San Joaquin Valley to refineries in the San Francisco Bay Area. A 1916 topographic map indicates that the pump station was constructed between 1908 and 1916. The pump station operated through the 1960s and was decommissioned sometime during the 1970s. The pump station equipment consisted of pumps, heaters, boilers, aboveground storage tanks (ASTs) and associated piping, repair/maintenance shops, and cottages. The ASTs consisted of one 10,000-barrel tank, one approximately 15,000-barrel tank, two 30,000-barrel tanks, and one 55,000-barrel tank. A valve manifold connected the TAOC pipelines to the boiler/pump house and ASTs. Historical site drawings and aerial photographs show a sump area across the Union Pacific Railroad right-of-way that appears to have served as wastewater storage or discharge. This historic sump is adjacent to a seasonal creek on parcel APN 052-051-034.

Chevron commissioned 22 soil borings (SB-1 through SB-29) at the TAOC New Love Pump Station in January 2008. The investigation was conducted under the oversight of the RWQCB. Detectable concentrations of petroleum hydrocarbons were reported in 33 of the 51 soil samples analyzed. Concentrations of TPH were also detected in nine groundwater samples submitted from 11 borings.

Chevron is currently conducting an additional investigation to further evaluate the extent of groundwater impacts. The RWQCB has not required further assessment of the extent of soil impacts. Chevron will be preparing a health risk assessment and a soil management plan to address future grading and development. Chevron has acknowledged responsibility for the noted contamination and associated regulatory compliance.

### *4. PG&E Oakley Metering Station (SLIC)*

The former 0.69-acre PG&E facility is located near the intersection of Oakley Road and Phillips Lane (APN: 052-051-035). PG&E used the site during the 1970s as a metering station for natural gas being transported by pipeline to nearby gas processing facilities. In 1991, soils and groundwater impacted with petroleum hydrocarbons and PCBs were detected.

Extensive site characterization and remedial efforts have been conducted under the oversight of the RWQCB. Groundwater extraction wells and vapor extraction wells were installed on the site. Separate-phase hydrocarbon removal was initiated in August 1993 in selected wells using an in-well product removal system, passive product recover devices, and manual bailing. In 1997, a groundwater extraction and treatment system (GWETS) and a soil vapor extraction system (SVE) were installed to address the subsurface contamination.

Groundwater monitoring continues, including sampling conducted in March 2008 and July 2008. Residual groundwater impacts were found to be limited in extent and generally confined off-site to the north of the PG&E-owned parcel. A Remedial Process Optimization (RPO) report was submitted in April 2008. Three key findings from the RPO report were recommended: 1) optimize the GWETS, 2) formally shut down the SVE, and 3) conduct an air-sparging pilot test. In August 2008, RWQCB requested a work plan from PG&E due by October 30, 2008. The work plan will

include an air sparging pilot study and evaluation of soil vapor for additional evaluation of the formal SVE shut-down; additional lateral and vertical delineation of the contaminant plume; and an evaluation of the effectiveness of wells with submerged well screens.

No human health risks have been identified in association with the soil and groundwater impacts in this area. Groundwater monitoring and remediation will be continued until remedial objectives have been achieved. PG&E has acknowledged responsibility for the noted contamination and associated regulatory compliance.

### ***Contamination Potential on Other Sites***

#### ***A. PDQ Products***

Until January 2008, this facility had been processing primarily scrap metal for resale for the last 20 years (APN: 052-052-002). The primary operations included processing and packaging of aluminum, aluminum oxide, and zinc. The operations do not involve hazardous materials, but the facility inventory listed compressed welding gas, one above ground, 500-gallon diesel storage tank, and minor used motor oil. Before PDQ Products was located here, another commercial/industrial activity had large above-ground oil storage tanks on site, and other previous uses may have impacted the soils or groundwater. However, no references to soil or groundwater impacts were noted in the Contra Costa County Health Services files. A subsurface soil and groundwater assessment should be performed on this parcel to evaluate for the presence of petroleum hydrocarbon, polycyclic aromatic hydrocarbons (PAHs), and metals.

#### ***B. Esver Property***

The Esver property, APN 052-030-015, is currently developed with a residence and several out-structures. Based on a review of historical topographic maps and aerial photographs, the parcel has consisted of a residence since the early 1960s. The parcel is shown as undeveloped prior to the 1960s. The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the current or past use of the Esver parcel. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge associated with the parcel. Based on the findings of this assessment, no Recognized Environmental Conditions (RECs) and no historical RECs were identified for the parcel.

#### ***C. Former Orchard***

More than 100 acres of the 268 acres evaluated in the Phase One ESA were cultivated as orchard. A previous agrichemical assessment of parcels 051-170-003 and 051-170-052 found no evidence of environmental impacts associated with agricultural uses. The Phase One ESA indicates that other similar agriculture uses have not significantly impacted the soils and groundwater. However, if sensitive land uses, such as residential development, are planned, an agrichemical impact assessment should be considered. The assessment should include analyzing near-surface soil samples for organochlorine pesticides, arsenic, and lead.

#### ***D. PG&E Substation***

The Hillcrest Avenue Yard and Substation in the northwest corner of the Planning Area has been in place since the 1950s. This site is not currently listed as contaminated, but it is feasible that the site has soil and/or groundwater impacted with petroleum hydrocarbons and PCBs. If sensitive

land uses, such as residential development are planned for the area abutting the PG&E property, a limited soil and groundwater sampling program should be undertaken to determine the presence of hydrocarbons and PCBs.

#### *E. Railroad Right-of-Way*

The soil surrounding the Union Pacific Railroad ROW may be impacted with metals, petroleum hydrocarbons, or other contaminants. If sensitive land uses, such as residential development, are planned for the area proximate to the railway alignment, or if significant earth movement is to occur within the right-of-way, a near-surface soil sampling program should be considered to evaluate for metals, PAHs, and petroleum hydrocarbons.

#### *F. Petroleum Pipeline Alignments*

Former and active petroleum pipeline easements exist throughout the Planning Area. To date, soil and groundwater investigations associated with the petroleum pipelines have been limited to the area around the FKP property. Given the number and length of the pipeline easements within the Planning Area, it is conceivable that other undetected areas of contaminated soil and/or groundwater may exist along the alignment. If sensitive land uses, such as residential development, are planned for the area proximate to the pipelines, the Phase One ESA recommends a soil and groundwater subsurface assessment to evaluate for the presence of petroleum hydrocarbons, BTEX (benzene, toluene, ethylbenzene, and xylenes), and PAHs.

