

## 3.9 HAZARDS AND HAZARDOUS MATERIALS

This section addresses hazards to human health and the environment from the use of hazardous materials and the potential for such materials to accidentally spill during construction or subsequent operations; the potential for construction (excavation) to occur in areas affected by hazardous materials; the potential for accidents or incidents in adjacent industrial areas to affect people at the SOIA Area or at off-site improvement areas; and potential exposure to wildfires.

This section uses the term “hazardous materials” to discuss hazardous materials and wastes. Under federal and State laws, any material, including waste, may be considered hazardous if it is specifically listed by statute as such, or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). Hazardous materials are defined in Title 49, Section 171.8 of the Code of Federal Regulations (49 CFR 171.8) as “a substance or material that...is capable of posing an unreasonable risk to health, safety, and property when transported in commerce.” Section 25501 of the California Health and Safety Code defines hazardous materials as any material (hazardous substances, wastes, or materials) that poses a significant present or potential hazard to human health and the environment. Health and Safety Code Section 25141(b) defines hazardous wastes as wastes that may cause or significantly contribute to an increase in mortality or serious illness or hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Potential hazards and associated impacts related to toxic air contaminant emissions are discussed in Section 3.3, “Air Quality.” Seismic and other geologic hazards are addressed in Section 3.7, “Geology, Soils, Minerals, and Paleontological Resources.” Flooding hazards are addressed in Section 3.10, “Hydrology and Water Quality.” Traffic hazards not related to the ability of emergency responders to respond to an emergency are addressed in Section 3.14, “Transportation.” Service levels by fire personnel and other emergency responders are addressed in Section 3.13, “Public Services and Recreation.”

### 3.9.1 ENVIRONMENTAL SETTING

#### LAND USES AND CONDITIONS IN THE SOIA AREA

The SOIA Area is within unincorporated Sacramento County and is primarily used for extensive dry farmed and irrigated croplands and vineyard operations. Review of historical imagery and documents shows that the SOIA Area has been used for agriculture (farming and ranching) since the mid-1800s. Similarly, other adjacent parcels have historically been used for row crops, vineyards, and pasture (See Section 3.5 of this EIR, “Cultural Resources” for more information on the history of the SOIA Area).

#### USE OF AGRICULTURAL CHEMICALS ON THE SOIA AREA

Pasture, dry-farmed crops, and natural grasses, such as those historically and currently grown on the SOIA Area, typically require little to no applications of environmentally persistent pesticides. Orchards and orchard-cultivated soils in the may have been contaminated through the repeated application of agricultural chemicals to fruit or nut trees. These may have included organochlorine pesticides, such as dichlorodiphenyltrichloroethane (DDT), which may be broken down into dichlorodiphenyldichloroethane (DDD) and dichlorodiphenyldichloroethylene (DDE).

## **ASBESTOS AND LEAD-BASED PAINT**

Currently, the Wackman Ranch consists of a main house, a modular home, a construction worker's house, a modern mobile home, three barns, two shop buildings, a small shed, and a carriage house with attached garage. Older building in the SOIA Area could contain asbestos-containing materials (ACMs) and lead-based paints.

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to lodge in the lung tissue and cause health problems. The presence of ACMs in existing buildings poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, there is no inhalation hazard because asbestos fibers remain bound in the material matrix. Emissions of asbestos fiber to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the federal Clean Air Act.

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. Human exposure to lead has been determined by U.S. Environmental Protection Agency (EPA) and the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) to be an adverse health risk, particularly to young children. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil.

## **KNOWN INACTIVE AND ACTIVE HAZARDOUS SITES**

According to the *City of Elk Grove General Plan Background Report*, an "active" status does not mean that the site poses an environmental or human safety risk, only that there is a hazardous material occurrence associated with the facility and that the site is presently undergoing remediation or is under further regulatory review. DTSC maintains a hazardous waste and substances site list (Cortese list) pursuant to Government Code Section 65962. None of the sites identified by the *City of Elk Grove General Plan Background Report* were listed on the Cortese List (City of Elk Grove 2003a). In addition, as of May 2016, the SOIA Area is not on the Cortese list (DTSC 2016).

The *City of Elk Grove General Plan Background Report* contains a list of known "inactive" hazardous sites within the City's Planning Area, which includes the SOIA Area. "Inactive" sites are defined as having been investigated and remediated to the satisfaction of the lead oversight agency. Three sites were identified in the commercial/industrial area northeast of the Kammerer Road/Highway 99 interchange, approximately 2,400 feet from the edge of the SOIA Area: the Transcon Lines, the Flying "V" SS groundwater contamination site (former), and the Georgia-Pacific soil contamination site. Of these, only the Georgia-Pacific site was considered active at the time, although the facility is now closed. Another inactive site was identified at 8320 Eschinger Road, just over a half mile south of the SOIA Area. The *City of Elk Grove General Plan Background Report* did not identify any other inactive hazardous sites in the vicinity of the SOIA Area (City of Elk Grove 2003a).

The Sacramento County General Plan does not identify any hazardous materials near the SOIA Area. The closest listed site in the Sacramento County General Plan is the closed Elk Grove Landfill, an estimated 3 miles north of the SOIA Area (Sacramento County 2011b).

AECOM searched the EPA's Envirofacts web site and the State Water Resources Control Board's (SWRCB's) GeoTracker web site to identify toxic releases, hazardous waste, or other violations that could affect the SOIA

Area. The Envirofacts web site presents information from several regulatory agencies and databases, including those for the EPA, California Department of Toxic Substances Control (DTSC), and Office of Emergency Services, and contains a variety of environmental information maintained by EPA, such as the locations of releases of more than 650 toxic chemicals. The GeoTracker database provides data relating to leaking underground storage tanks and other types of soil and groundwater contamination, along with associated cleanup activities. No records of any toxic releases, hazardous waste, or other violations were found that would affect the SOIA Area (EPA 2016, SWRCB 2016).

The SOIA Area was not listed on any county, State, or federal government lists as a contaminated site. There were no known contaminated municipal groundwater wells, active or inactive landfills, producing California Division of Oil and Gas petroleum wells, or registered USTs located on, adjacent to, or within one-half mile of the SOIA Area. There are four buried, plugged, and abandoned wells within the SOIA Area. No confirmed, State or federal “Superfund” sites were identified within one mile of the property.

## **TRANSPORT OF HAZARDOUS MATERIALS**

Hazardous materials are transported on area roadways, including State Route (SR) 99, continually. The transportation of hazardous materials within the City is subject to various federal, State, and local regulations (see Section 3.9.2, “Regulatory Framework,” below) The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City is Interstate 5, located more than 3 miles west of the SOIA Area. Smaller quantities of hazardous materials, such as medical supplies, pool chemicals, cleansing agents, paint, and household chemicals, may be transported on all roadways throughout the City. An industrial area where larger concentrations of hazardous materials may occur is located near the northeastern corner of the SOIA Area, east of SR 99. It is likely that the majority of deliveries of hazardous materials to this area would occur via Grant Line Road and SR 99.

## **SUBURBAN PROPANE**

Suburban Propane facility is located at 10450 Grant Line Road, approximately 3,000 feet from the northeastern corner of the SOIA Area. The Suburban Propane facility receives and stores pressurized and refrigerated propane from trucks and railcars and loads trucks for off-site transport. The facility operates four 60,000-gallon, pressurized, ambient-temperature propane storage tanks and two 12-million-gallon refrigerated, low-pressure storage tanks. The tanks are 146 feet in diameter and 122 feet tall. According to the comment from Suburban Propane on the Notice of Preparation, the property for the facility was selected in 1969 and propane was first stored on site in 1971. The facility has operated on an around-the-clock, 365 days per year basis since that time Suburban Propane utilizes state of the art security at its facility and there has never been an accident on site. Fire Chief Mark Meaker, who retired in 2003, reduced the radius for residential or dense development around the facility from one mile to 1/2 mile (Suburban Propane 2016).

The Elk Grove Patch in 2011 interviewed several land owners for details on the safety at the Suburban Propane Facility. Cosumnes Fire Marshal George Apple said that the Suburban plant “goes above and beyond” the safety measures required by California fire code. Fire Marshal Apple said he had overseen eight years of annual inspections there and failed to identify a single safety problem. A high-tech sprinkler system is designed to detect and immediately cool any tank where a flame erupts, preventing a fire like the one in Lincoln, California from occurring. Large berms have been built around the plant’s perimeter to contain liquid in case of a leak. A disaster preparedness expert, Denise Beach, a senior engineer with the National Fire Protection Association, interviewed

for the article said “The only way an explosion would occur is if a fire impinges directly on a [propane] tank and there is no effort taken to keep the tank cool.” In addition, the article summarized some of the safety measures Elk Grove has in place. “A Reverse 911 system can convey instructions to all residents near the propane plant in the event of an emergency” and a mandatory evacuation order, has been pre-reviewed by the city attorney and can be quickly signed by officials, if it is ever needed. (Mello 2011).

