

3.9 HAZARDS AND HAZARDOUS MATERIALS

3.9.1 INTRODUCTION

This section describes existing hazards and hazardous materials conditions at the project site and on surrounding properties, summarizes relevant regulations and policies, and analyzes the anticipated impacts of implementing the Proposed Action or any of the alternatives to the Proposed Action.

Sources of information used in this analysis include:

- Sierra Vista Specific Plan EIR prepared by the City of Roseville;
- PG&E Line 406/407 Natural Gas Pipeline Final EIR, November 2009, prepared by the California State Lands Commission (SLC);
- *EMF Frequently Asked Questions*, by Pacific Gas and Electric Company;
- *EMF Questions and Answers*, by the National Institute of Environmental Health Sciences; and
- *Short Factsheet on EMF*, by the California Department of Health Services (CDHS).

A number of Phase I Environmental Site Assessments were performed on the parcels that make up the project site prior to preparation of the Sierra Vista Specific Plan EIR; information from those Environmental Impact Assessments was also used in this section.

3.9.2 AFFECTED ENVIRONMENT

For the purposes of this analysis, the term “hazards” refers to risk associated with exposure to hazardous materials, proximity to high-voltage transmission lines, exposure to electromagnetic fields, or exposure to recycled water. Potential hazards related to toxic air contaminants are discussed in **Section 3.3, Air Quality**.

“Hazardous material” has different definitions depending on the federal or state regulatory scheme with jurisdiction over the material or the industrial operation. This EIS uses both the US Department of Transportation (DOT) definition and the California Health and Safety Code Section 25501 definition. The DOT defines hazardous materials (49 CFR 171.8) as:

- a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has been designated as hazardous under section 5103 of federal hazardous materials transportation law (49 USC. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in part 173 of subchapter C of 49 CFR Chapter I.

The California Health and Safety Code defines hazardous materials as:

- any material that, because of its quantity, concentration, or physical, chemical, or biological characteristics, poses a potential hazard to human health or safety, or to the environment. Hazardous materials include, but are not limited to hazardous substances, hazardous wastes, and any material which a handler or the administering agency has a reasonable basis for believing

that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, or contaminated, or are being stored prior to proper disposal. In California, hazardous waste is a discarded material that meets any of a list of criteria in the California Code of Regulations (CCR), including:

- The waste exhibits the characteristics of hazardous wastes identified in CCR Title 22, Division 4.5, Chapter 11, Article 3. Such characteristics include whether the material is ignitable, corrosive, reactive, or toxic.
- The waste is listed, contains a constituent that is listed, or is a mixture of hazardous waste that is listed in CCR Title 22, Division 4.5, Chapter 11.

Hazardous materials may include products such as pesticides, petroleum products, solvents, chemical intermediates, and heavy metals. Hazardous waste may include spent, discarded, spilled, or contaminated products, or wastes from certain industrial processes, as well as a mixture (e.g., soil, water, carbon, construction debris, building materials) that exhibits the characteristics of hazardous wastes. California regulates hazardous waste management under CCR Title 22, Division 4.5.

The need for and the level of remediation of soil or groundwater affected by hazardous materials at a site depend on specific site conditions, including planned site use, potential receptors, and exposure pathways. Cleanup requirements are typically evaluated on a case-by-case basis by the lead regulatory agency overseeing a site.

Activities on the project site that could expose the public to hazardous materials or wastes during project development and operation include improper handling or use of hazardous materials during the course of business; failure of storage containment systems; fire, explosion, or other emergencies; unsound disposal or treatment methods; accidents during transport; or exposure to contaminated soil or groundwater (for example, during excavation and grading).

Past and Current Conditions on the Project Site

The project site consists primarily of rolling, open annual grassland areas traversed by permanent and seasonal creeks. Most of the land area is used for grazing livestock. Built features include four large-lot single family residences, a few smaller farm structures, and high-tension electrical transmission lines. A 375-foot-wide (114-meter-wide) easement that contains multiple transmission lines extends in an east-west direction through the northern portion of the site. A 50-foot-wide (15-meter-wide) utility easement with 60 kilovolt (kV) transmission lines extends in a north-south direction through the northern portion of the site.

Hazardous Materials and Waste

The site has been used primarily for grazing, which does not typically involve the use of pesticides, herbicides, or other potentially hazardous materials. However, strawberry cultivation within two strawberry patches on Baseline Road may involve use of pesticides. Reviews of historic maps and

photographs performed as part of the Phase I Environmental Impact Assessments for the site showed that the project area was historically undeveloped grassland and dry-farmed or grazing land. No evidence was found of intense agricultural use or the presence of aboveground storage tanks or underground storage tanks (USTs), oil/water separators, or agricultural chemical mixing facilities.

Current and previous potential sources of hazardous materials within the project site include residences with septic systems, debris from past uses or dumping on the site. **Figure 1.0-3** (in **Chapter 1.0, Introduction and Statement of Purpose and Need**) shows the properties identified in the parcel-specific discussion below. The review of site conditions included in the Phase I Environmental Impact Assessments for the site identified a barn used as a motorcycle workshop, with some chemical products storage, but found no signs of spills, leaks, or odors. The Phase I Environmental Impact Assessments also noted some debris (scrap metal, old farm equipment, empty containers, tire casings, and other household-type items) scattered on the site and recommended removal of the debris prior to site development. Several areas were recommended for further testing prior to development if evidence of soil staining or other indicators were observed during site clearance. These areas include:

- Diesel or motor oil staining on soils in the vicinity of the strawberry field on the southeastern portion of the property near Baseline Road. An approximately 100-square-foot (30-square-foot) area was noted to be affected. Tractor and farm-related equipment, as well as numerous empty and partially full one-quart and 1-gallon containers of motor oil and hydraulic oil, were observed nearby.
- Minor quantities of abandoned items and dumped soil piles on APN 017-0150-009 (AKT Investments property) on the southwesterly end of the project site along Baseline Road. Most did not appear to be of an obviously hazardous nature.
- Minor amounts of domestic debris, concrete, building foundations, tire casings, automobile parts, and other debris were on APN 017-150-081 and 017-150-082 (AKT Investments property) located on Baseline Road, near its intersection with Watt Avenue. No unusual stains were observed. One irrigation water supply well and two water pressure holding tanks were present on the property. A former residential site was likely served by an on-site septic system, which may still exist.
- Three wells on the Westpark Associates property (APN 017-150-012; -020; -024; -033; and -035) in the north-central portion of the project site. Two low yield wells were on the property in 1959 and are currently inactive. In 1983 a new well was drilled to replace the other two. The well is still active and is occasionally accessed by use of a truck-mounted diesel pump. There was evidence of hunting and target practice on this property but the amount of shell casings observed was insignificant and did not suggest a buildup of lead in the soil.
- Two domestic/irrigation wells on the Conley property (APN 017-150-036) in the northwest corner of the project site. The Conley property also includes two residences and a barn that date from the 1980s. Although asbestos was banned in the late 1970s, the Phase I report recommends that the barn be tested for asbestos prior to demolition.

Hazardous Materials Transportation

Hazardous materials are routinely transported by truck and by rail in the project site vicinity. The California Vehicle Code and DOT regulations generally prohibit transportation of hazardous materials

through residential neighborhoods, although local deliveries are allowed. These regulations also require that hazardous materials be transported via routes with the least overall travel time. The City of Roseville Public Works Department has designated truck routes for hazardous materials transport to provide access to light industrial and industrial facilities in the City. These routes include Blue Oaks Boulevard, west from State Route 65, and Baseline Road, west of Foothills Boulevard. Hazardous materials may also be transported on State Route 65 and by the Union Pacific Railroad line, which is located approximately 2 miles (3.2 kilometer) east of the project site. The Pleasant Grove Wastewater Treatment Plant (PGWWTP) receives deliveries including hazardous materials on routes that pass through the West Roseville Specific Plan area.

