3.15 HAZARDS AND HAZARDOUS MATERIALS

This section describes the potential for existing hazards in the SOIA area (or "project site") and provides a qualitative evaluation of the project's potential to create a significant hazard for the public or the environment, conflict with airspace or adopted emergency response plans, or expose people to wildland fires. The analysis includes a description of the existing environmental conditions, the methods used for assessment, the potential direct and indirect impacts of project implementation.

No comments regarding potential hazards were received in response to the Notice of Preparation.

3.15.1 Environmental Setting

The SOIA area is within unincorporated Sacramento County and is primarily used for agricultural activities including field crops and grazing land. A small portion of the site associated with residential property includes viniculture. 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.

POTENTIAL PRESENCE OF HAZARDOUS MATERIALS IN SOIL AND GROUNDWATER

Hazardous materials, including pesticides and herbicides, heavy metals, volatile organic compounds, and oil and gas, may be present in soil and groundwater in areas where land uses have resulted in leaking fuel or chemical storage tanks, or other releases of hazardous materials have occurred. Land uses that typically involve the handling of hazardous materials include agricultural areas where soils may contain pesticides and herbicides.

Hazardous Materials Associated with Agriculture

Agricultural enterprises have historically stored, handled, and applied pesticides and herbicides on orchards and row crops in the SOIA area. Pasture and natural grasses, such as those historically and currently grown on the SOIA area, typically require little to no application of environmentally persistent pesticides. However, agricultural chemicals used before the 1970s often included highly persistent compounds such as DDT. Inorganic compounds containing heavy metals such as arsenic, lead, and mercury were commonly used before the 1950s. Chemicals commonly used in the past have the potential to leave residual inorganic or organic components in shallow soils that could persist for many decades. If present in elevated concentrations, these residues could pose a potential health risk to future construction workers, residents, and other persons who may come in direct contact with surface soils.

Modern agricultural chemicals are generally less-persistent, organic compounds. Routine application of these materials does not generally result in accumulation to levels sufficient to cause concern because of product testing by the U.S. Environmental Protection Agency (EPA) before commercial use and regulation related to product application. Areas that are typically of concern include (1) pesticide-handling areas that lack concrete pads, berms, or cribs to contain spills or leaks during handling and storage, and (2) rinse water from washout facilities for pesticide-application equipment that has not been properly collected and treated before discharge. Equipment-repair and petroleum-storage areas might also be of concern.

Lead, Asbestos, and Other Hazardous Materials in Buildings

Hazardous materials are commonly found in building materials that may be affected during demolition and renovation activities associated with redevelopment. Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and fire resistance. In addition, other common items present in buildings,

such as electrical transformers, fluorescent lighting, electrical switches, heating/cooling equipment, and thermostats, can contain hazardous materials that may pose a health risk if not handled and disposed of properly. Among these hazardous materials are polychlorinated biphenyls (PCBs), which were used in hundreds of industrial and commercial applications because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties. Equipment on the project site that might contain PCBs includes electrical equipment and thermal insulation material (e.g., fiberglass, felt, foam, or cork). Older, pole-mounted electrical transformers can also contain PCBs.

Documented Sites of Contamination

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. The California Department of Toxic Substances Control (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 June 2017, the SOIA area is not on the Cortese list (DTSC 2017).

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. Two sites are within 0.5 mile of the project site to the west, and include 10413 Franklin Boulevard and 10464 Franklin Boulevard (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 2011).

A search of 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 revealed no records of any toxic releases, hazardous waste, or other violations that would affect the SOIA Area (EPA 2017, SWRCB 2017).

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 underground storage tanks located on, adjacent to, or within one-half mile of the SOIA area. No confirmed, State or federal "Superfund" sites were identified within 1 mile of the property.

TRANSPORT OF HAZARDOUS MATERIALS

Hazardous materials, hazardous wastes, and petroleum products are a subset of the goods routinely shipped along the transportation corridors in the Plan area. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by the DTSC. DTSC maintains a list of active registered hazardous waste transporters throughout California, and the California Department of Public Health regulates the haulers of hazardous waste. Three agencies maintain searchable databases that track hazardous material releases in reportable quantities: EPA maintains the Hazardous Materials Incident Report System that contains data on hazardous material spill incidents reported to the U.S. Department of Transportation (USDOT); the California Office of Emergency Services (OES) maintains the California Hazardous Materials Incident Report System that contains information on reported hazardous material accidental releases or spills; and SWRCB's Site Cleanup Program maintains information on reported hazardous material accidental releases or spills. USDOT also provides grants to local agencies for preparation and training for hazardous materials incidents through its Hazardous Materials Emergency Preparedness Program administered by OES.