For the City General Plan, the City of Elk Grove reviewed several technical reports that evaluated a range of hypothetical accident scenarios and the potential effects from an explosion, radiant heat, fire, shrapnel, and chemical exposure, including potential injuries and fatalities. The study prepared by Quest in 2000, used in the General Plan EIR, evaluated a hypothetical release of flammable (propane) and toxic chemicals (formalin), the probability of an incident, and estimated hazard zones around the Suburban Propane facility. The Quest study presented individual risk contours and a numerical estimate of the annual risk of fatality with distance from the facility. As shown in Exhibit 3.9-1, the northeast corner of the SOIA Area falls within the  $10^{-8}$  contour indicating a 1-in-one hundred million risk of fatality.

## **SCHOOLS**

There are no schools within 0.25 mile of the SOIA Area. Elk Grove High School is approximately 1.9 miles north of the SOIA Area, Elizabeth Pinkerton Middle School is approximately 1.5 miles north of the SOIA Area, and Carroll Elementary School is approximately 1.8 miles northwest of the SOIA Area.

## **AIRPORTS AND AIRSTRIPS**

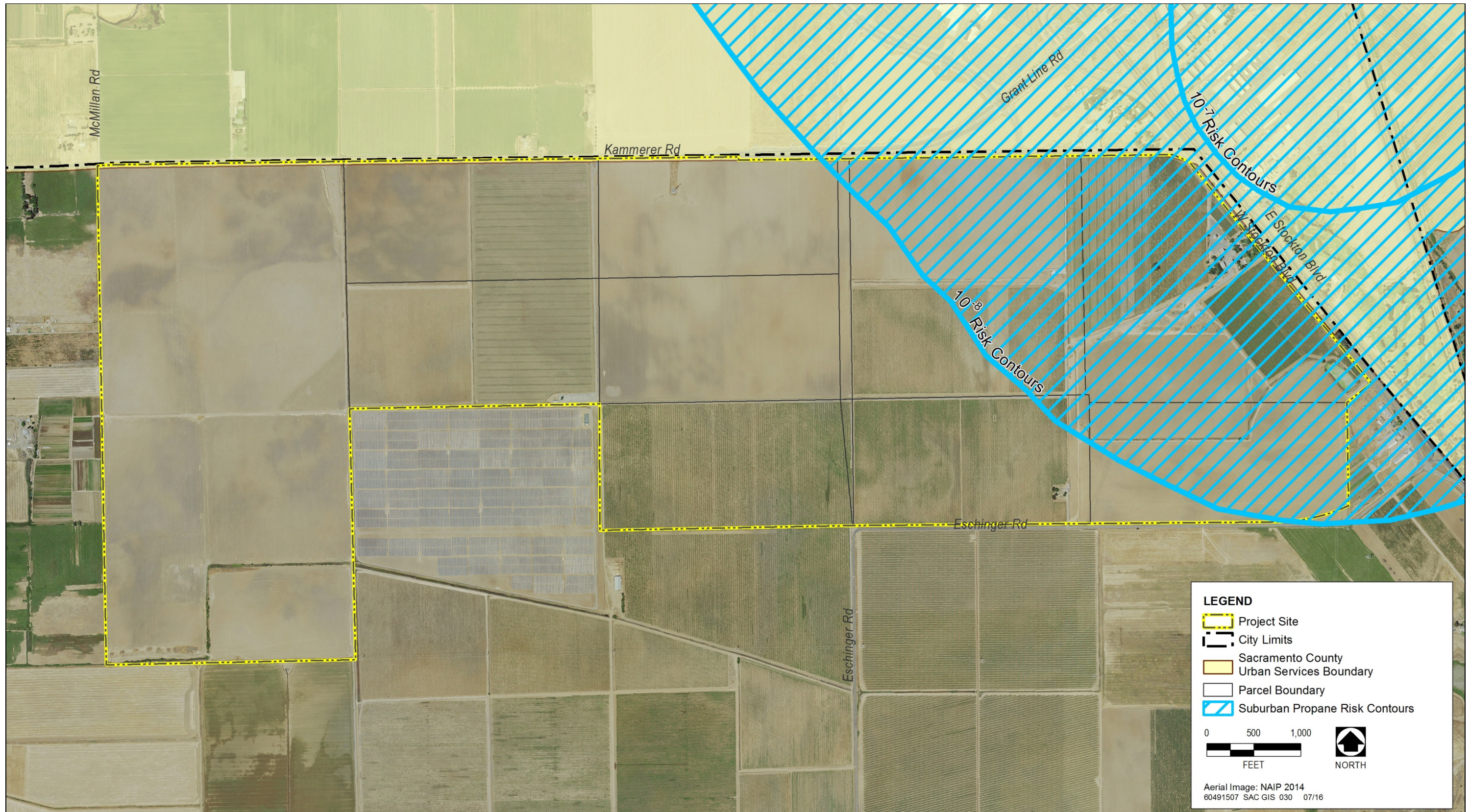
No public airports or private airstrips exist within two miles of the SOIA Area. The closest public-use airport is Sacramento Executive Airport, approximately 11 miles northwest of the SOIA Area. The nearest active, privately operated airstrips—~~Mosier Airport (on Sheldon Road in Elk Grove) and Mustang Airport (on Arno Road in Galt)—are~~ located approximately ~~6 miles northeast and 3.5 miles south~~ of the SOIA Area, ~~respectively~~. The former Sunset Sky ranch Airport, formerly located approximately two miles to the northeast, was closed after the Sacramento County Board of Supervisors denied a use permit.

## **WILDLAND FIRE HAZARDS**

CEQA requires that environmental analyses consider the potential exposure of people and structures to wildland fire hazards. The California Department of Forestry and Fire Protection (CAL FIRE) has developed fire hazard severity zones to predict the potential damage from wildland fires. The zones depicted on CAL FIRE maps account for potential fire intensity and speed, production and spread of embers, fuel loading, topography, and climate (e.g., temperature and the potential for strong winds).

Fire prevention areas considered to be under State jurisdiction are referred to as “state responsibility areas.” In state responsibility areas, the CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high. “Local responsibility areas,” which are under the jurisdiction of local entities (e.g., cities, counties), are required to only identify very high fire hazard severity zones.

The SOIA Area is within a local responsibility area (LRA) and CAL FIRE identifies the SOIA Area as a non-very high fire hazard severity zone (CAL FIRE 2016). The Cosumnes Community Service District (CCSD) Fire Department is responsible for providing fire protection services to the SOIA Area.



Source: Quest 2000, adapted by AECOM 2016

**Exhibit 3.9-1**

**Risk Contours at Suburban Propane**

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## 3.9.2 REGULATORY FRAMEWORK

### FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

#### Hazardous Materials Management

The U.S. Environmental Protection Agency (EPA) has primary responsibility for enforcing and implementing federal laws and regulations pertaining to hazardous materials. Applicable regulations are contained mainly in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the laws summarized below.

- ▶ **Resource Conservation and Recovery Act of 1976 (RCRA):** The RCRA (42 U.S. Code [USC] 6901 et seq.) established a federal regulatory program for the generation, transport, and disposal of hazardous substances. Under the RCRA, EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. The RCRA was amended by the Hazardous and Solid Waste Amendments of 1984, which banned the disposal of hazardous waste on land and strengthened EPA's reporting requirements. EPA has delegated authority for many RCRA requirements to the California Department of Toxic Substances Control (DTSC).
- ▶ **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA):** CERCLA, also called the Superfund Act (42 USC 9601 et seq.), provided broad federal authority and created a trust fund for addressing releases and threatened releases of hazardous substances that could endanger public health or the environment.
- ▶ **Superfund Amendments and Reauthorization Act of 1986 (SARA):** The Superfund Hazardous Substance Cleanup Program (Public Law 96-510) was established on December 11, 1980. The program was expanded and reauthorized by the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499), also known as SARA Title III. SARA created the Emergency Planning and Community Right-to-Know Act of 1986, also known as SARA Title III, a statute designed to improve community access to information about chemical hazards and to facilitate the development of chemical emergency response plans by state, tribal, and local governments.
- ▶ **Toxic Substances Control Act:** The Toxic Substances Control Act (15 USC 2601 et seq.) provides EPA with authority to require reporting, recordkeeping and testing, and restrictions related to chemical substances and/or mixtures. The Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.
- ▶ **Clean Air Act:** Regulations under the Clean Air Act (42 USC 7401 et seq., as amended) are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store a threshold quantity or greater of listed regulated substances to develop a risk management plan that includes hazard assessments and response programs to prevent accidental releases of listed chemicals.
- ▶ **Federal Clean Water Act Section 311 and 40 CFR 110.10:** Federal Clean Water Act Section 311 and 40 CFR 110.10, also referred to as the "Spill Prevention, Control, and Countermeasure (SPCC) Regulation," is intended to prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil. The regulation requires reporting to the National Response Center of any discharge of oil to navigable

waters that causes a sheen upon the water, deposits a sludge upon the shoreline or violates a water quality standard. Essentially, any amount of petroleum could cause a sheen, and in California, the State Water Resources Control Board (SWRCB) has determined that, due to the drain discharge locations, storm drains generally are considered navigable waters.