Natural Gas Pipeline

Pacific Gas & Electric (PG&E) plans to construct a 30-inch-diameter (76-centimeter-diameter), 40-mile-long (64-kilometer-long) natural gas pipeline to serve the southern Sacramento Valley region, including the project site. The project was approved in 2009 and construction of the segment adjacent to the project site is currently anticipated in 2015. The pipeline, known as Line 406/407, will begin in Yolo County, north of Esparto, and run east through Yolo, Sacramento, Sutter, and Placer counties. Within the vicinity of the Proposed Action, the pipeline (designated Line 407-E in this area) will run along Baseline Road along the entire southern boundary of the project site. The pipeline will terminate at the intersection of Fiddymment and Baseline Roads, at the southeast corner of the project site, where it will connect with existing Line 123. Construction is anticipated to take place in 2015.

The pipeline would be buried within a 50-foot (15-meter) private, permanent right of way easement along the north side of Baseline Road. It would be located at a minimum depth of approximately 5 feet (1.5 meters). In order to avoid riparian areas and vernal pools, the pipeline would be installed using directional drilling (and not trenching) and would go under Curry Creek at depths of at least 35 feet (11 meters) at the two locations where Curry Creek exits and enters the site. Therefore, a large portion of the pipeline would be at a considerable depth along the project frontage.

One pipeline-related structure, the Baseline Road Pressure Regulating Station (BRS), will be located within the project boundaries. There are two possible locations. One is within the proposed commercial center at the northwest corner of Baseline and Fiddymment Road. The second is approximately 1,000 feet (305 meters) west of Fiddymment Road, in an area designated for commercial use. This open space area is intended to provide a buffer to the proposed residential uses located to north. The aboveground station would consist of gas regulation and monitoring equipment, which would provide primary and backup routing of gas flow through the station. The BRS structure would be no greater than 10 feet (3 meters) in height and would require a permanent easement area of approximately 84 feet by 145 feet (26 meters by 44 meters). Access would be provided directly from Baseline Road.

Methane, the primary component of natural gas, is a colorless, odorless, and tasteless gas. It has an auto-ignition temperature of 1,166 degrees Fahrenheit (630 degrees Celsius) and is flammable at concentrations between 5 and 15 percent by volume in air. The presence of flammable concentrations of methane within an enclosed space and an ignition source can result in an explosion. Methane is buoyant at atmospheric

temperatures and disperses rapidly in air; therefore, confined mixtures of methane in air are not commonly associated with pipelines installed outdoors, and the risk of explosion is low in such conditions. Unconfined mixtures of methane in air may be flammable but are rarely explosive. The most common type of risk encountered with natural gas pipelines is the risk of leakage. Leaks may expose sensitive populations to methane, which is not toxic but is classified as a simple asphyxiant, posing a slight inhalation hazard. If inhaled in high concentration, it can cause oxygen deficiency, resulting in serious injury or death (SLC 2009).

As noted in the 2009 EIR prepared by SLC for the proposed PG&E Line 406/407 pipeline project, older pipelines have a higher frequency of external forces incidents, partly because their location may be less well known and less well marked than newer lines. Older pipelines also include a disproportionate number of smaller diameter pipelines, which have a greater rate of external-forces incidents and are more easily crushed or broken by mechanical equipment or earth movements.

Electromagnetic Fields

The locations of the high-powered electrical transmission lines owned by PG&E and WAPA are shown in **Figure 1.0-3** and are discussed in **Chapter 2.0, Proposed Action and Alternatives**. An electrical receiving station is located east of the project site, on the east side of Fiddymont Road, approximately 375 feet (114 meters) south of Pleasant Grove Boulevard. The northern boundary of the substation site is adjacent to an existing 425-foot-wide (130-meter-wide) transmission corridor that consists of aboveground 230-kV transmission lines that run east/west through the project site. A second transmission corridor with 60 kV transmission lines owned by Roseville Electric is located in the northern portion of the site.

Electrical transmission lines generate electric and magnetic (or electromagnetic) fields (EMF). EMF are invisible fields of force created by electric voltage (electric fields) and by electric current (magnetic fields). EMF exposure comes from many sources, including high voltage transmission lines, distribution lines, wiring in buildings, and electric appliances and tools. For both electric and magnetic fields, strength decreases more quickly with distance from point sources such as appliances than from line sources such as power lines. Magnetic fields are typically reduced to background levels at 3 to 4 feet (0.9 to 1.2 meters) away from an appliance, 60 to 200 feet (18 to 61 meters) from a distribution line, and 300 to 1,000 feet (91 to 305 meters) from a transmission line (CDHS 2009). Roseville Electric measures electric and magnetic fields along transmission lines, substations, and other electrical equipment. In addition, measurements can be made on customer's premises at their request (City of Roseville 2010a).

Although there is public concern regarding the potential health effects of EMF exposure, studies to date have neither found conclusive or consistent evidence that exposure to magnetic fields from utility electric facilities is a health hazard nor disproved such a link. Federal and state agencies, including the California Department of Health Services, have reviewed previously conducted studies to determine if adverse health effects were associated with EMF and have found no basis for setting health standards (CDHS 1999).

The largest evaluation to date was conducted by the National Institute of Environmental Health Sciences (NIEHS) of the National Institutes of Health (NIH) and the US Department of Energy (DOE). This

evaluation, the Electric and Magnetic Fields Research and Public Information Dissemination (EMF-RAPID) Program, examined whether exposure to power-frequency EMF involves a potential risk to human health. The EMF-RAPID study, published in 1999, concluded that the scientific evidence connecting health risks due to EMF exposure is weak. The study demonstrates a small increased risk in lifetime cancer and leukemia risk associated with EMF exposure. However, toxicology studies in the laboratory have failed to demonstrate any consistent pattern of biological effects on animals or cells (NIEHS 2002).

In 2002, the NIEHS conducted a review of epidemiological and laboratory studies, which indicate that most people in the United States are exposed to magnetic fields that average less than 2 milligauss (NIEHS 2002). Some pre-1999 studies found a weak link between the development of childhood leukemia and proximity to EMFs generated by electric power transmission facilities, while other studies concluded there is no direct link. More recent studies have had varied results but generally support a small association between childhood leukemia and exposure to power-frequency EMF. The more recent reviews do not, however, support a link between EMF exposures and adult leukemia. Scientific research in this area is continuing in the US and other countries. Because of the potential that there may be a relationship between EMF and cancer among children, the California Department of Education has adopted a policy that K–12 schools may not be constructed within 100 feet of an easement for a 115-kV transmission line (approximately 150 feet from the power line itself). However, because so many studies have concluded that evidence for a direct link is weak at most, the state has not adopted any laws or regulations requiring an additional setback from electric power transmission facilities beyond the utility right-of-way easement, which is generally 50 feet on either side of a 115-kV line.

For electrical substations, evidence reviewed by NIEHS indicates that the strongest EMF around the outside of a substation comes from the power lines entering and leaving the substation. The strength of the EMF from equipment within the substations, such as transformers, reactors, and capacitor banks, decreases rapidly with increasing distance. Beyond the substation fence or wall, the EMF produced by substation equipment is typically indistinguishable from background levels.