#### *Outside Planning Area*

Outside the Planning Area, a number of sites have been identified as having existing or prior use of hazardous materials. These sites have been identified on a variety of databases, including, but not limited to, the California EPA Geotracker database, US EPA Envirofacts Data Warehouse, Cortese Hazardous Waste and Substances Sites List, Leaking Underground Storage Tank Incident Reports, Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program's EnviroStor databases. The sites are primarily registered, historic, and leaking underground fuel tanks. There are also recycling facilities, former agricultural sites, power plants, and other industrial facilities that handle small amounts of hazardous materials. These offsite facilities are not expected to affect the Planning Area and are not mapped on Figure 3.8-1.

#### ***Hazardous Building Materials***

Based on study of an aerial photograph from 2004, there are approximately 17 structures within the Planning Area. Seven of the structures, including four at the PDQ facility, were built prior to 1972. There is a high probability that these structures were built with hazardous building components such as asbestos, lead-based paint, and/or polychlorinated biphenyls (PCBs).

#### **Urban/Wildland Fire Interface**

Based on the existing conditions of the Planning Area, the California Fire and Resource Assessment Program (FRAP) 2004 maps indicate that 95 percent of the area has a moderate fire threat. (Cal FIRE, 2007) Fire threat is determined based on the combination of potential fire behavior and expected fire frequency. Most large urbanized areas receive a moderate fire threat classification to account for fires carried by ornamental vegetation and flammable structures. Fire threat areas are mapped on Figure 3.8-1.

**Table 3.8-2 Planning Area Fire Threat**

<i>Threat Level</i>	<i>Acres</i>	<i>Percent of Area</i>
Little to no	5	1%
Moderate	355	95%
High	15	4%

Source: FRAP, 2004.

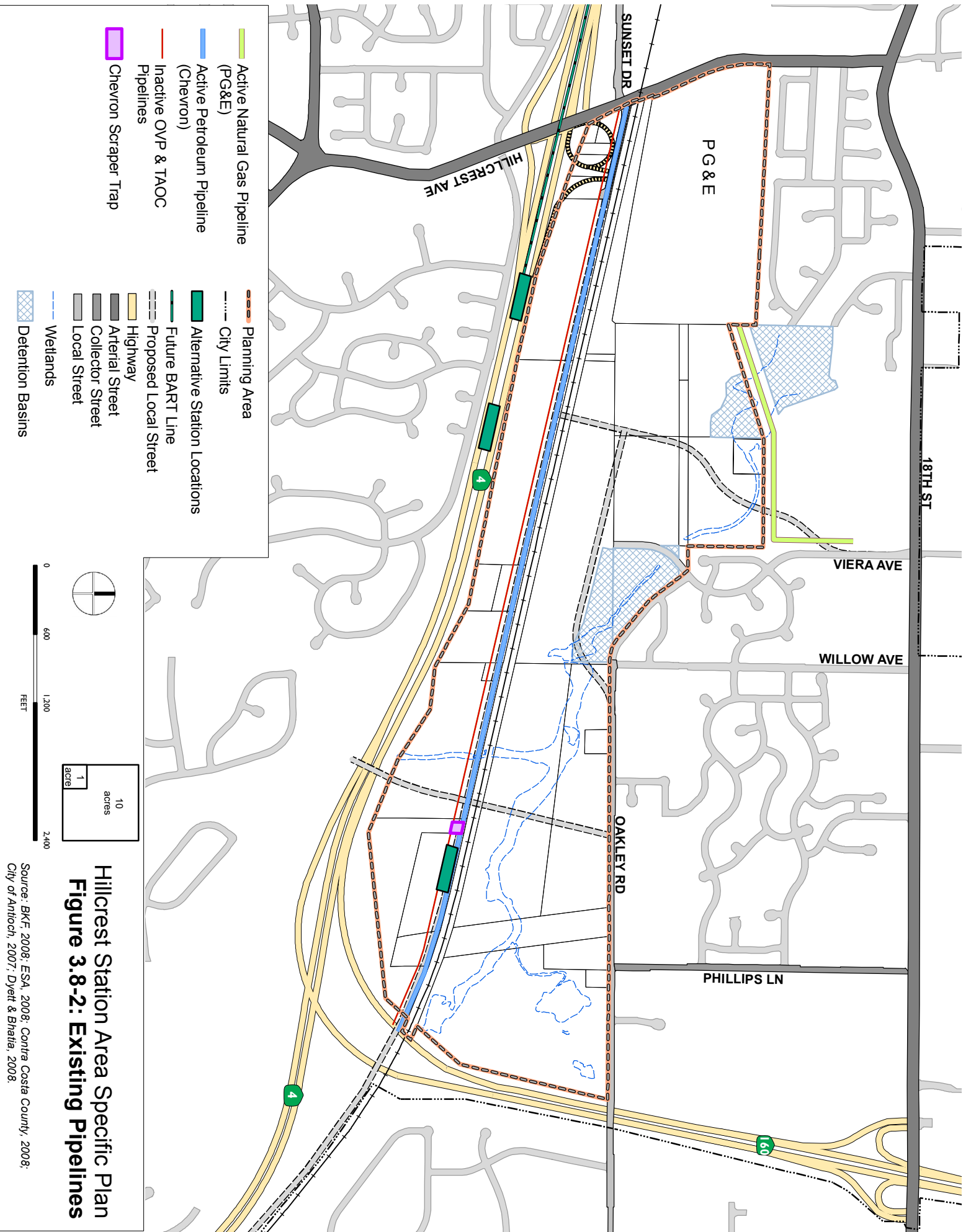
The Fire Hazard Severity Zones (FHSZ) are used by building officials to determine appropriate construction materials for new buildings and by property owners to comply with natural hazards disclosure requirements. (Cal FIRE, 2007) These maps are created using data and models describing development patterns, potential fuels over a 30-50 year time horizon, expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to new construction. The 2007 Draft FHSZ for Contra Costa County were generated based on expected land uses; therefore, the majority of the Planning Area is considered urban, with only a small portion, about 21 acres, having a moderate fire hazard. This area corresponds to the existing grassy hillsides along SR 4 in the southeast part of the Planning Area.

### **High-Pressure Pipelines**

Virtually all natural gas and two-thirds of petroleum products are transported by transmission pipelines, which make up 20 percent of the 1.8 million total miles of pipelines in the United States. Transportation of energy fuels via transmission pipelines is safer than transportation via other modes, but a significant failure can result in loss of life, personal injury, property damage, and environmental damage. There are many causes and contributors to pipeline failures, including construction errors, material defects, internal and external corrosion, operational errors, malfunctions of control systems or relief equipment, and outside force damage (e.g., by third parties during excavation). Excavation and construction-related damage to pipelines remain the leading causes of pipeline failure. (Transportation Research Board, 2004) High-pressure oil and gas pipelines are located in and near the Planning Area. Chevron operates one active pipeline within the Union Pacific right-of-way. This 8-inch steel high pressure pipeline transports refined petroleum products. PG&E operates natural gas pipelines in parcel APN: 051-170-010 to the north of the Planning Area and adjacent to Viera Avenue.