- ▶ **40 CFR 112.4 (federal SPCC rule):** This rule requires facility owners/operators to report specified information to the U.S. EPA Regional Administrator within 60 days if the facility has discharged more than 1,000 gallons of oil to navigable waters or adjoining shorelines in a single discharge or discharged more than 42 gallons of oil to navigable waters or adjoining shorelines in each of two discharges occurring within any twelve-month period.
  
- ▶ **Emergency Planning and Community Right-to-Know Act (EPCRA):** EPCRA establishes requirements for federal, State, and local governments, Indian tribes, and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. Regulations implementing EPCRA are codified in Title 40 of the Code of Federal Regulations, parts 350 to 372. EPCRA requires businesses have available Material Safety Data Sheets (MSDS) and must submit hazardous chemical inventory forms to the State Emergency Response Commission, Local Emergency Preparedness Committee, and local fire department annually on March 1st. Meeting this federal requirement is achieved through compliance with the California Hazardous Materials Business Plan program (CA Health and Safety Code sec 25504 [a-c]). Such plans must include an inventory of hazardous materials handled, as well as facility floor plans showing where hazardous materials are stored, an emergency response plan, and emergency response procedures that provide for employee training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). In addition, facilities must immediately notify the Local Emergency Planning Committees and the State Emergency Response Commission or the Tribal Emergency Response Commissions if there is a release into the environment of a hazardous substance that is equal to or exceeds the minimum reportable quantity set in the regulations. This requirement covers the 355 extremely hazardous substances, as well as the more than 700 hazardous substances subject to the emergency notification requirements under CERCLA Section 103(a)(40 CFR 302.4).

These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, and/or dispose of hazardous materials. EPA is responsible for compiling the National Priorities List (NPL) for known or threatened release sites of hazardous substances, pollutants, or contaminants (commonly referred to as “Superfund sites”). EPA provides oversight of and supervision for Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards.

## **Occupational Safety and Health Administration Worker Safety Requirements**

The Occupational Safety and Health Administration (OSHA) is responsible for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for handling hazardous substances and addressing other potential industrial hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. The Hazard Communication Standard (CFR Title 29, Part 1910) requires that workers be informed of the hazards associated with the materials they handle. Workers must be trained in safe handling of hazardous materials, use of emergency response equipment,



and building emergency response plans and procedures. Containers must be labeled appropriately, and material safety data sheets must be available in the workplace.

## **Hazardous Materials Transportation**

The U.S. Department of Transportation (DOT), in conjunction with EPA, is responsible for enforcing and implementing federal laws and regulations that govern transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 (49 USC 5101) directed DOT to establish regulations for the safe storage and transportation of hazardous materials (CFR Title 49, Parts 171–180), which define the types of hazardous materials, their transport, packaging, and methods of marking vehicles (i.e., via placards). The Federal Motor Carrier Safety Administration was established as a separate administration within the DOT on January 1, 2000, pursuant to the Motor Carrier Safety Improvement Act of 1999. The Federal Motor Carrier Safety Administration covers all non-exempt commercial motor vehicles that cross state lines. EPA, the California Highway Patrol (CHP), the California Department of Transportation (Caltrans), and DTSC also enforce State and federal laws regarding hazardous materials transport. EPA regulations for transporting hazardous wastes require tracking shipments with manifests. EPA standards for transporters of hazardous materials are found at 40 CFR 263 and include labeling, placarding, proper containers, and reporting discharges. DOT regulations are documented in 49 CFR 171–180.

## **STATE PLANS, POLICIES, REGULATIONS, AND LAWS**

### **Hazardous Materials Management**

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety. The California Environmental Protection Agency (Cal/EPA) and the Governor’s Office of Emergency Services establish rules governing the use of hazardous substances in California. Within Cal/EPA, under Title 22, Division 4.5 of the California Code of Regulations (CCR 22), DTSC is primarily responsible for regulating the generation, transport, and disposal of hazardous substances under the authority of the Hazardous Waste Control Law; enforcement is delegated to local jurisdictions. Regulations implementing the Hazardous Waste Control Law list hazardous chemicals and common substances that may be hazardous; establish criteria for identifying, packaging, and labeling hazardous substances; prescribe hazardous-substances management; establish permit requirements for treatment, storage, disposal, and transportation of hazardous substances; and identify hazardous substances prohibited from landfills. These regulations apply to the protection of human health and the environment during construction.

State regulations applicable to hazardous materials are contained primarily in Title 22 of the California Code of Regulations (CCR). CCR Title 26 is a compilation of those CCR chapters or titles that are applicable to hazardous materials management. California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) standards are presented in CCR Title 8; these standards are more stringent than federal OSHA regulations and address workplace regulations involving the use, storage, and disposal of hazardous materials.

State and federal laws require detailed planning to ensure that hazardous materials are handled, used, stored, and disposed of properly, and, in case such materials are accidentally released, to prevent or to mitigate injury to health or the environment.

## **Underground Storage Tank Program and the Spills, Leaks, Investigations, and Cleanups Program**

Several state regulatory structures govern cleanup of contaminated sites in California. DTSC regulates many of these programs: RCRA corrective actions, state Superfund sites, brownfields programs, and voluntary cleanups. The State Water Resources Control Board (through nine regional water quality control boards and some local agencies) regulates releases with the potential to affect water resources under programs such as the Underground Storage Tank Program and the Spills, Leaks, Investigations, and Cleanups Program. Regulatory authority for these programs may be delegated by the federal government (as with RCRA corrective actions directed by DTSC) or may be found in the California Health and Safety Code. These regulations require reporting, investigation, and remediation of sites where hazardous materials have been released, and appropriate disposal of any hazardous materials. These programs govern a range of pollutants in surface water, groundwater, soil, sediment, and air, such as solvents, petroleum fuels, heavy metals, and pesticides.

### **California Hazardous Materials Release Response Plans and Inventory Law of 1985**

Chapter 6.95 of the California Health and Safety Code requires any business handling or storing in excess of 55 gallons or 500 pounds of a solid or liquid hazardous material or 200 cubic feet of gas to submit Hazardous Materials Management Business Plans (HMBPs). Such plans must include an inventory of hazardous materials handled, as well as facility floor plans showing where hazardous materials are stored, an emergency response plan, and emergency response procedures that provide for employee training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Facilities storing materials that are “acutely” hazardous and in excess of the quantities in CCR, Title 19, must submit a more comprehensive Risk Management Plan, which includes off-site consequences analysis, maintenance, training programs, and an executive summary. This law requires preparation of hazardous materials business plans and disclosure of hazardous materials inventories. Such plans must include an inventory of hazardous materials handled, as well as facility floor plans showing where hazardous materials are stored, an emergency response plan, and emergency response procedures that provide for employee training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). The business plan program is administered by the California Emergency Management Agency.

### **Health and Safety Code 25507(a) and 19 California Code of Regulations (CCR) 2703**

A handler of hazardous materials must, upon discovery, immediately report to the Certified Unified Program Agency (CUPA) and California Emergency Management Agency (Cal EMA) any release or threatened release of a hazardous material if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. There is no quantitative reportable quantity stated, and this threat/hazard-based reporting requirement applies regardless of whether the release enters a waterway or escapes the facility.

### **California Water Code (CWC) 13272 and California Government Code 8670**

The regulations require reporting to California Emergency Management Agency or the Regional Water Quality Control Board (RWQCB) of discharges into or onto waters of the state and marine waters of ‘any amount’ of oil (a 42-gallon threshold is stated in the statutes, but the statute-referenced California Oil Spill Contingency Plan requires any amount be reported).

## **Cal/OSHA Worker Safety Requirements**

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations for the use of hazardous materials in the workplace (CCR Title 8) require safety training, available safety equipment, accident and illness prevention programs, hazardous-substance exposure warnings, and preparation of emergency action and fire prevention plans. Cal/OSHA enforces regulations on hazard communication programs and mandates specific training and information requirements. These requirements include procedures for identifying and labeling hazardous substances, providing hazard information about hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous-waste sites. Employers must make material safety data sheets available to employees and document employee information and training programs.

## **Hazardous Materials Transportation**

DOT regulates transportation of hazardous materials between states. The CHP and Caltrans are the state agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. Together, these agencies determine container types used and license haulers to transport hazardous waste on public roads.