3.9.2.1 Alternative 4 Site

The Alternative 4 site is located approximately 2 miles to the west of the project site on Baseline Road. The site is bounded by the extension of Sankey Road and the County-approved Regional University and Community Specific Plan (SP) Area to the north, the Sutter County line to the west, the Country Acres rural residential area and Baseline Road to the south, and the Curry Creek Community Plan (CP) area (see **Section 2.6**) to the east. This site has not previously been proposed for development. The site consists mainly of open land used for grazing and field crops. A few scattered residences and farm buildings are present on the site. Although specific information on hazardous materials use or conditions on the Alternative 4 site are not available, based on its current uses, conditions are likely to be broadly similar to those of the Proposed Action site. Review of aerial photographs shows that more intensive farming occurs on some portions of this site compared to the project site. In addition, two water skiing lakes are present on the west side of the site. A high-tension electrical transmission line passes in a north-south

direction across the site near its eastern boundary. As with the Proposed Action, the PG&E Line 406/407 planned natural gas pipeline would be located along the southern boundary of the alternative site along Baseline Road.

3.9.3 REGULATORY FRAMEWORK – APPLICABLE LAWS, REGULATIONS, PLANS, AND POLICIES

Numerous federal, state, and local laws and regulations control the generation, storage, handling, transportation, and disposal of hazardous materials and hazardous wastes, as well as site remediation and brownfield development. Those with particular application to the Proposed Action and the alternatives are detailed below.

3.9.3.1 Federal Regulations

Generally administered by the US EPA, federal statutes and regulations both set forth federal responsibilities for dealing with hazardous materials and, where appropriate, authorize the US EPA to delegate responsibility to state agencies. The Occupational Safety and Health Administration (OSHA) and the DOT also regulate handling and transport of hazardous materials and hazardous waste. Applicable federal regulations are contained primarily in Titles 10, 29, 40 and 49 of the code of Federal Regulations (CFR). CFR Title 40 addresses emergency planning and notification, hazardous material management plans, soil and water pollution remediation and reporting, and community right-to-know reporting. Any investigation or cleanup of soil contamination required on the project site or the Alternative 4 site would be subject to the standards set forth in Title 40.

Toxic Substances Control Act of 1976

The Toxic Substances Control Act (TSCA) (15 USC Sections 2601–2692) authorizes the US EPA to require chemical manufacturers to provide data about their products' effects on human health and on the environment (Sections 2603–2604). TSCA further authorizes the US EPA to regulate their production and use to reduce health or environmental risks (Sections 2604–2605). TSCA also sets forth regulations for lead-based paint abatement, including authorizing regulations for building renovation or demolition to reduce lead exposure (Sections 2682–2688). In addition, TSCA banned the manufacture, processing, distribution, and use of polychlorinated biphenyls (PCBs). PCBs are toxic, carcinogenic, and can cause effects on the immune, reproductive, nervous, and endocrine systems of humans and animals. The US EPA Region 9 PCB Program regulates remediation of PCBs in several states, including California. Under Title 40 CFR, Section 761.30(a)(1)(vi)(A), all owners of electrical transformers containing PCBs must register them with the US EPA. Transformers and other items manufactured before July 1, 1978 containing PCBs must be marked by the owner with a warning notice that the equipment contains PCBs. Specified electrical equipment manufactured between July 1, 1978, and July 1, 1998, that does not contain PCBs must be marked by the manufacturer with the statement "No PCBs."

Solid Waste Disposal Act and Resource Conservation and Recovery Act of 1976

The Solid Waste Disposal Act (SWDA) (42 USC Sections 6901–6992(k)), which includes as a subsection the Resource Conservation and Recovery Act (RCRA) (42 USC sections 6921–6939(e)), creates a “cradle-to-grave” (from manufacture to disposal) regulatory system for hazardous wastes, and delegates substantial authority to the states for waste management under US EPA supervision. RCRA requires the US EPA to adopt criteria for identifying hazardous wastes, to formulate a list of designated hazardous wastes, and to set forth standards for facilities that handle them.

Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 USC sections 9601–9675), which was later amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), sets forth regulations for cleanup of hazardous wastes after improper disposal; identifies federal response authority; and outlines responsibilities and liabilities of potentially responsible parties, who have control over the hazardous material itself, the property where hazardous material has been disposed or spilled, the vehicle that it was spilled from, etc. The CERCLA also specifies where Superfund money can be used for site cleanup. Notably, CERCLA cross references other statutes for hazardous material definition, but permits the US EPA to add materials as their hazardous properties become known.

3.9.3.2 Hazardous Materials Transportation Regulations

Under RCRA, the US EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. The Federal Emergency Planning and Community Right to Know Act of 1986 (US Code Title 42, Chapter 116) imposes hazardous materials planning requirements to help protect local communities in the event of accidental release of hazardous substances, including releases that may occur during transportation of such materials. The US EPA has delegated RCRA authority to the State of California. This authority is administered by the California Department of Toxic Substances Control (DTSC). Transportation of hazardous materials along any local or state roadway or rail line is subject to both the transportation safety requirements established in RCRA and the DOT hazardous materials transportation regulations. The DOT Federal Railroad Administration enforces hazardous materials transport regulations, which include requirements that railroads and other transporters of hazardous materials, including shippers, create and adhere to security plans and provide safety and security training to employees involved in handling or transporting hazardous materials.

3.9.3.3 Pipeline Safety Statutes

The DOT provides oversight for the nation’s natural gas pipeline transportation system. Its responsibilities are outlined under Title 49 CFR, Chapter 601. The Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS) administers the national pipeline regulatory program to ensure the safe transportation of gas and other hazardous materials. The Pipeline Safety Statute at Title 49, Chapters 601 and 603 establishes requirements for pipeline construction,

operational safety, and risk management. The Hazardous Liquid Pipeline Safety Act of 1979, as amended, authorizes the DOT to regulate pipeline transportation of hazardous liquids. The Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 established a damage prevention program and additional safety requirements for petroleum, natural gas, and hazardous liquid pipelines. The federal pipeline regulations are published in Title 49 CFR 26, Parts 190 through 199. CFR 192 specifically addresses natural and other gas pipelines. Many of the pipeline regulations are written as performance standards, which set the level of safety to be attained and allow the pipeline operator discretion in the choice of technologies to achieve the required safety level.

3.9.3.4 State Regulations

The DTSC and the Regional Water Quality Control Boards (RWQCB) administer most of California's hazardous waste regulations. The principal California regulations for hazardous materials are in the Government Code: the California Emergency Services Act (California Government Code Sections 8574.1–8574.23), Oil Spill Response and Contingency Planning (Sections 8670.1–8670.73), and the Elder California Pipeline Safety Act of 1981 (Sections 51010–51019.1), as well as in numerous provisions in the Health and Safety Code, such as the Hazardous Waste Control Act (Health and Safety Code Sections 25100–25250.28), the Safe Drinking Water and Toxic Enforcement Act of 1986 (Sections 25249.5–25249.13), Government Code Section 65962.5 (Cortese List), the California Land Use and Revitalization Act of 2004 (Sections 25395.6–25395.109), the California Land Environmental Restoration and Reuse Act (Sections 25401–25402.3), the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Sections 25404–25404.9), Asbestos and Hazardous Substance Removal Contracts (Sections 25914–25914.3), Asbestos Notification (Sections 25915–25919.7), and Hazardous Materials Release Response Plans and Inventory (Sections 25500–25546.5). The Porter-Cologne Water Quality Control Act (Water Code Sections 13000–13953.4) addresses hazardous material discharge into water bodies and groundwater. The following statutes would apply to the Proposed Action and the alternatives:

Hazardous Waste Control Act

The California Hazardous Waste Control Act (HWCA) is the primary state law that regulates hazardous waste and hazardous waste disposal facilities, and is administered by the DTSC. Like the federal RCRA, the HWCA regulates transportation and disposal of hazardous wastes, sets forth hazardous waste facility standards and directs administrative and enforcement procedures. It also lists and categorizes specific hazardous wastes.