### **Emergency Response Plans**

The City of Antioch maintains an Emergency Plan addressing response to disasters, including but not limited to earthquakes, floods, fires, hazardous spills or leaks, major industrial accidents, major transportation accidents, major storms, airplane crashes, environmental response, civil unrest, and national security emergencies. The plan outlines the general authority, organization, and response actions for City staff to undertake when disasters happen. The City's plan is in compliance with existing law. The objectives of the plan are to reduce life, injury, and property losses through effective management of emergency forces. Emergency operations centers are maintained at the City's central police facility and at the City water treatment plant. (City of Antioch, 2003)



**Hillcrest Station Area Specific Plan**  
**Figure 3.8-2: Existing Pipelines**

Source: BKF, 2008; ESA, 2008; Contra Costa County, 2008; City of Antioch, 2007; Dyett & Bhatia, 2008.



## **REGULATORY SETTING**

### **Definitions**

#### ***Hazardous Material***

A hazardous material is defined by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 California Code of Regulations 25501).

#### ***Hazardous Waste***

The DTSC defines hazardous waste as waste substances which can pose a substantial or potential hazard to human health or the environment when improperly managed. Hazardous waste possesses at least one of these four characteristics: ignitability, corrosivity, reactivity or toxicity; or it appears on special EPA lists. Household hazardous wastes include:

- Flammables include paints, dry or wet, petroleum-based products, and polishes.
- Corrosives include acids, bases, batteries, and drain clog remover.
- Toxics include poisons, pesticides, gardening chemicals, ammonia, and solvents.
- Oxidizers include pool chemicals, hydrogen peroxide, iodine, and perchlorates.

#### ***Health Hazard***

Under OSHA standard 1910.120, a health hazard is defined to mean “a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees.”

### **Federal Regulations**

#### ***Resource Conservation and Recovery Act***

The Resource Conservation and Recovery Act (RCRA) enables EPA to administer a regulatory program that extends from the manufacture of hazardous materials to their disposal, thus regulating the generation, transport, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation.

#### ***Comprehensive Environmental Response, Compensation, and Liability Act***

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA 1980), also known as Superfund, was passed to facilitate the cleanup of the nation’s toxic waste sites. In 1986, Superfund was amended by the Superfund Amendment and Reauthorization Act Title III (community right-to-know laws). Title III states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the cleanup, even if the material was dumped illegally when the property was under different ownership. Under CERCLA, defense against contamination liability was usually established by conducting Phase I, II and III environmental site assessments (ESA). In 2002, the Small Business Liability Relief and Revitalization Act (“Brownfield Law”) was enacted which amends and clarifies liability under CERCLA and provides grant funding for the cleanup of brownfield sites. The law requires that to

have defense against contamination liability one must conduct an “All Appropriate Inquiry” (AAI) prior to property acquisition in accordance with standards established by the EPA.

***Title 49 of the Code of Federal Regulations (CFR 49)***

Title 49 of the Code of Federal Regulations (CFR 49) contains lists of more than 2,400 hazardous materials and regulates the transport of hazardous materials. The U.S. Department of Transportation (DOT) has developed regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. The U.S. Postal Service (USPS) has developed additional regulations for the transport of hazardous materials by mail. US EPA has also promulgated regulations for the transport of hazardous wastes. These more stringent requirements include tracking shipments with manifests to ensure that wastes are delivered to their intended destinations.

***Occupational Health and Safety Administration (OSHA)***

The Occupational Health and Safety Administration (OSHA) published standard 1910.120, addressing dangers that hazardous materials pose in the workplace. The standard requires that employers evaluate the potential health hazard that hazardous materials pose in the workplace and communicate information concerning hazards and appropriate protective measures to employees.

***Pipeline Inspection, Protection, Enforcement and Safety Act of 2006***

The Department of Transportation, Pipeline and Hazardous Materials Safety Administration regulates the operation and maintenance of all pipelines.

**State Regulations**

California regulations are equal to or more stringent than federal regulations. EPA has granted the State of California primary oversight responsibility to administer and enforce hazardous waste management programs. State regulations require planning and management to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment.

***Hazardous Materials Release Response Plans and Inventory Act of 1985***

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored, to prepare an emergency response plan, and to train employees to use the materials safely.

***Hazardous Waste Control Act***

The Hazardous Waste Control Act created the state hazardous waste management program, which is similar to, but more stringent than, the federal Resource Conservation and Recovery Act program. The act is implemented by regulations contained in Title 26 of the California Code of Regulations, which describes the following required aspects for the proper management of hazardous waste:

- Identification and classification;

- Generation and transport;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of them. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

### ***California Department of Toxic Substance Control***

The California Department of Toxic Substance Control (DTSC), an agency of the California Environmental Protection Agency (CalEPA), regulates hazardous waste in California primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. DTSC is directly responsible for administering the “Unified Program,” which consolidates and coordinates the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs and is implemented at the local government level by Certified Unified Program Agencies (CUPA).

State requirements assign “cradle-to-grave” responsibility for hazardous waste to hazardous waste generators. Anyone who creates a hazardous waste is considered a hazardous waste generator. Generators must ensure that their waste is disposed of properly, and legal requirements dictate the disposal requirements for many waste streams (e.g., banning many types of hazardous wastes from landfills). All hazardous waste generators must certify that, at a minimum, they make a good faith effort to minimize their waste and select the best waste management method available.

### ***Polychlorinated Biphenyls (PCBs)***

DTSC has classified PCBs as a hazardous waste when concentrations exceed 5 parts per million (ppm) in liquids or when a standard extract of a non-liquid exceeds 5 ppm. Electrical transformers and fluorescent light ballasts may contain PCBs, and if so, they are regulated as hazardous waste and must be transported and disposed of as hazardous waste. Ballasts manufactured since 1978, in general, do not contain PCBs and are required to have a label stating that PCBs are not present.

### ***State of California Water Resources Control Board***

The State of California Water Resources Control Board (SWRCB) also regulates the handling, storage, and disposal of hazardous substances in construction projects. Permits and/or other action by the SWRCB may be required if contamination of water or soils occurs during the construction of the proposed project.