## **California Accidental Release Prevention Program**

US EPA Risk Management Plan (RMP) Rule, the CalARP Program; and the California Occupational Safety and Health (Cal/OSHA) Process Safety Management (PSM) standard require that facilities assess the potential for accidental releases of toxic, reactive, flammable, or explosive chemicals, and programs must be established to minimize the frequency and extent of accidental releases. The goal of the ~~California Accidental Release Prevention Program~~ CalARP (CCR Title 19, Division 2, Chapter 4.5) is to reduce the likelihood and severity of consequences of any releases of extremely hazardous materials. Any business that handles regulated substances (chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive, including ammonia, chlorine gas, hydrogen, nitric acid, and propane) must prepare a risk management plan. The risk management plan is a detailed engineering analysis of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. The plan must provide safety information, hazard data, operating procedures, and training and maintenance requirements. The list of regulated substances is found in Article 8, Section 2770.5 of the program regulations.

The RMP and CalARP regulations are focused on off-site consequences, to protect the general public. PSM is geared toward workplace and employee safety. Propane and butane manufactured and stored in quantities over 10,000 pounds are regulated flammable substances under the RMP and CalARP Rules.

## **Fire Protection**

California Fire Code and National Fire Protection Association (NFPA) code addresses requirements for flammable and combustible liquid and compressed gas storage including pressure vessel installation, water mains, foam fire protection systems, and water supply reliability requirements.

## **California Department of Pesticide Regulation**

The purpose of the California Department of Pesticide Regulation (DPR) is to protect the health of humans and the environment. DPR sets standards for the sale and use of pesticides and encourage “reduced-risk pest management” to decrease the use of hazardous pesticides. The DPR has a staff of about 350 employees and is funded by regulatory fees. A portion of its budget supports local pesticide enforcement by County Agricultural Commissioners. DPR released “A Community Guide to Recognizing and Reporting Pesticide Problems” to inform Californians about the use, potential hazards, and response to hazards from pesticide use (DPR 2008).

## **State Water Resources Control Board**

The Central Valley RWQCB is authorized by the SWRCB to enforce provisions of the Porter-Cologne Water Quality Control Act of 1969. This act gives the Central Valley RWQCB authority to require groundwater investigations when the quality of groundwater or surface waters of the state is threatened and to require remediation of the site, if necessary.

## **State Hazard Mitigation Plan**

The State Hazard Mitigation Plan (SHMP) is the official statement of the State’s hazard identification, vulnerability analysis, and hazard mitigation strategy. The SHMP is also a federal requirement under the Disaster Mitigation Act of 2000 for the State of California to receive federal funds for disaster assistance grant programs. The goal of the SHMP, prepared by the California Office of Emergency Services (OES), is to guide implementation activities to achieve the greatest reduction of vulnerability, which results in saved lives, reduced injuries, reduced property damage, and protection for the environment. OES worked with the California Office of Planning and Research to incorporate hazard mitigation into the 2016 General Plan Guidelines, a public draft of which was released in October 2015.

## **Emergency Response to Hazardous Materials Incidents**

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including Cal/EPA, the California Highway Patrol, the California Department of Fish and Wildlife, and RWQCBs.

## **Unified Program**

Cal/EPA has adopted regulations implementing the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The six program elements of the Unified Program are hazardous-waste generation and on-site treatment, underground storage tanks, aboveground storage tanks, hazardous-material release response plans and inventories, risk management and prevention programs, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency, referred to as the Certified Unified Program Agency (CUPA), which is responsible for consolidating the administration of the six program elements within its jurisdiction. The Sacramento County Environmental Management Department (EMD) is the CUPA for Sacramento County and its incorporated cities, including Elk Grove.

The Unified Program Agencies are required to implement and enforce the California Aboveground Petroleum Storage Act (CAPSA), adopted in chapter 6.67 of the California Health and Safety Code. The CAL FIRE-Office of the State Fire Marshal (OSFM) is responsible for ensuring the implementation of the Aboveground Petroleum Storage Act (APSA) program element of the Unified Program. APSA regulates facilities with aggregate aboveground petroleum storage capacities of 1,320 gallons or more, which include aboveground storage containers or tanks with petroleum storage capacities of 55 gallons or greater. Facilities with total petroleum storage quantities at or above 10,000 gallons are inspected at least once every three years by a Unified Program Agency and have reporting and fee requirements, while facilities with petroleum storage quantities equal to or greater than 1,320 gallons but less than 10,000 gallons have reporting and fee requirements only. All regulated facilities must meet the federal Spill Prevention, Control and Countermeasure Rule requirements.

### **California Government Code Section 65962.5 (Cortese List)**

The provisions of California Government Code Section 65962.5 are commonly referred to as the “Cortese List” (after the legislator who authored the law). The Cortese List is a planning document used by State and local agencies to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Section 65962.5 requires Cal/EPA to develop an updated Cortese List at least annually. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies in California, such as the State Water Resources Control Board, also must provide additional release information. As of May 2016, the SOIA Area is not on the Cortese list (DTSC 2016).

### **Asbestos Abatement**

Asbestos abatement efforts must be completed in compliance with 7 CCR Section 5208, 8 CCR Section 1529, and 8 CCR Sections 341.6 through 341.14. The regulations in 7 CCR Section 5208 implement worker exposure limits, require exposure monitoring, implement compliance programs, require employee protection and hazard communication, and require employee medical surveillance and reporting. Asbestos exposure for construction work is regulated by 8 CCR Section 1529, which includes exposure limits and procedures for handling and removal. Requirements for transport and disposal are included in 8 CCR Sections 341.6 through 341.14.

Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, prohibits local agencies from issuing demolition or alteration permits until the applicant has demonstrated compliance with applicable regulations. If there is 100 square feet or more of asbestos-containing material, renovation or demolition of buildings containing asbestos must be conducted by a licensed contractor and the work must comply with requirements included in 8 CCR Sections 1529 and 341.6 through 341.14. Cal/OSHA must be notified 10 days before the start of construction and demolition activities. Asbestos encountered during demolition of an existing building must be transported and disposed of at an appropriate facility. The contractor and hauler of the material must file a hazardous-waste manifest that provides disposal details.

### **Lead and Lead-Based Paint Abatement**

Regulation of lead and lead-based paint is described in 29 CFR 1926.62 and 8 CCR Section 1532.1. These regulations cover the demolition, removal, cleanup, transportation, storage, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, and monitoring. Cal/OSHA’s Lead in Construction Standard requires notification and a lead compliance plan with safe work practices and a detailed plan to protect workers from lead exposure.

## **California Department of Education School Siting Requirements**

The California Department of Education (CDE) School Facilities Planning Division (SFPD) has prepared the Guide to School Site Analysis and Development (CDE 2000) that provides criteria (described below) for locating appropriate school sites in California. CDE's authority for approving proposed sites is contained in California Education Code Section 17251 and in Title 5, Section 14010 of the CCR. CDE's approval is a condition for school districts to receive State funds for the acquisition of sites under the State's School Facilities Program administered by the State Allocation Board. Districts using only local funds are still encouraged to seek CDE approval for the benefits that such outside review can provide.

### **School Siting Criteria**

The California Education Code contains various provisions governing the siting of new public schools (e.g., California Education Code Sections 17211, 17212, and 17212.5). In addition, to help focus and manage the site selection process, CDE's School Facilities and Planning Division has developed screening and ranking procedures based on criteria commonly affecting school selection (California Education Code Section 17251[b], 5 CCR Section 14001[c]). The highest priority on the criteria list is safety. Other site selection criteria require an analysis of the specific environmental constraints and land use concerns.

Before a school district can obtain State funding to acquire a site for a proposed school facility, CDE must approve the site to ensure that certain minimum criteria are met (CDE 2000). The criteria relevant to the project include the requirement of an analysis of environmental constraints and land use concerns.

The foremost consideration in the selection of school sites is safety. Certain health and safety requirements are governed by State statute and CDE regulations. In selecting a school site, a school district should consider the following factors:

- ▶ Proximity to airports.
- ▶ Proximity to high-voltage power transmission lines.
- ▶ Proximity to toxic and hazardous substances.
- ▶ Proximity to high-pressure pipelines, reservoirs, or water storage tanks.
- ▶ Hazardous air emissions and facilities within one-quarter mile.
- ▶ Whether the site consists of a current or former hazardous waste disposal site or solid-waste disposal site, unless, if the site was a former solid-waste disposal site, the board of education concludes that the wastes have been removed.
- ▶ Whether the site is a hazardous-substance release site identified by DTSC.
- ▶ Whether the site has one or more pipelines, situated underground or aboveground, that carry hazardous substances, materials, or wastes, unless the pipeline is used only to supply natural gas to that school or neighborhood.

- ▶ If the proposed land has been designated a border-zone property by DTSC, then a school may not be located on the site without a specific variance in writing by DTSC.
- ▶ Whether a site is located near or downwind from a stockyard, fertilizer plant, soil-processing operation, auto-dismantling facility, sewage treatment plant, or other potentially hazardous facility.
- ▶ Proximity to railroad tracks.
- ▶ Location within a 100-year floodplain, as designated by FEMA.
- ▶ Air quality adjacent to busy traffic corridors.
- ▶ Accessibility for residential neighborhoods.
- ▶ Consideration of the cost and complications associated with selecting sites adjacent to wetlands.
- ▶ Consideration of compatibility with land use plans.
- ▶ Consideration of compatibility with nearby agricultural operations.