Hazardous materials are transported on area roadways, including State Route (SR) 99 and Franklin Boulevard, continually. The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City of Elk Grove is Interstate 5, located more than 2 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.

SCHOOLS

Children are particularly susceptible to long-term effects from emissions of hazardous materials. Therefore, locations where children spend extended periods of time, such as schools, are particularly sensitive to hazardous air emissions and accidental release associated with the handling of extremely hazardous materials, substances, or wastes.

Carrol Elementary School, operated by Elk Grove Unified School District, is located approximately 0.14 mile north of the SOIA area.

AIRPORTS AND AIRSTRIPS

No active public airports or private airstrips exist within 2 miles of the SOIA area. While there is record of a private airport (Flying B Ranch Airport) two miles south of the SOIA area, it appears to be no longer in operation. The closest public airport is Franklin Field located at 12480 Bruceville Road, approximately 4 miles south of the SOIA area. Franklin Field is a public use airport owned and operated by the County of Sacramento. There are two paved runways that are 204 feet and 100 feet in length. The facility does not have an air traffic control tower or personnel, and it serves the general aviation community exclusively. Approximately 36,000 operations take place each year at Franklin Field, much of which are flight training activities.

The Sacramento Area Council of Governments Board of Directors serves as the Airport Land Use Commission for airports in Sacramento County, including Franklin Field. One of the Airport Land Use Commission's primary functions is to develop and adopt a plan that identifies zones for safety, noise contours, and height restrictions, along with associated compatible land uses, for each public-use airport. The Franklin Field Comprehensive Land Use Plan was prepared in 1988 and last amended in 1992. The SOIA area is not within the overflight zone mapped for Franklin Field.

WILDLAND FIRE HAZARDS

While all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. The California Department of Forestry and Fire Protection (CAL FIRE) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors (Public Resources Code [PRC] 4201-4204 and Government Code 51175-89). Factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. When development spreads into less densely populated, often hilly areas, it increases the number of people living in areas that are prone to wildfire.

"Local responsibility areas," which are under the jurisdiction of local entities (e.g., cities, counties), are required to identify very high fire hazard severity zones. The SOIA area is within a local responsibility area and CAL FIRE identifies the SOIA area as a non–very high fire hazard severity zone (CAL FIRE 2017). The Cosumnes Community Service District (CCSD) Fire Department is responsible for providing fire protection services to the SOIA area.

SUBURBAN PROPANE

Suburban Propane facility is located at 10450 Grant Line Road and is approximately 3.2 miles from the eastern boundary of the SOIA area. Suburban Propane 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.

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 that are the basis of policies and actions in the Safety Element of the General Plan. The SOIA area is outside of the Suburban Propane risk contours.

3.15.2 Regulatory Framework

FEDERAL

Hazardous Materials Management

EPA has primary responsibility for enforcing and implementing federal laws and regulations pertaining to hazardous materials. Applicable regulations are contained mainly in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR). 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 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.

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 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 Act

The USDOT has developed regulations in Titles 10 and 49 of the CFR pertaining to the transport of hazardous substances and hazardous wastes. The Hazardous Materials Transportation Act is administered by the Research and Special Programs Administration of the USDOT. The act provides the USDOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property that is inherent in the commercial transportation of hazardous materials. USDOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers.

Federal Insecticide, Fungicide, and Rodenticide Act

Pesticides are regulated under the Federal Insecticide, Fungicide and Rodenticide Act by EPA. This includes labeling and registration of pesticides as to how they may be used. EPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation, under Title 3 of the California Code of Regulations and the California Food and Agriculture Code. The California Department of Pesticide Regulation registers pesticides for use in California, and licenses pesticide applicators and pilots, advisors, dealers, brokers, and businesses.

STATE

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, 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.

California Hazardous Materials Release Response Plans and Inventory Law of 1985

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.

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.

California Accidental Release Prevention Program

The goal of the California Accidental Release Prevention Program (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.

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 Regional Water Quality Control Boards (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.