### ***Emergency Services Act***

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

### ***Other State Laws, Regulations, and Programs***

Other agencies and various other state regulations have been enacted that affect hazardous waste management, including:

- The California Highway Patrol, Caltrans, and DTSC play key roles in enforcing hazardous materials transportation requirements.
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), which requires labeling of substances known or suspected by the state to cause cancer; and
- California Government Code Section 65962.5, which requires the Office of Permit Assistance to compile a list of possible contaminated sites in the state.
- California Accidental Release Prevention Program Health and Safety Code Section 25531-25543.3; the California Accidental Release Prevention (CalARP) Program is a merging of the federal and state programs for the prevention of accidental release of regulated toxic and flammable substances.

### ***California Division of Occupational Safety and Health***

The California Division of Occupational Safety and Health (Cal OSHA) and the federal Occupational Safety and Health Administration are the agencies responsible for assuring worker safety in the workplace. Cal OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. At sites known to be contaminated, a Site Safety Plan must be prepared and submitted and approved by Cal OSHA to protect workers. The Site Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

### ***Asbestos***

Cal OSHA and Bay Area Air Quality Management District (BAAQMD) regulate asbestos as a hazardous air pollutant and as a potential worker safety hazard. Cal OSHA regulations restrict asbestos emissions from demolition and renovation activities, and specify safe work practices to minimize the potential release of asbestos fibers. These regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential to release asbestos fibers; and require notice be given to federal and local government agencies before beginning renovation or demolition that could disturb asbestos. California requires the licensing of contractors who conduct asbestos abatement activities.

### *Lead*

Cal OSHA standards establish a maximum safe exposure level for types of construction work that may result in exposure to lead, including demolition of structures with materials containing lead; removal or encapsulation of materials containing lead; and new construction, alteration, repair, and renovation of structures with materials containing lead. Inspection, testing, and removal of lead-containing building materials are to be performed by state-certified consultants and contractors who are required to comply with applicable health and safety and hazardous materials regulations. Typically, building materials with lead-based paint are not considered hazardous waste unless the paint is chemically or physically removed from the building debris.

### ***Fire Regulations***

The “Bates” bill, Government Code Section 51175, was prompted by the devastating Oakland Hills Fire of 1991. This mid-1990s legislation calls for the CAL FIRE Director to evaluate fire hazard severity in local responsibility area and to make a recommendation to the local jurisdiction where very high Fire Hazard Severity Zones exist. The Government Code then provides direction for the local jurisdiction to take appropriate action.

Government Code Sections 51175-51189, California Code of Regulations (CCR), Title 24, and the Public Resources Code Sections 4290 and 4291 contain a variety of requirements related to building construction, defensible space, and fire access in fire hazard severity zones.

### ***California Pipeline Safety Act (CAPSA)***

High-pressure pipelines must be operated and maintained in accordance to the regulations within the Pipeline Safety Act. These regulations require a minimum clearance of 12 inches between petroleum pipelines and other crosslines that intersect at a 90 degree angle. If the intersection angle is less than 90 degrees, the minimum clearance must be at least 24 inches. CAPSA Section 51014.6 provides that the pipeline and easement must be maintained clear of obstructions so that aerial observation can be conducted. No person, other than the pipeline operator, is allowed to build a structure, fence, wall or obstruction adjacent to any pipeline easement which would prevent complete and unimpaired surface access to the easement. In addition, no shrubbery or shielding is allowed on the pipeline easement which would impair aerial observation of the pipeline easement. (Transportation Research Board, 2004)

### **Regional Regulations**

#### ***California Regional Water Quality Control Board***

In coordination with the SWRCB, the Regional Water Quality Control Board (RWQCB) adopts and implements water quality control plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems.

#### ***Contra Costa County Health Services***

The Contra Costa County Health Services Department, Hazardous Materials Program (CCHSHM), is the local Certified Unified Program Agencies (CUPA). A local CUPA is responsible for administering/overseeing compliance with the following programs, as required by state and federal regulations:

- Hazardous Materials Release Response Plans and Inventories (Business Plans) – The Contra Costa County Hazardous Materials Area Plan was revised in December 2005.
- California Accidental Release Prevention (CalARP) Program
- Underground Storage Tank Program (UST)
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control and Countermeasure (SPCC) Plans (AST)
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements

Businesses, such as photographic processing, chrome plating or service stations, which generate small hazardous waste or require underground storage of hazardous materials, require a permit from the Contra Costa County Health Services.

#### ***Contra Costa County Industrial Safety Ordinance (ISO)***

This County ordinance expands on the California Accidental Release Prevention (CalARP) Program for facilities meeting the following:

- The facility is within an unincorporated area of the County
- The facility is either a petroleum refinery or chemical plant
- The facility is required to submit a Risk Management Plan (RMP) to the U.S. EPA and Contra Costa County Health Service (CCHS)
- The facility has at least one Program 3 process

The Hillcrest Station Planning Area has no facilities which meet any of these criteria.

#### ***Delta Diablo Sanitation District***

Delta Diablo Sanitation District (DDSD) manages the Delta Household Hazardous Waste Collection Facility, which would be the collection location for East Contra County including the Planning Area.

#### ***Contra Costa County Fire Protection District***

The Contra Costa County Fire Protection District (CCCFPD) has adopted the 2007 California Fire Code with amendments and the 2007 California Building Code, along with nationally recognized standards such as NFPA.

#### **Local Regulations: Antioch Municipal Code**

##### ***Section 8-10.01 Adoption of the Uniform Code for the Abatement of Dangerous Buildings***

The City of Antioch has adopted the “Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition,” published by the International Conference of Building Officials, as adopted and amended by the California Building Standards Commission in the California Building Standards Code; Title 24 of the California Code of Regulations.

***Zoning Ordinance Section 9-5.3826 Hazardous Waste Facility***

This section of the zoning ordinance defines a hazardous waste facility as a land use type and the requirements that the City has for permitting, criteria, and standards for such facilities.

**Antioch General Plan**

***8.6.2 Solid Waste Management Policies***

c. Provide and promote opportunities to reduce solid waste generation at home and in businesses and public facilities, making possible the safe disposal of hazardous materials.

***11.7.2 Hazardous Materials Policies***

a. Promote the reduction, recycling, and safe disposal of household hazardous wastes through public education and awareness.

b. Implement the provisions of the Contra Costa County Hazardous Waste Management Plan, including, but not limited to, provisions for pretreatment and disposal, storage, handling, and emergency response.

c. Require businesses generating hazardous wastes to pay necessary costs for local implementation of programs specified in the Contra Costa County Hazardous Waste Management Plan, as well as costs associated with emergency response services for a hazardous materials release.

d. Require new and expanding hazardous materials users to reduce the amount of hazardous waste generated.