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

The Safe Drinking Water and Toxic Enforcement Act, commonly referred to by its ballot measure, Proposition 65, prohibits businesses from discharging known carcinogens or reproductive toxins into sources of drinking water, and requires businesses (such as grocery stores) to warn persons about possible exposure on the business premises to such carcinogens or toxins.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program, enacted in 1993, enabled a statewide program to consolidate the numerous hazardous waste and materials programs then in existence. It assigns lead responsibility to the California Environmental Protection Agency (Cal/EPA) to certify subsidiary public agencies to administer the program's regulations (Certified Unified Program Agencies [CUPAs]), and enables participating agencies (PAs) to enforce one or more program elements. Notably, the Program requires Cal/EPA to establish a statewide database and geographic information system to collect and make public the data that CUPAs and PAs obtain. Implementing regulations are at 27 CCR Sections 15100–15620. The Roseville Fire Department is the CUPA for the City of Roseville; Placer County's Environmental Health Division is the designated CUPA for unincorporated County areas.

Asbestos-Related Statutes

Health and Safety Code Sections 25914–25914.3 specifies contract conditions for work involving asbestos or other hazardous substance removal, requiring that such removal work be performed by a properly certified contractor. Sections 25915–25919.7 require building owners to notify tenants, construction workers, etc., about the presence of asbestos in buildings constructed before 1979.

Hazardous Materials Release Response Plans and Inventory

The Hazardous Materials Release Response Plans and Inventory requires local governments and businesses to adopt plans to respond to releases of hazardous materials and to develop risk management and prevention programs to minimize risks from accidental releases of acutely hazardous materials. Minimum requirements for such plans are in the California Code of Regulations at Title 19, Sections 2720–2732.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act regulates water quality within the state and implements the Federal Water Pollution Control Act, including the National Pollutant Discharge Elimination System (NPDES) (see discussions under **Section 3.10, Hydrology and Water Quality**). The Regional Water Quality Control Boards exercise primary enforcement authority for waste discharges affecting water quality, including drafting regional water quality plans and issuing permits and cleanup and abatement orders. The boards may also seek judicial relief, including both civil and criminal penalties, against unlawful waste dischargers.

Hazardous Materials Transportation Regulations

Transport of hazardous materials is administered by the California Department of Transportation (Caltrans) and enforced by the California Highway Patrol (CHP). These agencies have established regulations on container types used and license hazardous waste haulers for transportation of hazardous waste on public roads. Hazardous waste transporters must be registered with the DTSC. Hazardous waste transporters must comply with CHP regulations and California State Fire Marshal regulations, as

well as federal DOT regulations. In addition, hazardous waste transporters must comply with Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and Title 22, Division 4.5, Chapter 13, of the California Code of Regulations, which are administered by the DTSC.

California Education Code

The California Education Code (Section 17210 et seq.) outlines the requirements for location of school facilities near or on suspected hazardous materials sites, near facilities that emit hazardous air emissions, or handle hazardous or acutely hazardous materials, substances, or waste. The Code requires that an environmental site investigation be completed to determine whether there are health and safety risks associated with a potential new school site prior to commencing the acquisition of the property. All proposed school sites that will receive state funding for acquisition or construction must go through a comprehensive investigation and cleanup process (if necessary) under DTSC oversight. The DTSC is responsible for assessment, investigation, and remediation of proposed school sites. Among other requirements, school districts must contract for the preparation of a Phase I Environmental Impact Assessment prior to acquiring a school site or engaging in a construction project and the Phase I Environmental Impact Assessment must be reviewed by the DTSC according to established guidelines.

School Locations Relative to Sources of Hazardous Emissions

Public Resources Code Sections 21151.4, 21151.8, and 21151.2 require that no EIR be approved for a project involving construction or alteration of a facility that might reasonably be anticipated to result in hazardous air emissions within 0.25 mile of a school unless the lead agency has consulted with the relevant school district regarding the potential impact of the project on the school, or the school has been given written notification of the project not less than 30 days prior to approval of the EIR. New schools are required to be set back 0.25 mile from high pressure gas lines.

School Locations Relative to Electrical Transmission Sources

The California Department of Education School Facilities Planning Division has developed specific guidelines that address the location of schools relative to electrical transmission lines. Any part of the school site must be at least 100 feet from the edge of an easement for a 50 to 133 kV line, and at least 150 feet from the edge of an easement for a 230 kV line.

Recycled Water Use Regulations

Wastewater treatment plant effluent that has received treatment that meets certain state requirements may be recycled and used for direct non-potable uses such as landscape irrigation or industrial cooling. Treatment requirements are set forth in CCR Title 22, Section 60301 et seq. Section 60301.230 specifies the requirements for recycled water. CDHS considers properly filtered and disinfected water meeting its water quality standards to be essentially pathogen-free and adequately protective of public health. Water meeting these standards may be used for unrestricted use, including but not limited to body contact for recreation (swimming), irrigation of food crops, and irrigation of parks, play grounds, and school yards.

Prior to allowing the use of recycled water for irrigation on the project site, the City would be required to prepare an Engineering Report in accordance with Title 22 of the CCR. The report must be submitted to and reviewed by CDHS. CDHS also requires that recycled water must be conveyed in a separate distribution system isolated from the potable water supply. Areas where recycled water is used for irrigation must be maintained by professional landscape maintenance contractors and local agency maintenance staff. The City of Roseville would be required to implement a cross-connection control program to ensure that potable water lines are not accidentally connected to the recycled water system and would also be required to implement a public education program (including signage) to notify the public of the use and location of non-potable water application. Section 60301 of the regulations establishes specific use area requirements that address separation of application areas from domestic supply wells and runoff control.

3.9.3.5 Local Plans, Policies, and Ordinances

Roseville Municipal Code

Chapter 9.60 of the Roseville Municipal Code establishes City regulations for the identification and disclosure of hazardous materials use and management in the City. The Code requires any person who uses or handles a hazardous material to submit a disclosure form annually to the fire chief. The fire department also works with the Placer County Department of Environmental Health in matters regarding hazardous materials management.

Hazardous Materials Emergency Response Plan

The Roseville Fire Department has developed a Hazardous Materials Emergency Response Plan that addresses organizational and operation responsibilities in the event of a hazardous materials emergency, including clean up and decontamination procedures. The fire department can also request mutual aid services from the Placer County, City of Sacramento, and Sacramento Metropolitan Fire District Hazardous Materials Response Teams in the event of a large-scale incident. The fire department also provides assistance to the CHP, Office of Emergency Services, and other responding agencies when requested in case of a hazardous materials spill on SR-65 or I-80. The fire department updates its Emergency Response Plan every three years. The plan is an extension of the City's Multi-Hazard Functional Plan and follows nationally adopted Incident Command System guidelines.

Roseville General Plan

Table 3.9-1, General Plan Safety Element Policies, summarizes the current City General Plan goals, policies, and implementation measures relevant to hazards and hazardous materials.