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 June 2017, the SOIA area is not on the Cortese list (DTSC 2017).

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 Education Code

Sections 17071.13, 17072.13, 17210, 17210.1, 17213.1-3, and 17268 of the California Education Code became effective January 1, 2000. Together, they establish requirements for assessments and approvals regarding toxic and hazardous materials that school districts must follow before receiving final site approval from the Department of Education and funds under the School Facilities Program. For example, the site approval package must include written determinations regarding the presence of hazardous wastes or pipelines carrying hazardous substances on the site (the adopted CEQA document is often used for these purposes). In addition, Section 17213(b) requires the local education agency to consult with the applicable air district to identify facilities within 0.25 mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials, substances, or wastes and prepare written findings that either there are not such facilities, the facilities do not pose a health risk, or corrective measures will be taken (consistent PRC Section 21151.8). The code also requires that a Phase I Environmental Site Assessment (ESA) is conducted according to the American Society of Testing and Materials standards (ASTM E-1527-2000) and transmitted to DTSC. If the Phase I ESA concludes that further investigation is needed or DTSC requires it, a PEA must be completed under DTSC oversight and review.

California Fire Code

The California Fire Code (CFC) is Chapter 9 of CCR Title 24. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years.

LOCAL

The project site lies within the jurisdictional boundaries of Sacramento County; therefore, the County's policies, as well as the Sacramento LAFCo's polices, would apply. Furthermore, if the SOIA is approved, it would likely lead to annexation to the City of Elk Grove. Thus, applicable policies of the City of Elk Grove's General Plan are described below.

Sacramento County General Plan

The following policies from the Sacramento County General Plan would apply to the SOIA.

- **Policy HM-4**: The handling, storage, and transport of hazardous materials shall be conducted in a manner so as not to compromise public health and safety standards.
- **Policy HM-7**: Encourage the implementation of workplace safety programs and to the best extent possible ensure that residents who live adjacent to industrial or commercial facilities are protected from accidents and the mishandling of hazardous materials.
- **Policy HM-8:** Continue the effort to prevent ground water and soil contamination.
- **Policy HM–9:** Continue the effort to prevent surface water contamination.
- **Policy HM-10:** Reduce the occurrences of hazardous material accidents and the subsequent need for incident response by developing and implementing effective prevention strategies.
- **Policy HM-11:** Protect residents and sensitive facilities from incidents which may occur during the transport of hazardous materials in the County.

City of Elk Grove General Plan

The following policies from the City of Elk Grove's General Plan would apply to future annexation and development of the project site.

- **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 will consider the hazards posed by reasonably foreseeable events. Evaluation of such hazards will 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.

Table 3.15-1 Reasonably Foreseeable Probability of Occurrence

Land Use	Probability of Occurrence Per Year
"Agriculture, Light Industrial, and Industrial" Uses involving continuous access and the presence of limited numbers 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"	Between 10 in one million and 1 in one million (10^{-5} to 10^{-6})

Table 3.15-1 Reasonably Foreseeable Probability of Occurrence

Land Use	Probability of Occurrence Per Year
Uses involving continuous access but of easy evacuation, e.g., commercial uses, offices.	
"Residential" All other land uses without restriction including institutional uses, residential areas, etc.	1 in one million and less (10^{-6})

Source: City of Elk Grove General Plan, adopted November 2003, Amended July 2016

- **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 on the following page.

  - **SA-3-Action 1:** As part of the environmental review process for proposed projects, the City will analyze potential safety-related impacts resulting from or affecting new development which could cause or be affected by reasonably foreseeable events. This analysis will 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's General Plan reproduced below as Table 3.15.2.

Table 3.15-2 Maximum Acceptable Exposure Criteria for Agricultural, Residential, and Non-Residential Land Uses (City of Elk Grove General Plan Table SA-A)

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

Notes:

(1) psig: pounds per square inch gauge.

(2) 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.

(3) kJ/m2: kiloJoules per square meter (a measure of radiant heat received); kW/m2: kilowatts per square meter; 1.0 kJ/m2 = 1.0 kW/m2 for 1 sec = 1 kW/ (m2-sec).

(4) As defined in Policy SA-3.

(5) Includes schools, parks, libraries, and other similar public gathering places regardless of their location.

- **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 3.15-2] 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.