- Require submittal of a waste minimization plan with any use permit application for a new large facility or expansion of an existing large facility creating additional hazardous wastes.
- Encourage existing large facilities to prepare waste minimization plans.
- Require new large hazardous waste-producing facilities to provide onsite treatment or recycling of wastes generated to the maximum extent feasible. This will minimize the amount of hazardous waste being transferred offsite for treatment or disposal.
- Require all hazardous waste generators to recycle wastes to the maximum extent feasible.

e. Encourage reductions in the amount of hazardous wastes being generated within Antioch through incentives and other methods.

- Provide educational and technical assistance to all hazardous materials users and waste generators to aid in their source reduction efforts (e.g., substitution of less hazardous products and modifications to operating procedures). These services will primarily be provided by through the County.
- Provide public recognition to hazardous materials users and waste generators who meet or exceed source reduction goals.

- Provide penalties for facilities failing to meet minimization objectives, and place funds from these penalties in a revolving account for use in educational and emergency services efforts.

f. Locate hazardous materials facilities in areas reserved for compatible uses.

- Permit large hazardous waste users and processors only in areas designated for “heavy industrial” use. Smaller generators and medical facilities (e.g., service stations) may be sited in other industrial and commercial areas, consistent with applicable General Plan policies and zoning regulations. The compatibility of small facilities will be determined by the types and amounts of hazardous materials involved and the nature of the surrounding area.
- Require use permits for all operations handling hazardous materials to ensure compatibility with the surrounding area.

g. Maintain adequate siting criteria to determine appropriate locations for hazardous material facilities.

- Maintain a “Hazardous Materials” section in the Antioch zoning ordinance to define siting criteria to be used for various types of facilities, requirements for application submittal, and required findings for approval.

h. Locate hazardous materials facilities at a sufficient distance from populated areas to reduce potential health and safety impacts.

- Require risk assessment studies to determine potential health impacts for all proposed hazardous waste processors and large generators as part of permit application submittals.
- Require a 2,000-foot buffer zone around all new hazardous waste processors within which no residences, schools, hospitals, or other immobile populations, existing proposed, or otherwise, would be located, unless evidence is presented in the risk assessment study that a larger buffer is needed.

i. Permit hazardous waste processors based on their relative need in conjunction with the “fair share” approach to facilities siting contained in the Contra Costa County Hazardous Waste Management Plan.

- Require a needs assessment as part of use permit applications for a waste processor, demonstrating the proposed facility will serve a need that cannot be better met in any other manner (e.g., source reduction) or at any other location.
- Discourage proposed hazardous waste facilities processing materials similar to those treated or stored at existing facilities within the County, unless the need for the new facility can be adequately demonstrated.

j. Carefully review and require appropriate mitigation for pipelines and other channels for hazardous materials.

k. Ensure adequate provision is made for emergency response to all crises involving hazardous materials.

- Require emergency response plans for all hazardous waste processors and large generators to be submitted as part of use permit applications.



- Require training of employees of all facilities in emergency procedures, and that they be acquainted with the properties and health effects of the hazardous materials involved in the facilities' operations.
- l. Promote the safest possible transport of hazardous materials through Antioch.
- Maintain formally designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
  - Restrict all processors and new large generators to access only along established hazardous material carrier routes.
  - Locate hazardous waste processors as near to waste generators as possible, in order to minimize the need for transport.
  - Require transportation analyses for all new large generators and processors to determine the effect of each facility on Antioch's transportation system, and assess and provide mitigation for potential safety impacts associated with hazardous materials transported to and from the site.
  - Prohibit the parking of vehicles transporting hazardous materials on City streets.
  - Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the greatest extent possible.
- m. Require that hazardous materials facilities within Antioch operate in a safe manner.
- As a condition of approval for new hazardous materials facilities, require access for vehicles carrying hazardous materials to be restricted to hazardous materials carrier routes.
  - Undertake inspections of hazardous materials facilities as needed (e.g., when an unauthorized discharge into City sewers is made), and assist Contra Costa Health Services in their inspections as requested.
  - Require that water, sewer, and emergency services be available consistent with the level of service standards set forth in the Growth Management Element. Work with LAFCO to require that that sites for proposed hazardous materials facilities annex into the City before necessary municipal services are provided.
- n. Require appropriate design features be incorporated into each facility's layout to increase safety and minimize potential adverse effects on public health.
- Require the provision of spill containment facilities and monitoring devices in all facilities.
  - Ensure that pipelines and other hazardous waste channels are properly designed to minimize leakage and require above ground pipelines to be surrounded by spill containment basins.
  - Give priority to underground storage of hazardous materials, unless this method is shown to be infeasible.
  - Require hazardous materials storage areas to be located as far from existing pipelines and electrical transmission lines as possible.

o. Maintain a high priority on clean-up of the GBF landfill, Hickmott Cannery, and other contaminated sites.

- Maintain communication with the Department of Toxic Substances Control, Contra Costa Health Services, and other responsible agencies to complete clean-up of the GBF landfill and Hickmott Cannery sites as rapidly and thoroughly as possible.
- Participate in task forces with County and State agencies for remediation of the GBF landfill and Hickmott Cannery sites.

p. Require that new large hazardous materials users and/or processors maintain communication lines within the Communication and Information Panel. Encourage existing large users and processors to form similar panels.

q. Facilitate public awareness of hazardous materials by preparing and distributing in conjunction with Contra Costa Health Services public information regarding uniform symbols used to identify hazardous wastes, Antioch's household hazardous waste collection programs, and hazardous waste source reduction programs.

r. Monitor the progress and success of hazardous materials efforts, and modify these efforts as needed.

s. Maintain data regarding the use and generation of hazardous materials within Antioch and its Planning Area.

### ***8.10.2 Fire Protection Policies***

a. Work with the Contra Costa County Fire Protection District to provide high quality fire protection services to area residents and businesses. The City's role should include, but not be limited to:

- Determining the appropriateness of station location sites;
- Enforcement of building codes to reduce fire hazards;
- Collection of mitigation fees established by the fire district to construct needed additional stations within the Antioch Planning Area.
- Support the District in providing funding for personnel costs to staff stations within the City;
- Support the District in establishing fees that are adequate to mitigate the impacts of new development and income to support operation of new stations whose construction is financed with development fees; and
- Requiring reasonable reservation of appropriate sites for new fire stations as part of new development.

b. In cooperation with the Contra Costa County Fire Protection District, conduct an annual assessment of the adequacy of facilities and services serving Antioch, personnel and staffing needs, and capital needs, based on anticipated growth and the level of service standard set forth in the Growth Management Element. This assessment should be undertaken as part of the annual

review of proposed capital projects required by the California Government code (see Chapter 12, Implementation, Section 12.4b).

c. Provide the Contra Costa County Fire Protection District with timely information on development proposals and projected levels of future growth so that it can maintain appropriate long-term master plans and refine the delivery of service and facilities to maintain the performance standards set forth in the Growth Management Element.

d. Involve the Fire Protection District in the development review process by referring development requests to the Fire District for review and comment.