**Table 3.9-1
General Plan Safety Element Policies**

Hazardous Material Goal: Protect the community's health, safety, natural resources, and property through regulation of use, storage, transport, and disposal of hazardous materials.	
Policy	Implementation Measures
1. Require the disclosure of the use and storage of hazardous materials in existing and proposed industrial and commercial activities and siting of hazardous waste disposal facilities in accordance with Placer County guidelines and state law.	<ul style="list-style-type: none"> • Hazardous Materials Listing • Development Review Process • Hazardous Waste Management Plan
2. Work with Placer County and other public agencies to inform consumers about household use and disposal of hazardous materials.	<ul style="list-style-type: none"> • Inter-governmental Coordination • Hazardous Waste Pickup • Hazardous Materials Data Base
3. Cooperate fully with both public and private agencies, as defined in the City of Roseville Hazardous Materials Emergency Response Plan in the event of a hazardous materials emergency.	<ul style="list-style-type: none"> • Interagency Cooperation
4. Develop a hazardous materials truck route through the City of Roseville and limit pickup and delivery of hazardous materials during peak traffic hours.	<ul style="list-style-type: none"> • Hazardous Materials Truck Route
Electro-magnetic Fields Goal: Protect the community's health, safety, natural resources, and property through regulation of use, storage, transport, and disposal of hazardous materials.	
1. Ensure implementation of the Electric Department's policy of "prudent action" with respect to EMF issues.	<ul style="list-style-type: none"> • EMF Plan
2. Limit public use within electrical power line easements to parking and low-density recreational activities such as undeveloped nature areas, bicycle, or jogging paths.	<ul style="list-style-type: none"> • Development Review Process • Specific Plans

Source: City of Roseville 2010b

Agency Databases

The US EPA maintains two databases: the National Priorities List (NPL) and the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list. NPL is the list of sites identified by the US EPA for priority clean-up under the Superfund Program. The CERCLIS list is a list of sites that are or have been investigated by the US EPA for a release or threatened release of hazardous substances. None of the parcels that make up the project site are on the NPL or CERCLIS list.

Under RCRA, the US EPA maintains a list of facilities that generate, store, transport, treat, or dispose of hazardous wastes. None of the parcels that make up the project site are on the RCRA list. One property located on Brewer Road in the north-central portion of the Alternative 4 site is listed on the RCRA list: as a large-quantity generator of hazardous waste, with no record of regulatory violations.

The State of California maintains several databases of sites having hazardous materials storage, generation, disposal or contamination. As part of the Phase I Environmental Impact Assessments performed on the project site parcels, available federal, state, and local agency databases were reviewed to identify the presence of any government-regulated properties, either on or adjacent to the project site, that could potentially result in hazardous on-site conditions. The review included the databases of the DTSC, California State Water Resources Control Board (SWRCB), and the California Office of Environmental Protection. Neither the project site nor Alternative 4 site is included on any state databases.

Placer County maintains a database of hazardous waste generators in the County. The project site is not included on this database. One property within the Alternative 4 site is listed in this database with a status of “closed” and no indication of violations.

3.9.4 SIGNIFICANCE THRESHOLDS AND ANALYSIS METHODOLOGY

3.9.4.1 Significance Thresholds

NEPA does not specify significance thresholds that may be used to evaluate the effects of a proposed action on hazards and hazardous materials. However, CEQ regulations require an evaluation of the degree to which the proposed action could affect public health or safety. The US Army Corps of Engineers (USACE) has determined that the Proposed Action or its alternatives would result in significant effects related to hazards and hazardous materials if the Proposed Action or an alternative would:

- Result in exposure of construction workers or the public to contaminated soil or groundwater;
- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or
- Expose people to a public safety hazard.

3.9.4.2 Analysis Methodology

Impacts related to hazards and hazardous materials were evaluated qualitatively, based on the general types of hazardous materials and techniques that are likely to be used during construction and operation of the Proposed Action and alternatives. The analysis in this section focuses on the use, generation, disposal, transport, risk of upset, or management of hazardous or potentially hazardous materials on the project site; the potential risks associated with a planned adjacent natural gas pipeline; the potential risks associated with the presence of electrical transmission lines; and the potential risks associated with use of recycled water for landscape irrigation. The analysis assumes that the construction and operation of development under the Proposed Action or the alternatives would comply with all applicable federal, state, and local laws and regulations, including the General Plan policies and implementation measures described in **subsection 3.9.3**, above.

3.9.5 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

Impact HAZ-1 Exposure to Soil or Groundwater Contamination from Past Uses

Proposed Action As discussed in the **Affected Environment** subsection above, no known soil or groundwater contamination was identified on the site during site investigations although a few areas of concern, including some relatively small areas of stained soil, were identified. Construction of the Proposed Action in these areas of concern could encounter contaminated soil and groundwater and could result in **significant** effects related to exposure to contaminated soil or groundwater. Mitigation is proposed that would reduce these effects to **less than significant**. In addition, adherence to California Education Code requirements would ensure that the development of the proposed school sites would not expose children and teachers to risks associated with contaminated sites. This effect is considered **less than significant**. No mitigation is required.

In general, there is a low potential for soil-disturbing activities to expose workers to contaminated debris or soil or to release hazardous substances during ground-disturbing activities. However, grading and excavation, for example, could generate airborne dust, resulting in aerial distribution of contamination. Soil containing elevated levels of contaminants, if left unmanaged, could create health risks to project occupants, although the risk appears low based on available information. In addition, septic tanks, wells, or underground storage tanks that were not previously identified may be present on site; while these would be subject to regulatory requirements for proper abandonment or removal, contamination associated with these could be encountered during site grading. Structures on site could contain lead based paint and/or asbestos. Based on this information, construction of the Proposed Action could result in **significant** effects related to exposure to contaminated soil or groundwater.

Mitigation Measure HAZ-1 would require the Applicants to carry out measures to reduce the risk of exposure to site contamination, including soil and groundwater testing where appropriate, remediation if necessary, and proper well closure. This measure is the same as Mitigation Measure 4.10-1 in the Sierra Vista Specific Plan EIR and was adopted by the City of Roseville at the time of project approval and will be enforced by the City. By ensuring that known or potentially hazardous site conditions are identified and appropriately managed in accordance with regulations adopted prior to development, the Sierra Vista Specific Plan EIR determined that this mitigation measure would reduce the effect to less than significant (City of Roseville 2010a). The USACE concurs with the conclusion in the Sierra Vista Specific Plan EIR and finds that this effect would be reduced to **less than significant**.

The California Education Code requires site specific information for school site development, including approval from DTSC that the proposed school sites are free of contaminants that would pose a risk to students and faculty. School sites have been