Sacramento Metropolitan Air Quality Management District Asbestos Program

The Sacramento Metropolitan Air Quality Management District regulates asbestos in building materials. The program applies to renovations or demolitions of jurisdictional structures in Sacramento County that include asbestos. This program requires and 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)

Sacramento County Local Hazard Mitigation Plan

The *Sacramento County Local Hazard Mitigation Plan* (Sacramento County 2016), 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.

Sacramento County Evacuation Plan

The Sacramento County Evacuation Plan is developed as an Annex to the Sacramento County 2008 All-Hazards Emergency Operations Plan. The purpose of this evacuation plan is to document the agreed upon strategy for the County's response to emergencies that involve the evacuation of persons from an impacted area to a safe area. This involves coordination and support for the safe and effective evacuation of the general population, and for those who need additional support to evacuate. Focus areas within this evacuation plan include public alert and warning, transportation, and care and shelter.

Primary evacuation routes are established for each of the seven County Sheriff Districts. These include major interstates, highways and prime arterials within Sacramento County. Local jurisdictions will work with the County, and especially the Operation's Section, Law Enforcement Branch and the Evacuation Movement Unit to identify and update evacuation routes and evacuation transfer points. The primary evacuation routes will usually be major interstates and other highways, and major roadways within and out of the county - unless otherwise determined by the County Department of Transportation (DOT). During an evacuation, County DOT traffic engineers would be able to quickly calculate traffic flow capacity and decide which of the available traffic routes should be used to move people in the correct directions. In many cases, the traffic engineers will need to reevaluate and re-calculate best traffic routes based on situational data. Interstate 5, which is located less than 2 miles west of the SOIA area is identified as a key evacuation route.

3.15.3 Environmental Impacts and Mitigation Measures

ANALYSIS METHODOLOGY

The following evaluation is based on a review of documents and publicly available information about hazardous and potentially hazardous conditions in the SOIA area to determine the potential for project implementation to result in an increased health or safety hazard to people or the environment. This includes city and county planning documents, and SWRCB and DTSC hazardous materials database information. Physical surveys of the SOI area were not conducted. Rather, this program-level analysis is based on hazards typically associated with certain land uses and an overall understanding of the key safety concerns that could result from implementation of the proposed Plan.

There are no changes to land uses proposed as part of this SOIA application. However, to facilitate environmental analysis for this SOIA request, the applicant has developed a conceptual land use scenario. 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. The evaluation of hazards and hazardous materials impacts assumes that any construction and development of subsequent projects would adhere to the latest federal, State, and local regulations, and conform to the latest required standards in the industry.

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact related to hazards or hazardous materials is considered significant if implementation of the project would do any of the following:

- 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 0.25 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 EVALUATED FURTHER

Public Airport and Private Airstrip Hazards

The SOIA area is not located within 2 miles of any active airport. The closest public-use airport is Franklin Field, approximately 4 miles from the SOIA area. There are no active private airstrips located in the vicinity. As a result, impacts related to safety hazards associated with the operation of a public airport or private airstrip would not occur. Therefore, this issue is not addressed further in this EIR.

IMPACT ANALYSIS

Impact 3.15-1: Create a significant hazard through transport, use, or disposal of hazardous materials.

Future development of the SOIA area upon annexation 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, because of compliance with applicable rules and regulations specifically designed to protect the public health through improved procedures for the handling of hazardous materials, the impact to the public through routine, transport, use, and disposal would be **less than significant.**

Construction activities associated with future development would temporarily increase the regional transport, use, storage, and disposal of hazardous materials and petroleum products (such as diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals) that are commonly used at construction sites. Hazardous waste generated during construction may consist of welding materials, fuel and lubricant containers, paint and solvent containers, and cement products containing strong basic or acidic chemicals.

Hazardous materials transported by truck use many of the same freeways, arterials, and local streets as other traffic. This creates a risk of accidents and associated release of hazardous materials for other drivers and for people along these routes. Although the transportation of hazardous materials could result in accidental spills, leaks, toxic releases, fire, or explosion, the USDOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 of the CFR. These standard accident and hazardous materials recovery training and procedures are enforced by the State and followed by private State-licensed, certified, and bonded transportation companies and contractors.