#### ***11.8.2 Disaster Response Policies***

a. Maintain and update the City's emergency Response Plan, as required by State law.

b. Disseminate disaster preparedness information to local residents and businesses, describing how emergency response will be coordinated, how evacuation, if needed, will proceed, and what residents and businesses can do to prepare for emergency situations. Provide information to the public about:

- Environmental hazards existing in Antioch;
- The costs of doing nothing to mitigate these hazards;
- Why governmental agencies can not eliminate all hazards;
- What the City does to assist;
- What the City cannot do;
- What the public can do to protect itself.

c. Maintain an effective and properly equipped emergency operations center, along with trained personnel, for receiving emergency calls, providing initial response and key support to major incidents, meeting the demands of automatic and mutual aid programs, and maintaining emergency incident statistical data.

d. Maintain ongoing emergency response coordination with surrounding jurisdictions.

e. Encourage private businesses and industrial uses to be self-sufficient in an emergency by:

- Maintaining a fire control plan, including onsite fire fighting capability and volunteer response teams to respond to and extinguish small fires; and
- Identifying personnel who are capable and certified in first aid and CPR.

f. Regularly review and clarify emergency evacuation plans for dam failure, fire, and hazardous materials releases.

### **Performance Standard**

3.5.2.2 Prior to approval of discretionary development projects, require written verification from the Contra Costa County Fire Protection District that a five minute response time (including three minute running time) can be maintained for 80 percent of emergency fire, medical, and hazardous materials calls on a citywide response area basis.

## **IMPACT ANALYSIS**

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### **SIGNIFICANCE CRITERIA**

Implementation of the proposed Plan would have a potentially significant adverse impact if the Plan would:

#### **Hazardous Materials**

- 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; or
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

#### **Fire Hazards**

- 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.

## **METHODOLOGY AND ASSUMPTIONS**

### **Hazardous Materials Environmental Database Review**

An electronic file search and review of existing Environmental Site Assessment reports was used to identify any reported hazardous materials spills and releases within the Planning Area. Environmental databases reviewed include EnviroStor, Cal-Sites, GeoTracker, and Cortese databases.

The EnviroStor database, maintained by the DTSC, provides information for properties regulated by DTSC's Site Mitigation and Brownfields Reuse Program where extensive investigation and/or cleanup actions are planned or have been completed. The Cal-Sites database, also maintained by DTSC, contains information regarding both known and potential hazardous substance sites. The GeoTracker database, maintained by the SWRCB, provides regulatory data regarding sites with leaking underground fuel tanks, fuel pipelines, and public drinking water supplies. The Cortese

database, maintained by the Cal EPA, identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release, and all solid waste disposal facilities from which there is known migration. It is not uncommon for sites with reported hazardous material spills and/or releases to be listed on more than one database.

Engeo Incorporated performed a Phase One Environmental Sites Assessment of the County Crossing properties in general conformance with the scope and limitations of ASTM E 1527-05 “Standard Practice for Environmental Sites Assessments” and US EPA “Standards and Practice for All Appropriate Inquiries,” 40 CFR Part 312. The Phase One ESA contains records reviews and site reconnaissance data for 268 acres within the Planning Area. The records review included a survey of available preliminary title reports as well as historical records sources. The Phase One ESA includes materials from the environmental databases listed above plus a review of permits from the City of Antioch Building and Planning Departments and Contra Costa County Health Services. The Phase One ESA did not include an asbestos or lead-based paint survey.

### **Urban/Wildland Fire Interface**

The California Department of Forestry and Fire Protection (CDF) is directed by State law to map zones of significant fire hazards, referred to as Fire Hazard Severity Zones (FHSZ). CAL FIRE’s Fire and Resource Assessment Program (FRAP) creates the maps using data and models describing development patterns, potential fuels over a 30-50 year time horizon, expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to new construction. The FHSZ define the application of various mitigation strategies to reduce risk associated with wildland fires. The FRAP maps are currently being updated. The September 2007 draft map was reviewed for this analysis.

## **SUMMARY OF IMPACTS**

### ***Hazardous Materials and Waste***

Soil and groundwater remediation is on-going on various properties within the Planning Area and the concentrations of contaminants in certain areas are above regulatory thresholds. Disturbance of previously contaminated areas through grading or excavation operations and the demolition of structures built with hazardous materials could expose the public to health hazards from physical contact with hazardous materials including potential airborne or waterborne hazards. Full compliance with existing regulations and proposed Specific Plan policies would ensure that impacts of hazardous materials are less than significant.

Increases in hazardous material use or generation of hazardous waste associated with industrial or commercial use, as well as household hazardous material use, would likely occur with residential and job growth within the Planning Area. However, future land uses will be subject to hazardous materials use, transport, and disposal regulations, and therefore, impacts would be less than significant.

There are no existing or proposed schools within one-quarter mile of the Planning Area, therefore the potential hazardous materials impacts on schools is not evaluated.

The City of Antioch requires that large hazardous waste users and processors, which could contribute to significant accidental hazardous materials release conditions, be sited in Heavy Industrial land use districts. In addition, new hazardous waste processors cannot be sited within 2,000 feet of sensitive receptors including residential uses. Therefore, no new large hazardous waste users and processors are anticipated within the Planning Area and the impact of accidental hazardous materials release conditions is not evaluated.

### ***High-Pressure Pipelines***

Development in the Planning Area will occur in the vicinity of high-pressure pipelines. Proposed Specific Plan policies would ensure that impacts from pipelines incidents are less than significant.

### ***Urban/Wildland Fire Hazards***

With development of the Specific Plan Area the fire risk is expected to remain at a moderate level, however, compliance with General Plan policies and proposed Specific Plan policies related to the fire protection and the establishment of a new fire station in or near the Planning Area would ensure that fire hazard impacts are less than significant.

### ***Emergency Response***

There is no indication that the proposed Specific Plan or pursuant development would interfere with the implementation of the Antioch Emergency Plan. Improving access in and around the Planning Area would allow adequate emergency response capabilities to serve new development, and have an overall benefit for emergency response by providing new circulation routes..