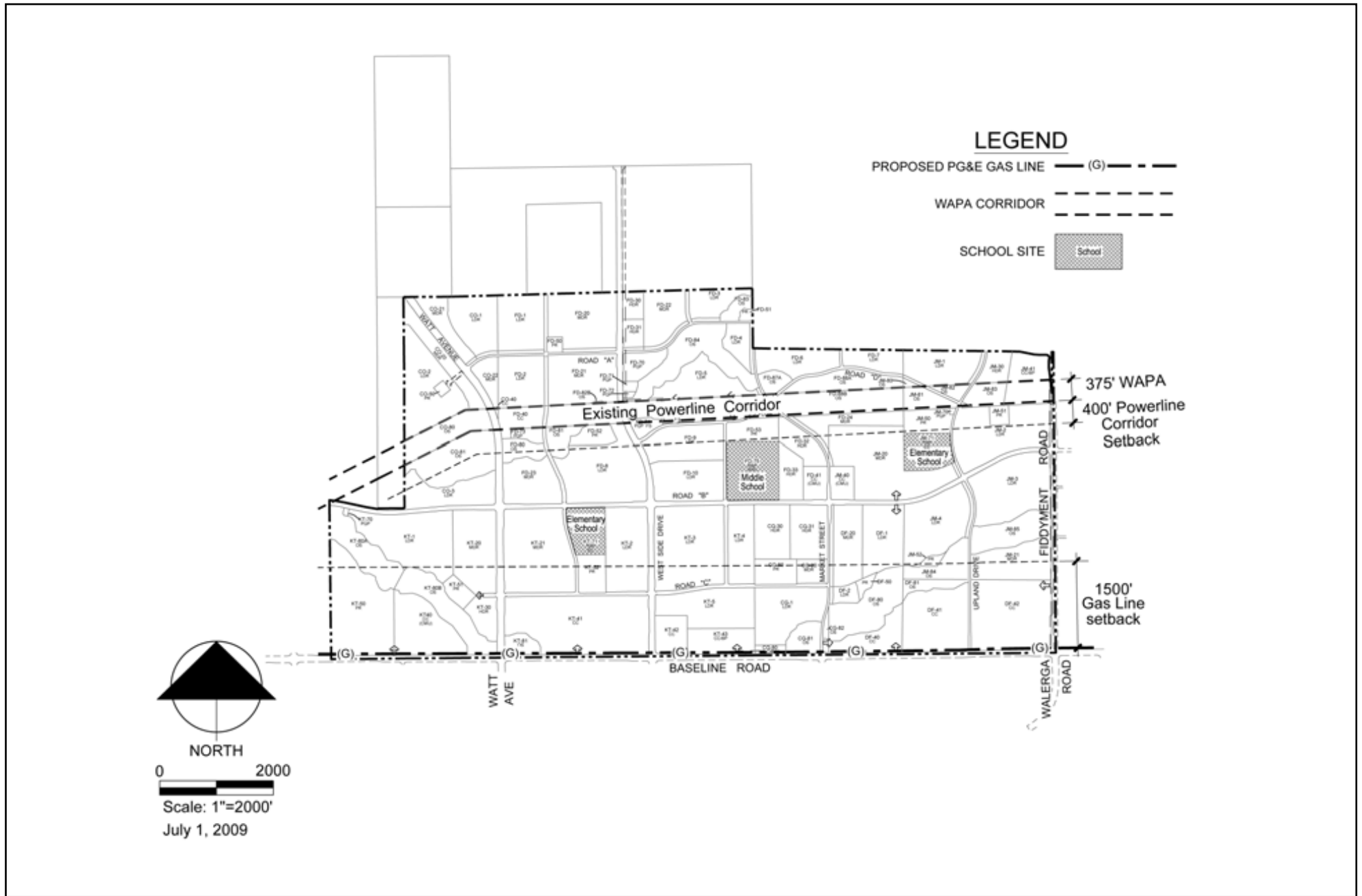
designated in the land use plan for the Sierra Vista Specific Plan (SVSP), as shown in **Figure 3.9-1**. Center Joint Unified School District would be required under the California Education Code to complete the necessary assessments to ensure that development of the proposed school sites would not expose children and teachers to risks associated with contaminated sites. This effect is considered **less than significant**. No mitigation is required.

**No Action
Alt., Alts. 1, 2
& 3
(On Site)** The No Action Alternative and Alternatives 1, 2 and 3 would construct a smaller mixed-use development on the project site. Since soil and groundwater conditions would be similar for all on-site alternatives, there is a potential for **significant** effects related to these conditions to occur based on the significance criteria listed above and for the same reasons presented above for the Proposed Action.

Mitigation Measure HAZ-1 would address these effects. As noted above, this measure is the same as Mitigation Measure 4.10-1 in the Sierra Vista Specific Plan EIR. The USACE assumes that the City of Roseville would impose the same mitigation measure on the on-site alternatives to address this effect. By ensuring that known or potentially hazardous site conditions are identified and appropriately managed in accordance with regulations adopted prior to development, this mitigation measure would reduce the effect to less than significant. The USACE finds that this effect would be reduced to **less than significant**.

**Alt. 4
(Off Site)** As discussed above, no site-specific information has been obtained regarding soil and groundwater conditions at the Southwest site. In addition, no site-specific information exists for the alignments of the off-site infrastructure that would be required to serve the site. If soil and groundwater conditions are similar for this alternative, there is a potential for **significant** effects related to these conditions to occur based on the significance criteria listed above and for the same reasons presented above for the Proposed Action. In addition, based on observation of more intensive farming practices, there is a greater potential for significant effects related to soil or groundwater contamination at this site than at the project site.

Mitigation Measure HAZ-1 would address these effects. The USACE assumes that Placer County would impose a mitigation measure similar to **Mitigation Measure HAZ-1** on the off-site alternative and would find that the measure would reduce the effect to **less than significant**. The USACE acknowledges that it has no authority to require **Mitigation Measure HAZ-1** and cannot guarantee that the County will impose this measure.



SOURCE: MacKay & Soms, February 2011

FIGURE 3.9-1

School Setback

Mitigation Measure HAZ-1**Groundwater Contamination***(Applicability – Proposed Action and All Alternatives)*

Prior to site development in the SVSP, recommended testing and remediation, if needed shall occur. Groundwater wells shall be properly closed.

If evidence of soil contamination, septic tanks, or other underground storage tanks are encountered in previously unidentified locations in the SVSP area, work shall cease until the area can be tested, and if necessary remediated and/or properly removed or closed. Remediation activities could include removal of contaminated soil and/or on-site treatment. As part of the process, the City shall ensure that any necessary investigation and/or remediation activities are coordinated with the Roseville Fire Department, Placer County Division of Environmental Health, and if needed, other appropriate federal, state, and local agencies. Once a site is remediated, construction can continue.

Impact HAZ-2**Hazards from Accidental Release of Hazardous Materials or Wastes****Proposed Action**

Effects related to hazards from the accidental release of Hazardous Materials or Wastes during construction and operation of the Proposed Action, including the operation of groundwater wells and the transportation of hazardous materials, would be **less than significant**. Mitigation is not required.

Construction

Construction typically involves the use of hazardous materials such as petroleum products, coatings (paint), and cleaning chemicals, and may generate hazardous wastes through use of such materials. Construction workers could be exposed to hazardous materials through improper handling or use of hazardous materials or hazardous wastes during construction or operation of the project, particularly by untrained personnel; transportation accident; unsound disposal methods; or fire, explosion, or other emergencies. As discussed in **subsection 3.9.3** above, construction activities on site would be subject to federal and state hazardous materials regulations and worker safety regulations regarding handling of and exposure to hazardous substances. These regulations must be implemented by employers and businesses and are enforced by the state (Cal OSHA for workplace safety and DTSC for hazardous materials and waste). In addition, all construction projects involving 1 acre or more of ground disturbance would be subject to NPDES requirements of developing and implementing a Storm Water Pollution and Prevention Plan to prevent construction pollutants from contacting storm water and entering into storm sewer systems and other jurisdictional waters. Effective July 1, 2010, all dischargers must obtain coverage under the Construction General Permit Order 2009-0009-DWQ adopted on September 2, 2009, which is substantially more stringent than previous requirements. Compliance with federal regulations would reduce the risk to human health and the environment from the routine use of hazardous substances during construction, and the effects would be **less than significant**.

Mitigation is not required.

Project Operation

Once the project site is developed, residential and commercial uses would involve use and storage of hazardous materials. These materials would likely include household products such as cleaning agents, solvent, paint, oils, pesticides, etc. These products are commercially available for public use and are typically sold with warning labels and use/storage recommendations from the manufacturers. These materials are typically used or stored in residences in small quantities. Such uses of hazardous materials do not generate hazardous air emissions and rarely, if ever, involve the use of acutely hazardous materials that could pose a significant threat to the environment or human health.

Depending on the type of commercial development that occurs, use and storage of larger quantities of hazardous materials and generation of hazardous waste could occur. For example, development could include warehouse-type building supply stores that would stock products such as paint, lubricants, cleaning products, printing ink, pool treatment chemicals, and other hazardous materials. Building maintenance operations as well as businesses such as auto repair, gas stations, and medical offices would generate hazardous wastes. Commercial use and storage of hazardous materials and disposal of hazardous wastes would be subject to federal, state, and local regulations. As discussed in **subsection 3.9.3** above, hazardous materials regulations have been established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine handling, use, and storage of hazardous substances. These regulations must be implemented by employers and businesses and are enforced by the state (Cal OSHA in the workplace or DTSC for hazardous waste) and local jurisdictions (Roseville Fire Department). The fire department is the local agency responsible for implementation of the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. Compliance with the Unified Program would reduce the potential for accidental release of hazardous materials during occupancy of the project site and would avoid or reduce adverse effects associated with such use. The Unified Program is intended to ensure that regulated activities (businesses) within the project site are managed in accordance with applicable regulations, including the Hazardous Materials Release Response Plans and Inventories (Business Plan), the California Accidental Release Prevention (CalARP) Program, and the California Fire Code. Compliance with these regulations would avoid significant effects associated with chemical use and storage and this effect would be **less than significant**. Mitigation is not required.