Further, pursuant to 40 CFR 112, the project would be required to prepare a spill prevention and treatment plan for rapidly, effectively, and safely cleaning up and disposing of any spills or releases that may occur during construction at the SOIA site. As required under state and federal law, notification and evacuation procedures for site workers and local residents would be included as part of the plan in the event of a hazardous materials release during on-site construction.

In addition to 40 CFR 112, SWRCB Construction General Permit (2009-0009 DWQ) requires spill prevention and containment plans to avoid spills and releases of hazardous materials and wastes into the environment. Inspections would be conducted to verify consistent implementation of general construction permit conditions and best management practices (BMPs) to avoid and minimize the potential for spills and releases, and of the immediate cleanup and response thereto. BMPs include, for example, the designation of special storage areas and labeling, containment berms, coverage from rain, and concrete washout areas. Compliance with the aforementioned regulations would minimize the potential risk of a spill or accidental release of hazardous materials during construction.

Development would increase population, jobs, and households and a variety of land uses including residential, commercial, and industrial. Specific uses, such as dry cleaners and gas stations, would involve routine transport, use, and disposal of hazardous materials such as household hazardous wastes (e.g., paints, cleaning supplies, solvents, and petroleum products) and commercial and industrial hazardous waste. Exposure to hazardous materials could cause various short-term and/or long-term health effects. Possible health effects could be acute (immediate, or of short-term severity), chronic (long-term, recurring, or resulting from repeated exposure), or both. Acute effects, often resulting from a single exposure, could result in nausea, vomiting, headache, dizziness, or burns. Chronic exposure could result in systemic damage or damage to organs, such as the lungs, liver, or kidneys. Health effects would be specific to each hazardous material.

Development could also involve the use of hazardous materials or petroleum products. The operation of businesses that use, create, or dispose of hazardous materials is regulated and monitored by federal, State, and local regulations that provide a high level of protection to the public and the environment from the hazardous materials manufactured within, transported to, and disposed within the region. RCRA, Title 22 of the CCR, and the Hazardous Waste Control Law regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. These laws impose regulatory systems for handling hazardous waste in a manner that protects human health and the environment, including requirements for the classification of materials, packaging, hazard communication, Cal/EPA oversees the regulation and management of hazardous materials on a statewide level through DTSC. Use of hazardous materials requires permits and monitoring to avoid hazardous waste release through the local CUPA. Additionally, businesses that generate hazardous waste are required to have an EPA identification number to monitor and track hazardous waste activities.

If future development occurs within the SOIA area upon annexation, 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). USDOT (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, 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 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 would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.15-2: Create potential human hazards from exposure to existing on-site hazardous materials.

Future development of the SOIA area upon annexation 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 would be **potentially significant**.

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 underground storage tanks located on the proposed site. As of June 2017, the SOIA area is not on the Cortese list (DTSC 2017). 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 would be required to address hazardous materials conditions.

Hazardous Building Materials

Existing structures are believed to contain hazardous materials, including asbestos, lead, and heavy metals – primarily because many of the existing structures were constructed when the use of these materials was not heavily restricted. Demolition of structures could result in inadvertent release or improper disposal of debris containing potentially hazardous materials; however, federal, state, and local regulations have been developed to address potential impacts related to the handling and disposal of hazardous materials during demolition. Potential impacts would be minimized through adherence to regulatory standards that prescribe specific methods of material characterization and handling.

Federal and state regulations govern the renovation and demolition of structures where materials containing lead and asbestos are present. Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the State Department of Health Services. In addition, Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Specific actions required by law include the following.

- **Asbestos.** Prior to demolition, all structures would be tested for the presence of asbestos-containing materials. Any asbestos would be removed and disposed of by an accredited contractor in compliance with federal, state, and local regulations (including the Toxic Substances Control Act and the National Emission Standard for Hazardous Air Pollutants). The City of Elk Grove would regulate asbestos through conditions of approval and the Sacramento Metropolitan Air Quality Management District would be notified 10 days in advance of any proposed demolition or abatement work. Compliance with these regulations would result in the safe disposal of asbestos-containing materials.

- **Lead-based paint or other coatings.** A survey for indicators of lead-based coatings would be conducted before demolition to further characterize the presence of lead on the project site. For the purposes of compliance with Cal/OSHA regulations, all coated surfaces would be assumed to potentially contain lead. There is also a potential for soil contamination because of deposition of deteriorated (i.e., flaked, peeled, chipped) lead-based paint adjacent to structures where lead-based exterior paints were used. Loose or peeling paint may be classified as a hazardous waste if concentrations exceed total threshold limits. Cal/OSHA regulations require air monitoring, special work practices, and respiratory protection during demolition where even small amounts of lead have been detected.