## **IMPACTS AND MITIGATIONS**

### ***3.8-1 Implementation of the Hillcrest Station Area Specific Plan could expose construction workers and/or the public to soil and groundwater impacted with petroleum-products, agriculture chemicals, or other hazardous materials. (Less than Significant)***

Soil and groundwater remediation is on-going on various properties within the Planning Area and the concentrations of contaminants in certain areas are above regulatory thresholds. The following properties, shown on Figure 3.8-1, have been specifically identified as having hazardous materials:

- Former Hickson-Kerley (FKP) Property (APN: 052-051-034);
- Chevron Old Valley Pipeline;
- TAOC New Love Pump Station Site (APN: 052-051-034); and,
- PG&E Oakley Metering Station (APN: 052-051-035)

Other parcels have not been fully evaluated for potential soil and groundwater contamination at this time. These conditions could expose individuals to hazardous health conditions at or near the contaminated sites. Disturbance of contaminated soils during grading or excavation could expose construction workers and the public to the hazardous materials or hazardous vapors. Although various local, State, and federal regulations govern the proper storage, handling and transport of hazardous materials, the improper handling or storage of contaminated soil and groundwater can

further expose the public to these hazards, or potentially spread contamination through surface water runoff or air borne dust. In addition, contaminated groundwater can spread down gradient, potentially contaminating subsurface areas of surrounding properties.

If buildings are erected over contaminated materials, volatile contaminants could potentially migrate from soil and groundwater via soil gases, and enter indoor air spaces through foundation cracks, posing a potential health risk to future site workers, employees, and residents.

Furthermore, existing structures that would be demolished in the Planning Area could potentially include hazardous building materials such as asbestos, PCBs, or lead-based paint. If not properly removed and handled, these materials could pose a significant threat to human health and the environment.

Project-related impacts to human health and the environment associated with site contamination and hazardous building materials would be considered potentially significant. However, implementation of the policies included in the Antioch General Plan and the proposed project reduce the potential impacts of hazardous materials to a less than significant level for the proposed Specific Plan.

***Specific Plan Policies that Reduce Impact***

In addition to compliance with existing General Plan policies, implementation of the following proposed Specific Plan policies would reduce the impact of contaminated soils and groundwater to less than significant:

*All Parcels*

EH-37 Prior to approval of any discretionary permits for subdivisions or new construction, property owners shall work with the Contra Costa County Fire Protection District (CCCFPD), the Contra Costa County Health Services Department (CCCHSD), the California Department of Toxic Substances Control (DTSC), and/or the California Regional Water Quality Control Board (RWQCB), whichever has jurisdiction, to resolve issues related to contamination that could potentially impact future land uses in the project area.

*Parcels with Known Contamination*

EH-38 For parcels with known contamination, the lateral and vertical extent of contamination shall be determined; cleanup activities shall be undertaken per state and federal regulations; and appropriate land use restrictions implemented, as necessary, prior to the issuance of development permits on parcels with known contamination.

EH-39 As part of the project entitlement process, appropriate studies shall be conducted for each site with an open remediation case based on proposed land uses by a qualified environmental professional. The studies shall compare maximum soil, soil gas, and groundwater concentrations to relevant environmental screening levels (ESLs) and evaluate all potential exposure pathways from contaminated groundwater and soil. As required by the appropriate responsible agency, studies shall be prepared for the:

- Former Hickson-Kerley (FKP) Property (APN: 052-051-034);
- Chevron Old Valley Pipeline;

- TAOC New Love Pump Station Site (APN: 052-051-034); and,
- PG&E Oakley Metering Station (APN: 052-051-035)

EH-40 At sites with known contamination issues, a Construction Risk Management Plan (RMP) shall be prepared and approved prior to commencement of construction, to protect the health and safety of construction workers and site users adjacent to construction activities.

*Parcels with Potential Contamination*

EH-41 Soil and water contamination assessments are required to ensure public health for projects on the following properties:

- PDQ parcel (APN: 052-052-002);
- Former orchards;
- Parcels adjacent to the PG&E Substation property;
- Parcels adjacent to the railroad right-of-way;
- Parcels adjacent to active and inactive petroleum pipelines;
- Park-n-ride lot (APNs: 052-011-009, 052-011-010, 052-011-011, 052-011-015, 052-011-016); and,
- Detention basins (APN: 051-170-004, 051-170-053, 051-333-001, 052-030-022).

EH-42 If soil or groundwater contamination is identified on any parcel in the Hillcrest Station Area, the lateral and vertical extent of contamination shall be determined; cleanup activities shall be undertaken per state and federal regulations; and appropriate land use restrictions implemented, as necessary, prior to issuance of development permits.

EH-43 The City of Antioch and property owners shall contact and work with Union Pacific to ensure that planned railway improvements that disturb potentially contaminated soils do not impact nearby properties or development, or cause a public health hazard.

EH-44 Project applicants shall submit to the City a project Demolition Plan that addresses onsite and offsite chemical and physical hazards. The Demolition Plan shall contain:

- Information, to be verified by the City prior to the issuance of demolition permits for any existing structures or buildings, regarding the presence of hazardous building materials such as asbestos-containing building materials, PCBs, and lead-based paint in existing buildings proposed for demolition, additions, or alterations;
- Protocols for ensuring the safety of workers and the public during demolition or construction activities, as approved by the City. These protocols will include, but are not limited to:
  - Prior to demolition, hazardous building materials shall be removed and appropriately disposed of in accordance with all applicable guidelines, laws, and ordinances.
  - The demolition of buildings containing asbestos requires that licensed asbestos abatement contractors are retained and the Bay Area Air Quality Management



District (BAAQMD) is notified ten days prior to initiating construction and demolition activities.

- The Cal-OSHA-specified method of compliance for demolition activities involving lead-based paint including required respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training shall be required.
- Any electrical transformers and fluorescent light ballasts that do not have labels stating that they do not contain PCBs, shall be treated as hazardous waste and are subject to all hazardous waste regulations.

UD-20 Provide a continuous landscape buffer along both sides of the rail line corridor, outside of the Union Pacific and Chevron easements. The minimum width of the landscaped buffer shall be 25 feet if adjacent to a building; and 15 feet if adjacent to a street.

- Include landscaping, berming (typically 4 to 5 feet high), and at least one continuous row of trees throughout the area.
- This landscape buffer may be located within the Chevron easement if permission, encroachment permits, and maintenance agreements are obtained prior to final approval for a development project.

UD-22 Provide a continuous landscape buffer, with a minimum width of approximately 25 feet, around the southern and eastern edges of the Hillcrest PG&E Substation.

- Include landscaping and a continuous double row of trees to screen the facility from new development, SR 4, and the eBART station.
- Work with PG&E when the company decides to expand substation operations within their site, to ensure an adequate separation is retained between the substation and development.