Groundwater Wells

The existing wells on the site associated with the agricultural/rural uses would likely be closed. The Environmental Utilities Department would oversee closure. The proposed

groundwater wells would include well-head chlorination and fluoridation at each well site and at the tank and pump station. Operation of the groundwater wells could include 25 gallons a day of commercial strength bleach (12.5 percent), or 200 gallons a week. Deliveries would be weekly. Well tanks would be sized to hold up to 400 gallons. All chemicals would be stored inside buildings with appropriate containment. Well operation, including chlorination chemical use, storage, and transport, would be subject to applicable federal regulations as described above. Compliance with these regulations would avoid significant effects associated with chemical use and storage at the on-site wells and this effect would be **less than significant**. Mitigation is not required.

Hazardous Materials Transportation

Construction and operation of development under the Proposed Action would involve transport of hazardous materials, potentially including large quantities of construction and maintenance supplies containing hazardous substances. In addition, as discussed in **subsection 3.9.2** above, the project site is adjacent to a designated hazardous materials transport route along Baseline Road. All transport would be required to comply with federal and state regulations, as administered by Caltrans and enforced by the CHP. Implementation of the transportation regulations in Title 49 CFR would reduce the potential for accidental release during construction or occupancy by transporters delivering hazardous materials to the project site or picking up hazardous waste. Compliance with applicable regulations would reduce or avoid the risk of significant effects related to transport of hazardous materials and this effect would be **less than significant**. Mitigation is not required.

- No Action
Alt., Alts. 1, 2
& 3
(On Site)** The No Action Alternative and Alternatives 1, 2, and 3 would construct a smaller mixed-use development on the project site. The risk of significant effects from use, storage, and transport of hazardous materials and generation of hazardous wastes would be similar to those described above for the Proposed Action and would be minimized by compliance with applicable regulations. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects of all the on-site alternatives associated with the use, storage, and transport of hazardous materials and generation of hazardous wastes would be **less than significant**. Mitigation is not required.
- Alt. 4
(Off Site)** The off-site alternative would construct a project broadly similar to the Proposed Action at the alternative site. In addition, Alternative 4 would require the installation of off-site infrastructure consisting of water, recycled water and sewer lines. The risk of significant effects from use, storage, and transport of hazardous materials and generation of hazardous wastes would be similar and would be minimized by compliance with applicable regulations. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects of the alternative associated with the use, storage, and transport of hazardous materials and generation of hazardous

wastes would be **less than significant**. Mitigation is not required.

Impact HAZ-3 Hazard associated with Adjacent Natural Gas Pipeline

Proposed Action Construction of the planned PG&E Line 407-E natural gas pipeline along the southern boundary of the project site is anticipated to take place in 2012. Based on this schedule, the natural gas pipeline would be present adjacent to the project site when development of the Proposed Action commences. The implementation of the Proposed Action would have the potential to expose residents and employees on the project site to risk associated with the natural gas pipeline. However, as the analysis below shows, significant effects to the residents and employees on the project site from the rupture of the natural gas pipeline are not anticipated and this effect is considered **less than significant**. Mitigation is not required.

As described in the 2009 PG&E Line 406/407 Final EIR (PG&E Line Final EIR), the planned Line 407-E, a 30-inch (76-centimeter) diameter natural gas pipeline, would be designed to meet current regulatory standards for safety. Proper design, construction, and maintenance of the planned pipeline would be required and would minimize leaks. The pipeline would be buried along its entire length at a minimum depth of approximately 5 feet (1.5 meters), including the segment adjacent to the project site, except at BRS regulating station, which would be fenced to prevent access. A 50-foot (15-meter) easement would be placed along the length of the pipeline where no developed uses would be allowed (SLC 2009).

Under the Proposed Action, the predominant proposed land uses along Baseline Road are commercial, park, and open space. These uses are generally considered compatible with the gas pipeline. No residential uses are proposed directly adjacent to the natural gas pipeline easement on Baseline Road. The closest designated residential areas would be a low-density neighborhood located approximately 80 feet north of the pipeline easement in the south-central portion of the project site, and a high-density neighborhood located approximately 300 feet (91 meter north of the pipeline easement and west of Watt Avenue. Within the low-density residential land use designation, residential uses could be placed 200 feet (61 meters) from the easement. Residential uses would also be allowed in an area designated for community commercial uses, which would allow a mixed-use commercial and residential uses, located south of Curry Creek along Baseline Road near the southwest corner of the project site. Conceptual plans for this mixed-use site show the residential uses would be set back from Baseline Road approximately 500 feet (152 meters) from the pipeline easement.

No school uses are proposed adjacent to the natural gas pipeline easement on Baseline Road. The schools would be located within the areas designated for public/quasi-public uses in the land use plan for the Proposed Action. As shown in **Figure 2.0-2**, the nearest school uses would be set back over one-quarter mile (0.4 kilometer) from the pipeline

easement; this distance is consistent with California Department of Education Standards, which require a minimum separation of one-quarter mile (0.4 kilometer). PG&E has submitted a letter to the City (see **Appendix 3.9**) that verified that the proposed land uses would be compatible with the planned natural gas pipeline.

Furthermore, based on the risk assessment included in the PG&E Line Final EIR, the planned pipeline would not pose a significant risk from rupture to nearby populated areas. The assessment used the threshold used by the California Department of Education as a part of their school siting criteria. This is a threshold for unacceptable individual risk and is expressed as an annual likelihood of a one in 1 million (1:1,000,000) chance of fatality as a result of an accident involving the natural gas pipeline. The risk assessment included calculation of risks before and after implementation of mitigation measures identified in the Final EIR. Two analysis approaches, a simplified approach and an enhanced approach intended to present a worst-case scenario, were presented for both pre- and post-mitigation conditions. Based on the assessment, the maximum individual risk posed by Line 407 (both east and west segments) before mitigation is 1:2,062,000, and after mitigation it is 1:4,115,000 chance of fatality per year. Because the calculated individual risk is well below the threshold of 1:1,000,000, the Final EIR concluded that the risk was less than significant (SLC 2009). Although the risk was considered less than significant, the EIR included mitigation measures to further reduce the risk of rupture. These include use of recently manufactured pipe, post-construction surveys and periodic inspections, and implementation of an Emergency Response Plan that would be coordinated and tested (through drills and exercises) with local fire and police departments and emergency management agencies (SLC 2009).

Based on the information presented above, significant effects associated with the presence of the natural gas pipeline are not anticipated and this effect is considered **less than significant**. Mitigation is not required.

**No Action
Alt.**

The No Action Alternative would construct a smaller mixed-use development on the project site; however, the project would still be located adjacent to the planned pipeline along Baseline Road. The closest designated residential areas under the No Action Alternative would be two low-density residential areas located at the southwest corner of the project site, adjacent to the pipeline easement; several low-density areas located at least 80 feet (24 meters) north of the easement in the south-central portion of the project site and east of East Dyer Lane; and a high-density neighborhood located approximately 300 feet (91 meters) north of the pipeline easement and west of Watt Avenue. The risk from proximity to this pipeline would be similar to or, depending on the exact location of low-density housing, slightly greater than that of the Proposed Action. However, based on the low risk level as presented in the PG&E risk assessment (SLC 2009), significant effects are not anticipated. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects associated with the planned

pipeline along Baseline Road would be **less than significant** under the No Action Alternative. Mitigation is not required.