## **REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES**

### **Sacramento Metropolitan Air Quality Management District Asbestos Program**

The Sacramento Metropolitan Air Quality Management District (SMAQMD) regulates asbestos in building materials. The program applies to renovations or demolitions of jurisdictional structures in Sacramento County that include asbestos. This program requires an asbestos survey to identify all of the asbestos in building materials and abatement by a licensed asbestos contractor.

### **Sacramento County Environmental Management Department, Hazardous Materials Division**

The Hazardous Materials Division of the Sacramento County EMD is the designated CUPA for Sacramento County, including Elk Grove. The Sacramento County EMD has a 24-hour hazardous materials incident response team and responds to incidents involving chemical releases, as well as any other hazardous materials situations. As the CUPA, the Hazardous Materials Division is responsible for implementing six statewide environmental programs for Sacramento County:

- ▶ Underground storage of hazardous substances (underground storage tanks)
- ▶ Hazardous materials business plan requirements
- ▶ Hazardous waste generator requirements
- ▶ California Accidental Release Prevention Program
- ▶ Uniform Fire Code hazardous materials management plan
- ▶ Aboveground storage tanks (spill prevention control and countermeasures plan)

Aboveground Petroleum Storage Tanks is one element within the Sacramento County EMD. EMD provides regulatory oversight for the operation of Aboveground Petroleum Storage Tanks including:

- ▶ Review of Aboveground Petroleum Storage Tank Facility Statements (TFS)
- ▶ Routine inspections of AST site operations and equipment
- ▶ Review and verification of Spill Prevention Control and Countermeasure (SPCC) Plans

Permits for all CUPA regulatory programs are obtained by registering with EMD and paying an annual permit fee. According to the EMD, all tank facilities meeting the storage capacity threshold of 1,320 gallons, must take the following 6 actions:

- ▶ Complete and submit to EMD an initial Aboveground Petroleum Storage Tank Facility Statement Form.
- ▶ Prepare and implement an SPCC Plan in accordance with U.S. Code of Federal Regulations, Title 40, Part 112 (40 CFR 112)
  - Facilities with ≤10,000 aggregate storage capacity and with no tank >5,000 gallons (e.g., Tier I Facilities) may use the Environmental Protection Agency (EPA) SPCC Plan template.
  - Facilities with ≤10,000 aggregate storage capacity and with any individual tank >5,000 gallons (e.g., Tier II Facilities) may self-certify an SPCC Plan, but may not use the EPA SPCC Plan template.
  - Facilities with >10,000 gallons must have a registered Professional Engineer (P.E.) review and certify the SPCC Plan.
- ▶ Conduct periodic inspections of your ASTs to ensure compliance with the 40 CFR 112.
- ▶ Submit an annual fee to EMD beginning in January 2010. This fee is established by the CUPA to recover the cost it will take to administer this program.
- ▶ Allow EMD to conduct periodic inspections.
- ▶ Immediately notify the California Emergency Management Agency (EMA) and EMD upon discovery of a spill or release of 42 gallons or more of petroleum.

## **Sacramento County Local Hazard Mitigation Plan**

The *Sacramento County Local Hazard Mitigation Plan* (Sacramento County 2011a), as amended, to which the City of Elk Grove is a signatory, includes a risk assessment of existing hazards such as severe weather, dam failure, flooding, earthquakes, wildfire, drought, health hazards, landslides, and volcanoes, and a mitigation strategy. The plan includes countywide recommended action items to reduce the economic effects and the loss of life and property. Specific action items recommended for Elk Grove included fully integrating the local hazard mitigation plan into the General Plan Safety Element.



## Elk Grove General Plan

The following policies and actions from the *Elk Grove General Plan Safety Element* (City of Elk Grove 2015) related to hazards and hazardous materials would apply to future development in the proposed SOIA Area.

- ▶ **Policy SA-1:** The City will seek to maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards in Elk Grove.
- ▶ **Policy SA-2:** In considering the potential impact of hazardous facilities on the public and/or adjacent or nearby properties, the City shall consider the hazards posed by reasonably foreseeable events. Evaluation of such hazards shall address the potential for events at facilities to create hazardous physical effects at off-site locations that could result in death, significant injury, or significant property damage. The potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable as defined in Policy SA-3. Absent substantial evidence to the contrary, a “hazardous physical effect” from an event shall be a level of exposure to a hazardous physical effect in excess of the levels identified in Policy SA-4.

For the purpose of implementing Policy SA-2, the City considers an event to be “reasonably foreseeable” when the probability of the event occurring is as indicated in the table below (labeled as Table 3.9-1 for this EIR).

| Land Use   | Probability of Occurrence Per Year  |
|--|---|
| “Agriculture, Light Industrial, and Industrial”<br>Uses involving continuous access and the presence of limited number of people but easy evacuation, e.g., open house, warehouses, manufacturing plants, etc. | Between 100 in one million and 10 in one million ( $10^{-4}$ to $10^{-5}$ ) |
| “Commercial”<br>Uses involving continuous access but of easy evacuation, e.g., commercial uses, offices.   | Between 10 in one million and 1 in one million ( $10^{-5}$ to $10^{-6}$ )   |
| “Residential”<br>All other land uses without restriction including institutional uses, residential areas, etc.   | 1 in one million and less ( $10^{-6}$ )                                     |

- ▶ **Policy SA-3:** For the purpose of implementing Policy SA-2, the City considers an event to be “reasonably foreseeable” when the probability of the event occurring is as indicated in the [table contained on page SA-5 of the City General Plan].
  - **SA-3-Action 1:** As part of the environmental review process for proposed projects, the City shall analyze potential safety-related impacts resulting from or affecting new development which could cause or be affected by reasonably foreseeable events. This analysis shall include the potential for events to occur at the facility, and the potential for hazardous physical effects to result from such events with respect to the hazards listed in Table SA-A [page SA-6 of the City General Plan, reproduced below as Table 3.9-2].

**Table 3.9-2. Maximum Acceptable Exposure Criteria for Agricultural, Residential, and Non-Residential Land Uses (Elk Grove General Plan Table SA-A)**

| Land Use  | Maximum Acceptable Exposure |  |   |   |
|---|-----------------------------|--|---|---|
|   | Overpressur                 | Airborne Toxic Substances  | Radiant Heat  | Shrapnel  |
| Agriculture                                     | 3.4 psig <sup>(1)</sup>     | Dose = ERPG-2 <sup>(2)</sup> ppm for 60 min Exposure time = 60 min   | Radiant dose = 200 kJ/ m <sup>2</sup> <sup>(3)</sup><br>Exposure time = 30 sec  | All uses shall be located such that the possibility of injury for an unprotected person due to shrapnel released by a reasonably foreseeable event <sup>(4)</sup> is less than 1/10 <sup>-6</sup> (1/1,000,000) |
| Residential (all density ranges) <sup>(5)</sup> | 1.0 psig                    | For example: chlorine ERPG-2 = 3 ppm<br>Dose = 3 ppm x 60 min = 180 ppm-min<br>Target concentration = Dose/Exposure time   | Target radiant energy = Radiant dose/Exposure time  |   |
| Office/ Commercial                              | 1.0 psig                    | Target concentration = (180 ppm-min)/60 min<br>Target concentration = 3 ppm chlorine   | Target radiant energy = (200 kJ/m <sup>2</sup> )/30 sec<br>Target radiant energy = 6.67 kW/m <sup>2</sup>             |   |
| Light industrial                                | 1.25 psig                   | Dose = ERPG-2 ppm for 60 min Exposure time = 30 min<br>For example: chlorine ERPG-2 = 3 ppm<br>Dose = 3 ppm x 60 min = 180 ppm-min<br>Target concentration = Dose/Exposure time<br>Target concentration = (180 ppm-min)/30 min<br>Target concentration = 6 ppm chlorine  | Radiant dose = 200 kJ/m <sup>2</sup><br>Exposure time = 15 sec<br>Target radiant energy = Radiant dose/ Exposure time |   |
| Industrial                                      | 3.4 psig                    | Dose = ERPG-2 ppm for 60 min Exposure time = 15 min<br>For example: chlorine ERPG-2 = 3 ppm<br>Dose = 3 ppm x 60 min = 180 ppm-min<br>Target concentration = Dose/Exposure time<br>Target concentration = (180 ppm-min)/15 min<br>Target concentration = 12 ppm chlorine | Target radiant energy = (200 kJ/m <sup>2</sup> )/15 sec<br>Target radiant energy = 13.34 kW/m <sup>2</sup>            |   |

<sup>(1)</sup> psig: pounds per square inch gauge.  
<sup>(2)</sup> ERPG-2: Emergency Response Planning Guidelines. The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action; ppm: parts per million.  
<sup>(3)</sup> kJ/m<sup>2</sup>: kiloJoules per square meter (a measure of radiant heat received); kW/m<sup>2</sup>: kilowatts per square meter; 1.0 kJ/m<sup>2</sup> = 1.0 kW/m<sup>2</sup> for 1 sec = 1 kW/ (m<sup>2</sup>-sec).  
<sup>(4)</sup> As defined in Policy SA-3.  
<sup>(5)</sup> Includes schools, parks, libraries, and other similar public gathering places regardless of their location.  
 Source: City of Elk Grove 2015:SA-6

► **Policy SA-4:** The Maximum Acceptable Exposure standards shown in Table SA-A [page SA-6 of the City General Plan, reproduced below as Table 3.9-2] shall be used in determining the appropriateness of either:

1. placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or
2. siting a hazardous facility that could expose other nearby uses to hazardous physical effects.