### ***Mitigation Measures***

Compliance with the General Plan and proposed Specific Plan policies will ensure that no further mitigation measures are required to reduce the potential impact of hazardous materials to less than significant levels.

### ***3.8-2 Future land uses proposed by the Hillcrest Station Area Specific Plan could involve the transport, use, and disposal of hazardous materials. (Less than Significant)***

Future commercial, residential, and light industrial land uses under the proposed project would likely involve the use, transport, and disposal of hazardous substances including paints, polishes, petroleum-based products, household cleaning agents, solvents, gardening chemicals, pool chemicals, and ammonia. Above-ground storage tanks and underground-storage tanks could also be used.

Hazardous materials transportation, use, and disposal are subject to state and federal hazardous materials laws and regulations. Hazardous materials would be required to be transported under DOT regulations. The proposed project would be subject to hazardous materials programs and ordinances administered by the Contra Costa County Fire Protection District, the Contra Costa

County Health Services Department, and the Antioch General Plan. Businesses associated with aboveground and underground storage tanks and the generation of hazardous waste must be permitted and inspected annually by the Contra Costa Health Services Hazardous Materials Programs (CCHSHM).

Due to mandatory compliance with federal, state, and local regulations, potential impacts associated with future hazardous material use, transport, and disposal are considered less than significant for the proposed Plan.

### ***Mitigation Measures***

No mitigation measures are required.

### **3.8-3 *Implementation of the proposed Specific Plan would expose people or structures to some risk of loss, injury, or death involving high-pressure pipeline incidents. (Less than Significant)***

While there is a general recognition that pipelines pose a hazard to people, property, and the environment, the extent of the danger is not well understood. Risk is inherent in the pipeline system—it can be reduced and managed, but it cannot be eliminated. Pipeline operators are required to comprehensively assess, identify, and address the safety of pipeline segments that are located in areas where the consequences of a pipeline failure could be significant. However, these requirements may be insufficient to protect life, property, and the environment from the effects of a pipeline incident.

The City of Antioch does not regulate activities and development near high-pressure pipelines. Land use measures can reduce the risk of disturbing the pipelines by keeping human activity away from the immediate vicinity of the pipelines and by minimizing the exposure of those living and working near a transmission pipeline in the event of an incident. Transmission pipelines generally are not subject to any local land use regulation. In most instances, the width, configuration, and control of pipeline rights-of-way are established without local input. Provisions with regard to the widths of rights-of-way are often established for laying and inspecting the pipeline rather than for public safety or prevention of environmental damage. For example, a catastrophic failure of a high-pressure natural gas transmission pipeline could cause injury to people 100 feet or more away.

### ***Specific Plan Policies that Reduce Impact***

Implementation of the following proposed Plan policies will help to reduce the impact of high-pressure pipeline incidents in the Planning Area:

- EH-54 Prior to the approval of development permits, require a disposition plan for all petroleum pipelines so that required mitigations (relocation, abandonment or protection) can be determined.
- EH-55 The City of Antioch and property owners shall work with Chevron to evaluate the risk factors related to the active high-pressure petroleum product pipelines, including product transported, operating pressure, age of pipeline, and depth of cover, and to provide adequate access to the oil pipelines in the Hillcrest Station Area. If it is

determined that there is a significant risk to adjacent residential development, prepare a Risk Management Plan or comparable risk reduction action plan.

- UT-15 Develop a comprehensive map showing all existing service corridor and utility easements to ensure proper inter-agency coordination prior to issuing any grading permits. Maps should show the location and dimensions of each pipeline within the easement or right-of-way. Coordinate with:
- Chevron to map all active and abandoned petroleum product pipelines;
  - PG&E to map all active natural gas pipelines;
  - City of Antioch Public Works Department to map all stormwater pipelines;
  - Delta Diablo Sanitation District to map all sewer pipelines; and,
  - Contra Costa Water District to map all water pipelines.
- UD-20 Provide a continuous landscape buffer along both sides of the rail line corridor, outside of the Union Pacific and Chevron easements. The minimum width of the landscaped buffer shall be 25 feet if adjacent to a building; and 15 feet if adjacent to a street.
- Include landscaping, berming (typically 4 to 5 feet high), and at least one continuous row of trees throughout the area.
  - This landscape buffer may be located within the Chevron easement if permission, encroachment permits, and maintenance agreements are obtained prior to final approval for a development project.
- LU-23 Locate residential units away from railroads and freeways, to minimize impacts from noise and air emissions. Units should be at least 300 feet away from rail and freeway rights-of-way, or incorporate construction measures that mitigate noise and air emission impacts.

***Mitigation Measures***

No mitigation measures are required.

**3.8-4 *Implementation of the proposed Specific Plan would expose people or structures to some risk of loss, injury or death involving urban or wildland fires. (Less than Significant)***

The Planning Area has a moderate wildland fire threat based on existing conditions. Implementation of the proposed Specific Plan will allow the area to be almost completely urbanized. However, urban areas are also considered to have moderate levels of fire threat, primarily due to decorative vegetation. One of the primary factors contributing to the effective control of a vegetation fire is the rapid response by local fire units. In addition, all new construction must meet standards in the Uniform Fire Code.

The proposed Plan anticipates that the area with moderate level of fire hazard will be graded and developed, likely reducing the level of fire hazard. However, due to the anticipated urban nature of development, the fire threat will generally remain moderate. The Specific Plan policies support the construction of a new fire station in or near the Planning Area. Therefore, these are less than significant impacts due to wildland fires.

***Specific Plan Policies that Reduce Impact***

- UT-20 At the time of any development application, subdivision, or master plan submittal, inform the CCC Fire Protection District, and involve them in the development review process. Prior to approval of any discretionary development project in the area, require written verification from the CCC Fire Protection District that a five minute response time (including three minute running time) can be maintained for 80 percent of emergency fire, medical, and hazardous materials calls on a citywide response area basis.
- UT-21 Project sponsors are required to submit a minimum of three (3) copies of a site plan for each phase of development so that Contra Costa County Fire Protection District is able to determine the placement of fire hydrants, required fire flow, and review of access in order to ensure compliance with minimum requirements as set forth in the California Fire Code.
- UT-22 The City and project sponsors in the Planning Area shall work with the Contra Costa County Fire Protection District to provide a 1-acre building site at a location subject to approval by the Contra Costa County Fire Protection District.
- UT-23 Fire access roadways and fire hydrants shall be installed and in service prior to construction.
- UT-24 Traffic signals, which are installed or modified as part of this Specific Plan, shall have preemption devices (Opticom) installed.

***Mitigation Measures***

No mitigation measures are required.