**Alts. 1, 2, 3
(On Site)** All of the on-site alternatives would construct a mixed use development on the project site, and the project would still be located adjacent to the planned pipeline along Baseline Road. Alternatives 1 and 2 would include low-density residential uses located farther from the pipeline easement than are proposed under the Proposed Action, and the risk would be correspondingly lower. Alternative 3 would locate the nearest low-density and high-density residential uses in areas similar to those proposed under the Proposed Action, and the risks would be similar to those of the Proposed Action. For all alternatives, the risk from proximity to this pipeline would be similar to or lower than that under the Proposed Action, and significant effects are not anticipated. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects associated with the planned pipeline along Baseline Road would be **less than significant** under all of the on-site alternatives. Mitigation is not required.

**Alt. 4
(Off Site)** The off-site alternative would construct a project broadly similar to the Proposed Action at the alternative site. In addition, Alternative 4 would require the installation of off-site infrastructure consisting of water, recycled water and sewer lines and roadway improvements. Even at this site, the proposed mixed use community would still be located adjacent to the planned pipeline along Baseline Road. The risk from proximity to this pipeline would be similar, and significant effects are not anticipated. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects associated with the planned pipeline along Baseline Road would be **less than significant** under the off-site alternative. Mitigation is not required.

Impact HAZ-4 Risk of Exposure to Electromagnetic Fields from Transmission Lines

Proposed Action The Proposed Action would minimize significant effects related to risk of exposure to electromagnetic fields from transmission lines. This effect is considered **less than significant**. Mitigation is not required.

As discussed above, power lines, electrical wiring, and appliances all produce EMF. High-voltage electrical lines exist on site, and development of the project site would increase the number of people who would be exposed to potential risks associated with EMF produced by these lines. Residential uses are proposed adjacent to but not within the WAPA transmission line corridor that extends across the plan area. Public uses within the transmission corridors would be limited to transient recreational activities such as use of undeveloped nature areas and trails or community commercial uses that would not include residences. Implementation of the City's General Plan policies,

including appropriate setbacks from the corridor, would ensure that significant effects associated with the potential for increased exposure to EMF would be minimal. This effect is considered **less than significant**. Mitigation is not required.

The California Education Code requires a minimum setback of 150 feet (46 meters) from 230-kV transmission corridors, and the Center Joint Unified School District has requested a minimum setback of 400 feet (122 meters) from the WAPA corridor. As shown on **Figure 2.0-2, Proposed Land Use Plan** (in **Chapter 2.0**), all schools are set back a minimum of 400 feet (122 meters). No significant EMF effects to schools from the project site transmission corridor are anticipated. This effect would be **less than significant**. Mitigation is not required.

The substation proposed as part of the Proposed Action would be located at least 50 feet (15 meters) from the nearest regularly occupied residential structures, and the distance from the proposed substation would limit exposure to EMF. This effect would be **less than significant**. Mitigation is not required.

Low-voltage transmission lines serving residential and commercial areas within the project site would be placed underground. Significant effects associated with the potential for increased exposure to EMF would be minimal. This effect would be **less than significant**. Mitigation is not required.

**No Action
Alt., Alts. 1,
2, 3
(On Site)**

The No Action Alternative and Alternatives 1, 2, and 3 would construct a smaller mixed-use development on the project site, but would still include residential and commercial development near the existing and planned equipment and transmission lines that are sources of EMF, similar to that of the Proposed Action. Similar setbacks would be required which would reduce the exposure of future occupants and school age children to EMF, and no significant effect related to such risks is anticipated. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects associated with exposure to electromagnetic fields from transmission lines would be **less than significant** under the No Action Alternative and Alternatives 1 through 3. Mitigation is not required.

**Alt. 4
(Off Site)**

The off-site alternative would construct a project broadly similar to the Proposed Action at the alternative site, and would include residential and commercial development near the existing and planned equipment and transmission lines that are sources of EMF, similar to that of the Proposed Action. Similar setbacks would be required, which would reduce the exposure of future occupants to EMF, and no significant effect related to such risks is anticipated. Off-site infrastructure that would be required to serve the site would not expose people to EMF. Based on the significance criteria listed above and for the same reasons presented above for the Proposed Action, the effects associated with exposure to electromagnetic fields from transmission lines would be **less than significant** under the off-site alternative. Mitigation is not required.

Impact HAZ-5 Risk related to Use of Recycled Water

Proposed Action The use of recycled water by the Proposed Action would not result in any conditions that would unduly expose future occupants to human health risks, and no significant effects related to the use of recycled water on the project site is anticipated. This effect is considered **less than significant**. Mitigation is not required.

The use of recycled water on the project site would not result in any conditions that would unduly expose future occupants to human health risks. As described in **Chapter 2.0**, recycled water would be conveyed to the project site from the PGWWTP and used for irrigation of parks and landscaping in roadway medians, commercial areas, and common areas in high-density residential neighborhoods. Individuals using or maintaining the parks and landscaped facilities would have skin contact with the water when these features are actively irrigated, for example by touching irrigated grass or runoff. The rates and frequency of application would be controlled to minimize ponding, as required under Municipal Code Chapter 14.17 and the City's "Rules and Regulations for the Use of Recycled Water" (see **Section 3.15, Utilities and Service Systems**). The PGWWTP is designed and operated to produce effluent that meets or exceeds standards consistent with "Disinfected Tertiary Recycled Water" as defined by Title 22 of the California Code of Regulations. Any recycled water to be used on-site would meet State regulatory standards, as outlined in **subsection 3.9.3** above. Water meeting these standards may be used for unrestricted use, including recreation involving body contact, irrigation of food crops, and irrigation of parks, playgrounds, and schoolyards. The City of Roseville would be responsible for ensuring that the irrigation sites comply with the use requirements established in Section 60310 of the CCR. As described in **subsection 3.9.3** above, cross-connection controls would ensure that recycled water does not enter the potable water distribution system. For these reasons, the use of recycled water would not result in any conditions that would unduly expose future occupants to human health risks, and no significant effect related to the use of recycled water on the project site is anticipated. This effect is considered **less than significant**. Mitigation is not required.

No Action Alt., Alts. 1, 2 & 3 (On Site) The No Action Alternative and Alternatives 1 through 3 would construct a smaller mixed-use development on the project site; however, the alternatives would also include use of recycled water similar to that of the Proposed Action. Based on the significance criteria listed above and for the same reasons as the Proposed Action, the effects associated with the use of recycled water on the project site would be **less than significant** under the No Action and Alternative 1 through 3. Mitigation is not required.

Alt. 4 (Off Site) The off-site alternative would construct a project broadly similar to the Proposed Action at the alternative site. The project could include use of recycled water similar to that of the Proposed Action. Based on the significance criteria listed above and for the same reasons as the Proposed Action, the effects associated with the use of recycled water on the project site would be **less than significant** under the off-site alternative. Mitigation is not required.

3.9.6 RESIDUAL SIGNIFICANT IMPACTS

All of the effects would either be **less than significant** or would be reduced to **less than significant** by the proposed mitigation. There would be no residual significant effects for the Proposed Action and any of the alternatives.

3.9.7 REFERENCES

- California Department of Health Services. 1999. "Short Factsheet on EMF" <http://www.ehib.org/emf/shortfactsheet.PDF>.
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- City of Roseville, 2010b, *City of Roseville General Plan 2025*. Adopted May 5, 2010.