Absent substantial evidence to the contrary, the placement of land uses that do not meet the Maximum Acceptable Exposure standards shall be considered to result in a significant, adverse impact for the purposes of CEQA analysis.

- ▶ **Policy SA-8:** Storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law.
  - **SA-8-Action 2:** Secondary containment and periodic examination shall be required for all storage of hazardous and toxic materials, consistent with the requirements of state or federal law.
  - **SA-8-Action 3:** As part of the review and approval of development plans and building permits, ensure that secondary containment is provided for hazardous and toxic materials.
  - **SA-8 Action 4:** Prior to site improvements for properties that are suspected or known to contain hazardous materials and sites that are listed on or identified on any hazardous material/waste database search shall require that the site and surrounding area be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, state, and federal regulations.
- ▶ **Policy SA-9:** The City shall seek to ensure that all industrial facilities are constructed and operated in accordance with up-to-date safety and environmental protection standards.
- ▶ **Policy SA-10:** Industries which store and process hazardous or toxic materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the City of Elk Grove.
  - **SA-10-Action 1:** Consider the impact of proposed industrial development projects with respect to transport of hazardous materials within the city. To the extent feasible, uses requiring substantial transport of hazardous materials should be located to direct such traffic away from the city’s residential and commercial areas.

**Elk Grove Municipal Code—Section 23.60.030, “Hazardous Materials”**

The City has developed the following standards to ensure that the use, handling, storage, and transportation of hazardous materials comply with all applicable State laws (Section 65850.2 of the Government Code and Section 25505 et seq. of the Health and Safety Code) and that appropriate information is reported to the Fire Department as the regulatory authority.

- A. Reporting Requirements. All businesses required by State law (Section 6.95 of the Health and Safety Code) to prepare hazardous materials release response plans and hazardous materials inventory statements shall, upon request, submit copies of these plans, including any revisions, to the Fire Department.
- B. Underground Storage. Underground storage of hazardous materials shall comply with all applicable requirements of state law (Section 6.7 of the Health and Safety Code and Articles 679 and 680 of the California Fire Code, or as subsequently amended). Businesses that use underground storage tanks shall comply with the following procedures:
  1. Notify the Fire Department of any unauthorized release of hazardous materials prescribed by City, county, state and federal regulations;
  2. Notify the Fire Department and the Sacramento County Health Department of any proposed abandoning, closing or ceasing operation of an underground storage tank and actions to be taken to dispose of any hazardous materials; and

3. Submit copies of the closure plan to the Fire Department.
- C. Above-Ground Storage. Above-ground storage tanks for hazardous materials and flammable and combustible materials may be allowed subject to the approval of the Fire Department.
- D. New Development. Structures adjacent to a commercial supply bulk transfer delivery system with at least six (6) inch pipes shall be designed to accommodate a setback of at least one hundred (100) feet from that delivery system. The setback may be reduced if the Planning Director, with recommendation from the Fire Department, can make one or more of the following findings:
1. The structure would be protected from the radiant heat of an explosion by berming or other physical barriers;
  2. A one hundred (100) foot setback would be impractical or unnecessary because of existing topography, streets, parcel lines or easements; or
  3. A secondary containment system for petroleum pipelines and transition points shall be constructed. The design of the system shall be subject to the approval of the Fire Department.
- E. Notification Required. A subdivider of a development within five hundred (500) feet of a pipeline shall notify a new/potential owner before the time of purchase and the close of escrow of the location, size and type of pipeline.

### **3.9.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

#### **METHODOLOGY**

The evaluation of environmental impacts from hazards and hazardous materials is based on a review of documents, such as the Elk Grove General Plan, Background Report, and EIR; the Sacramento County General Plan; and the Sacramento County Local Hazard Mitigation Plan and databases such as the Cortese List; EPA's Envirofacts, and CAL FIRE's maps, as well as:

- ▶ applicable laws and regulations pertaining to public health and safety and hazardous materials,
- ▶ potential future construction activities and uses,
- ▶ the potential to discover hazardous soils and other materials,
- ▶ the locations of known hazardous-waste sites, and
- ▶ the locations of schools, airports, and areas prone to fire (potential receptors and sources of safety hazards).

These hazards were reviewed in light of existing hazardous materials management plans and policies, emergency response plans, and fire management plans.

The information obtained from these sources was summarized to establish existing conditions and to evaluate the significance of potential environmental effects, based on the thresholds of significance presented below. In determining the level of significance, this analysis assumes that future development in the SOIA Area would comply with relevant federal, state, regional, and local ordinances and regulations.

There are no changes to land uses proposed as part of this SOIA application. However, in order to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. Since

the current project does not propose any development or land use change, it is possible that, if future development is proposed, it could involve land uses that are potentially capable of exposing the public or the environment to hazards and/or hazardous materials. However, future land use within the SOIA Area is not known. As a result, this analysis assumes and evaluates a broad range of potential uses, in order to fully address potential impacts and provide mitigation needed to reduce or avoid potentially significant impacts.

## THRESHOLDS OF SIGNIFICANCE

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the State CEQA Guidelines, as amended. The proposed project would have a significant impact related to hazards and hazardous materials if it would:

- ▶ 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 or through the routine transport, use, or disposal of hazardous materials;
- ▶ Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- ▶ Be located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- ▶ Result in a safety hazard for people residing or working in a project area that is located within 2 miles of a public airport or public use airport;
- ▶ Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- ▶ 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 residences are intermixed with wildlands.

## ISSUES NOT DISCUSSED FURTHER

- ▶ **Safety Hazard for People in a Project Area Located within 2 Miles of a Public Airport**—The SOIA Area is not located within 2 miles of any airport. The closest public-use airport is Sacramento Executive Airport, approximately 11 miles from the SOIA Area. The nearest active, privately operated airstrips—~~Mosier Airport (on Sheldon Road in Elk Grove) and Mustang Airport (on Arno Road in Galt)~~—are is located approximately ~~6 miles northeast and 3.5 miles south of the SOIA Area, respectively.~~ Therefore, this issue is not addressed further in this EIR.

## IMPACT ANALYSIS

**IMPACT 3.9-1** Routine transport, use, or disposal of hazardous materials. *Future development could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during demolition, construction, or operation activities. However, compliance with applicable rules and regulation specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies, the impact related to the creation of significant hazards to the public through routine, transport, use, and disposal is less than significant.*

Although the project does not include any land use plan or development, future development could occur within the SOIA Area. Future construction could require the storage, use, and transport of small quantities of hazardous materials as fuels, oils and lubricants, paints and paint thinners, glues, and cleaning fluids (e.g., solvents). Development could occur in the SOIA Area or off-site, for improvements to roads, sewer lines, drainage facilities, and water lines. Although it cannot be determined where these improvements would be located or how extensive the disturbance would be, it is possible that these improvements could require the storage, use, or transport of hazardous materials.

The SOIA Area could be developed with home improvement, hardware, or auto parts stores. Medical uses may use or store pressurized oxygen tanks, medical waste, biohazardous materials, and/or radioactive materials. The project area could also be developed with light manufacturing uses that could potentially use, store, or dispose of hazardous materials.

The SOIA Area could potentially require development of new schools to serve new students generated by future development. Future school sites would likely be more than one-quarter mile from areas proposed for commercial, office, and light industrial uses that could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

Hazardous materials are transported on virtually all public roads, particularly since all motor vehicles contain hazardous materials (e.g., fuel) in addition to any hazardous cargo that may be on board. Future development and associated future population growth would increase the amount of hazardous materials transported on main local and regional routes. With additional development, more people would be potentially exposed to toxic spills or releases under buildout conditions, as compared to existing conditions.

If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The primary exposure pathways are inhalation, ingestion, and contact with the skin. Events leading to exposure may include accidental releases during transportation, storage, or handling. Soil disturbance during construction (e.g., excavation, grading) can also lead to exposure of workers or the public if soils contaminated by spills or leaks are stockpiled, handled, or transported.

The CHP and Caltrans enforce regulations for transport of hazardous materials on local roadways and DTSC regulates the use of these materials, as outlined in CCR Title 22. If future development occurs within the SOIA Area, it is assumed that such development would occur under the jurisdiction of the City of Elk Grove. The City of Elk Grove and any construction contractors would be required to comply with Cal/EPA's Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous

materials management plans and inventories). DOT (through the Hazardous Materials Transportation Act), and other regulatory agencies (including the California Public Utilities Commission for natural gas transmission lines) provide standards designed to avoid releases including provisions regarding securing materials and container design.

Facilities that would use hazardous materials on-site would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases and protect the public health. Regulated activities would be managed by the Sacramento County EMD, the designated CUPA, and would be required to comply with CCR Title 8, "Industrial Relations," for workplace regulations addressing hazardous materials, as well as Title 26, "Toxics." Title 26, Division 6 contains requirements for CHP enforcement of hazardous materials storage and rapid-response cleanup in the event of a leak or spill. Compliance with these regulations would reduce the potential for accidental release of hazardous materials during future construction and operation and to minimize both the frequency and the magnitude if such a release occurs.

In addition, if new schools are proposed, certain health and safety requirements for school site selection are governed by State regulations and the California Department of Education's School Facilities Planning Division policies. These requirements are outlined in the *School Site Selection and Approval Guide* and relate to siting school facilities in the proximity to airports, railroads, and major roadways; near or on suspected hazardous materials sites; or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste and identifies requirements for conducting an environmental site investigation to determine the health and safety risks (if any) associated with a new school. An analysis of conformity of the proposed school sites with the California Department of Education School Siting Criteria would be the subject of further, separate environmental review.

In addition, the City of Elk Grove would enforce its General Plan and Municipal Code through project conditions of approval. The City would be required to comply with State regulations and the City would assess future discretionary entitlement requests for consistency with City General Plan policies for safety, including hazardous materials (described in Policy SA-8 and associated action measures, Policy SA-9, Policy SA-10 and associated actions).

With enforcement of existing hazardous materials regulations and the application of relevant City of Elk Grove policies and code requirements as conditions of approval, future development in the of the SOIA Area and, potentially, off-site improvement areas would be designed to minimize potential impacts from the release of hazardous materials and to minimize both the frequency and the magnitude if such a release occurs. The impact is **less than significant**.

### **Mitigation Measures**

No mitigation measures are required.

**IMPACT** Potential human health hazards from exposure to existing on-site hazardous material. *Future development could expose construction workers to hazardous materials present on-site during construction activities and hazardous materials on-site could create an environmental or health hazard for later residents or occupants, if left in place. This impact is considered **potentially significant**.*

3.9-2

A preliminary review of environmental risk databases was conducted. The SOIA Area was not listed on any county, State, or federal government lists as a contaminated site. There were no known contaminated municipal groundwater wells, active or inactive landfills, producing California Division of Oil and Gas petroleum wells, or registered USTs located on the proposed site. As of May 2016, the SOIA Area is not on the Cortese list (DTSC 2016). The timing and extent of any potential off-site infrastructure improvements that would be required to serve future development is unknown, but they would likely be in areas near the SOIA Area. The areas where off-site improvements would occur could have on-site hazardous materials.

This analysis did not include any sampling, site specific review, laboratory analysis, or inspection of buildings or site surfaces. Site specific investigation for future development or off-site improvements will be required to address hazardous materials conditions. Existing environmental and regulatory requirements would protect against effects from hazardous materials.

### **Hazardous Building Materials**

Demolition of existing structures, either within the SOIA Area or for off-site improvements, could encounter hazardous building materials requiring proper handling and disposal. Older buildings could have asbestos, electrical equipment containing PCBs or di(2-ethylhexyl)phthalate (DEHP), fluorescent lights containing mercury vapors, and/or lead-based paints, as described above. These materials have been prohibited from new construction for decades but are still encountered during demolition of older buildings. If discovered and removed during building demolition, these materials would require special disposal procedures.

Section 19827.5 of the California Health and Safety Code requires local agencies to comply with hazardous air pollutant regulations for asbestos. The City of Elk Grove would regulate asbestos through conditions of approval and the SMAQMD would be notified 10 days in advance of any proposed demolition or abatement work. Future projects will be required to comply with the California Health and Safety code for abatement of lead-based paint. Requirements for disposal and recycling of fluorescent light tubes containing mercury are specified in 22 CCR Section 66261.50; requirements for disposal of PCB-containing equipment are specified in 22 CCR Section 66261.24 and Part 761 of CFR Title 40. The waste generator must determine whether ballasts containing DEHP are hazardous and dispose of them properly. DTSC recommends that these wastes be shipped to a light ballast recycling facility (DTSC 2003).

### **Agricultural Contaminants**

If evidence of soil contamination exceeding ambient or background concentrations is discovered during construction, either within the SOIA Area or for off-site improvements, any future developer would implement and comply with existing hazardous materials regulations. The hazardous materials regulations are specifically designed to protect worker and public health by providing for improved handling and transport of hazardous materials, and coordinated and rapid emergency response. All demolition and soil handling would be subject to applicable federal, State, and local regulations, including the California Health and Safety Code, as described above. In addition, the City of Elk Grove would enforce its General Plan and Municipal Code through project



conditions of approval, specifically General Plan Policy SA-8 Action 4 states that if sites and surrounding area are suspected or known to contain hazardous materials, these areas will be reviewed, tested, and remediated for potential hazardous materials in accordance with all local, State, and federal regulations prior to site improvements.

### **Other Existing On-Site Hazardous Materials**

If contaminated soils and/or groundwater (i.e., identifiable by soil staining or odors) are encountered during construction activities, either within the SOIA Area or for off-site improvements, work would cease until appropriate worker health and safety precautions, as specified by Title 8 of the California Code of Regulations (Section 5194) promulgated by the California Occupational Safety and Health Agency (Cal OSHA), are implemented.

A qualified hazardous materials specialist would be notified for an evaluation and the appropriate regulatory agency would be contacted. If deemed necessary by the appropriate agency, remediation would be undertaken in accordance with existing federal, State, and local regulations/requirements and guideline established for the treatment of hazardous substances. Work would cease in the contaminated area until the nature and extent of contamination have been established, and proper disposal or remediation has occurred. Any contaminated soils and/or groundwater encountered during construction would require proper disposal. This would likely require removal from the site and transportation to an EPA approved disposal facility by a Department of Transportation (DOT) certified hazardous waste transporter.

The designation of encountered contamination would be based on the chemicals present and chemical concentrations detected through laboratory analysis. Based on the analytical results, appropriate disposal of the material in accordance with EPA, Department of Toxic Substances Control, and Regional Water Quality Control Board guidelines would be implemented.

However, hazardous materials on-site in the SOIA Area or in the area of off-site improvements could still create an environmental or health hazard for later residents or occupants, if left in place. Thus, impacts would be **potentially significant**.

### **Mitigation Measures**

#### **Mitigation Measure 3.9-2: Hazardous Materials Identification and Remediation.**

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall require an environmental analysis, including an updated review of environmental risk databases, for the presence of potential hazardous materials. This evaluation should consider the SOIA Area and any off-site improvement areas, and if this assessment indicates the presence or likely presence of contamination, Phase I environmental site assessments and/or Phase II soil/groundwater testing and remediation shall be required before development. The sampling program developed as a part of the Phase II EA shall be conducted to determine the degree and location of contamination, if any, exists. If contamination is determined to exist in the SOIA Area or any off-site improvements, it will be fully remediated, by qualified personnel, in accordance with federal, State, and local regulations and guideline established for the treatment of hazardous substances. The designation of encountered contamination will be based on the chemicals present and chemical concentrations detected through laboratory analysis.

Based on the analytical results, appropriate disposal of the material in accordance with EPA, Department of Toxic Substances Control, and Regional Water Quality Control Board guidelines shall be implemented. Any land disturbance near potential hazardous sites should occur only after the remediation and clean-up of the existing site is complete.

### Significance after Mitigation

With enforcement of the above mitigation measure and adherence to existing hazardous materials regulations, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts from any existing hazardous materials. The impact is considered **less than significant with mitigation incorporated**. Future projects proposed to the City of Elk Grove would require General Plan consistency findings and compliance with City policies and General Plan actions would further reduce potential impacts.

**IMPACT 3.9-3**      **Upset and accident conditions.** *Future development could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions at involving the release of hazardous materials into the environment. This impact would be less than significant.*

Compliance with State, federal, and regional or local regulations would reduce the risk or severity of an accident. Specifically, federal regulations include RCRA, CERCLA, the Clean Air Act, EPCRA, OSHA, The Hazardous Materials Transportation Act of 1974, the Motor Carrier Safety Improvement Act of 1999, 40 CFR 263, and 49 CFR 171–180. State regulations include CCR Title 26, Chapter 6.95 of the California Health and Safety Code, Health and Safety Code 25507(a) and 19 CCR 2703, Cal/OSHA, CCR Title 19, Division 2, Chapter 4.5, California Fire Code and NFPA code, and the California Aboveground Petroleum Storage Act (CAPSA), adopted in chapter 6.67 of the California Health and Safety Code. Regional and local regulations include Hazardous Materials Division of the Sacramento County EMD, the Elk Grove General Plan, and Elk Grove Municipal Code—Section 23.60.030, “Hazardous Materials.” To further reduce the effects of an industrial accident, the City of Elk Grove would implement its policies as outlined in the City General Plan Safety Element. These policies include coordination with the Governor’s Office of Emergency Services, DTSC, the CHP, the Sacramento County Department of Environmental Health Services, the Cosumnes Community Services District (CCSD) fire department (referred to in the Safety Element as the “Elk Grove CSD”), and local law enforcement to prepare for hazardous-materials route planning and incident response. The City is also part of the CUPA for Sacramento County, which responds to incidents involving chemical releases. The City participated in preparation of the County of Sacramento Emergency Operations Plan; however, while this plan focuses on preparedness to respond to an event and potentially reduce the number of casualties and other secondary effects, it does not reduce the probability of the initial event. The probability of an event can be reduced only by internal safety procedures, structural measures, and effective intelligence and law enforcement.

Accidents at nearby industrial areas, including the Suburban Propane facility could result in an explosion, radiant heat, fire, shrapnel, and chemical exposure, including potential injuries and fatalities. To evaluate potential risks associated with Suburban Propane to future site users and uses within the SOIA Area, LAFCo used the City General Plan’s Safety Element (City of Elk Grove 2015), which contains definitions of reasonably foreseeable events, permitted land uses, and maximum acceptable exposure criteria for uses adjacent to hazardous facilities. General Plan Policy SA-2 states that the City shall consider the hazards posed by reasonably foreseeable events and that potential hazardous physical effects of an event need not be considered if the occurrence of an event is not reasonably foreseeable. General Plan Policy SA-3 defines the probability of reasonably foreseeable for

different land uses (see Table 3.9-1, which reproduces City General Plan Table SA-A) and General Plan Policy SA-4 states that placing a land use not consistent with the criteria defining reasonably foreseeable events would be a significant adverse impact. The policy defines agriculture, light industrial, and industrial as allowed land uses in areas where the probability of an accident is between  $10^{-4}$  and  $10^{-5}$  (between 10 and 100 in one million), and commercial uses as allowed uses when the probability of accident is between  $10^{-5}$  and  $10^{-6}$  (between 1 and 10 in one million). Residential and institutional uses are allowed in areas where the probability of an incident is less than  $10^{-6}$  (1 in one million).

Information about Suburban Propane is provided in detail in this EIR to promote public disclosure. Per CEQA, this is not considered an adverse physical environmental effect because it is an existing condition (i.e., predating initial consideration of the proposed project) unrelated to any of the CEQA significance thresholds for hazards and hazardous materials. In addition, As identified in the Quest 2000 study, the northeastern corner of the SOIA Area in falls within the  $10^{-8}$  contour indicating a 1-in-one hundred million risk of fatality. This is below the City's threshold of "reasonably foreseeable" of  $10^{-6}$  (General Plan Policy SA-3). Although LAFCo will not necessarily use this very low chance of risk as a universal threshold when considering possible risks to the environment or public from accidents, for this project, the impact is considered less than significant.

## Mitigation Measures

No mitigation measures are required.

**IMPACT 3.9-4** Interfere with emergency response or evacuation plan. *Future development could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact is considered **potentially significant**.*

In the event of an emergency that would require citizens to evacuate, including those citizens who live in the City of Elk Grove, Sacramento County would implement its emergency operations plan, evacuation plan, and mass care and shelter plan. Sacramento County and other area agencies, including the City of Elk Grove, have also prepared the *Sacramento County Local Hazard Mitigation Plan* (Sacramento County 2011a).

There are no hospitals or fire stations in the vicinity of the SOIA Area. Future streets included within SOIA Area will comply with the City's and CCSD Fire Department's design standards pertaining to emergency access.

Nearby roadways in the vicinity of the SOIA Area and off-site improvements, such as Kammerer Road, Bruceville Road, and SR 99, could be affected intermittently during construction of future development and off-site improvements, resulting in decreased emergency response times. Construction activities could result in temporary lane closures, increased truck traffic, and other roadway effects that could slow or stop emergency vehicles, temporarily increasing response times and impeding existing services. Potential reduction of emergency response services during construction of future development and the off-site improvements would be a **potentially significant** impact.

## Mitigation Measures

### Mitigation Measure 3.9-4 Traffic Control Plans.

At the time of submittal of any application to annex territory within the SOIA Area, the City of Elk Grove shall ~~impose a condition on all discretionary projects~~ require applicants to prepare and implement traffic control plans for construction activities that may affect road rights-of-way during construction of future development and off-site improvements. The traffic control plans shall be designed to avoid traffic-related hazards and maintain emergency access during construction phases. The traffic control plan will illustrate the location of the proposed work area; provide a diagram showing the location of areas where the public right-of-way would be closed or obstructed and the placement of traffic control devices necessary to perform the work; show the proposed phases of traffic control; and identify the time periods when traffic control would be in effect and the time periods when work would prohibit access to private property from a public right-of-way. The plan may be modified in order to eliminate or avoid traffic conditions that are hazardous to the safety of the public. Traffic control plans should be submitted to the City of Elk Grove, Sacramento County, and/or the California Department of Transportation, as appropriate, for review and approval before approval of improvement plans, where future construction may cause impacts on traffic.

## Significance after Mitigation

Implementation of this mitigation measure would reduce the impact. With enforcement of the above mitigation measure, existing hazardous materials regulations, and City of Elk Grove policies and code requirements as conditions of approval, future development in the SOIA Area and off-site improvements would be designed to minimize potential impacts. LAFCo would condition approval of future annexation on compliance with Mitigation Measure 3.9-4. The impact is **less than significant with mitigation**.

**IMPACT 3.9-5** Risks from wildfires. *Future development would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact would be less than significant.*

The project does not propose development or land use change. However, for the purposes of analysis only in this EIR, it is assumed that development could occur in the future within the SOIA Area. It is possible that such future development could require removal of existing vegetation and could introduce roads, buildings, parking areas or structures, landscaping, and other features that would not be conducive to intense wildfires.

The SOIA Area is within an LRA where fire protection is provided by the nearby CCSD. In the event of a nearby grass fire or a fire within pastureland that adjacent to the SOIA Area, CCSD would respond (see Section 3.13, “Public Services and Recreation,” for further discussion of the CCSD Fire Department facilities and response times). CAL FIRE has designated the areas as a non-very high fire hazard severity zone (CAL FIRE 2016), which is defined as an area not prone to intense, damaging wildfires. Therefore, future development within the SOIA Area would not be exposed to significant risks of wildfire. This impact would be **less than significant**.

## Mitigation Measures

No mitigation measures are required.

**IMPACT 3.9-6** Hazardous emissions or handling of hazardous materials, substances, or waste within one-quarter mile of a school. *Future development could include the construction of schools. However, compliance with CDE school siting criteria ensures schools will not be located near hazardous material handlers and emitters. This impact would be less than significant.*

The closest schools are Elk Grove High School and Elizabeth Pinkerton Middle School are located approximately 1.9 and 1.5 miles away, respectively. However, it is possible that, if development is proposed within the SOIA Area in the future, such development could include the construction of schools or could generate population growth so that new schools are required.

However, future schools would be required to comply with CDE school siting criteria as defined in California Education Code Section 17251[b], 5 CCR Section 14001[c]. These requirements are outlined in the *School Site Selection and Approval Guide* and relate to siting school facilities in the proximity to airports, railroads, and major roadways; near or on suspected hazardous materials sites; or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste and identifies requirements for conducting an environmental site investigation to determine the health and safety risks (if any) associated with a new school site (see “California Department of Education School Site Selection and Approval Guide” under “Regulatory Framework”). There are no on-site high-voltage power transmission lines, and the project is not located in proximity to any airports or railroads or near or on any known or suspected hazardous materials sites. The SOIA Area is more than one-quarter mile from any handlers of hazardous or acutely hazardous materials, substances, or wastes. An analysis of conformity of future proposed school sites with the CDE School Siting Criteria would be the subject of further, separate environmental review that would be conducted by the Elk Grove Unified School District.

In addition, future development, within the SOIA Area or for off-site improvements, would be required to implement and comply with existing hazardous material regulations associated with the routine use, transport, and disposal of hazardous materials and each of these regulations is specifically designed to protect the public health (see Impact 4.9-1, above). Thus, future development, which could include or require the construction of a school, would not locate a school within one-quarter mile of hazardous emissions, or handling of hazardous materials, substances, or wastes. This impact would be **less than significant**.

### **Mitigation Measures**

No mitigation measures are required.

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