- **Heavy metals and PCBs.** Spent florescent light bulbs and ballasts, thermostats, and other electrical equipment may contain heavy metals, such as mercury, or PCBs. If concentrations of these materials exceed regulatory standards, they would be handled as hazardous waste in accordance with hazardous waste regulations.

Agricultural Chemicals

Due to historical use for agricultural purposes, it is anticipated that residue from pesticides, fertilizers, and other agricultural chemicals may be present on the site. As detailed in the setting section above, current agricultural practices do not generally employ toxic chemicals with long-persistence; however, chemicals formerly used in agriculture included heavy metals and organic compounds, such as DDT, which may persist in soil for decades. These residues could potentially pose a health risk to persons coming into contact with those chemicals.

Although, substantial concentrations of hazardous materials are not anticipated to occur on the site, based on recent use of the property, the presence of agricultural chemicals should be assumed. 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

Construction activities that disturb subsurface materials could encounter previously unidentified contamination from past practices or placement of undocumented fill or even unauthorized disposal of hazardous wastes. Encountering these hazardous materials could expose workers, the public or the environment to adverse effects depending on the volume, materials involved, and concentrations.

If contaminated soils and/or groundwater (i.e., identifiable by soil staining or odors) are encountered during construction activities, work would cease until appropriate worker health and safety precautions, as specified by CCR Title (Section 5194) promulgated by 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 USDOT-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, DTSC, and RWQCB guidelines would be implemented.

To address the potential for documented and undocumented hazards on a site, the American Society for Testing and Materials has developed widely accepted practice standards for the preliminary evaluation of site hazards (E-1527-05). Phase I ESAs include an on-site visit to determine current conditions; an evaluation of possible risks posed by neighboring properties; interviews with persons knowledgeable about the site's history; an examination of local planning files to check prior land uses and permits granted; file searches with

appropriate agencies having oversight authority relative to water quality and/or soil contamination; examination of historic aerial photography of the site and adjacent properties; a review of current topographic maps to determine drainage patterns; and an examination of chain-of-title for environmental lines and/or activity and land use limitations. If a Phase I ESA indicates the presence, or potential presence of contamination, a site-specific Phase II ESA is generally conducted to test soil and/or groundwater. Based on the outcome of a Phase II ESA, remediation of contaminated sites under federal and State regulations may be required prior to development. Phase I ESAs can also be used to identify the potential for presence of hazardous building materials in situations where older structures intended for demolition could contain lead-based paint, asbestos containing materials, mercury, or polychlorinated biphenyls. It is common practice for lending institutions to require a Phase I ESA to be prepared to research and disclose the prior uses of the site and the likelihood that residual hazardous materials and/or waste might be present in underlying soil and/or groundwater when properties change hands. However, there are no general regulatory requirements to conduct a Phase I ESA, or subsequent investigation of potential contamination. Therefore, because it cannot be assumed these practices would occur, the impacts related to changes in land use are considered **potentially significant**.

Mitigation Measure 3.15-2a: Prepare Environmental Site Assessments

At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require a site assessment, including an updated review of environmental risk databases, for the presence of potential hazardous materials. If this assessment indicates the presence or likely presence of contamination, the project sponsor shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition, the Phase I ESA shall make recommendations for any hazardous building materials survey work that shall be done. All recommendations included in a Phase I ESA prepared for a site shall be implemented. If a Phase I ESA indicates the presence or likely presence of contamination, the City of Elk Grove shall require a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented prior to ground disturbance. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.

Mitigation Measure 3.15-2b: Prepare a Hazardous Materials Contingency Plan for Construction Activities

At the time of any application to annex territory within the Bilby Ridge SOIA area, the City of Elk Grove shall require that the applicants provide a hazardous materials contingency plan to Sacramento County EMD. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, and presence of underground storage tanks or buried building material.

The plan shall include the provision that, if at any time during the course of constructing the project, evidence of soil and/or groundwater contamination with hazardous material is encountered, the project applicant shall immediately halt construction and contact Sacramento County EMD. Work shall not recommence until the discovery has been assessed/treated appropriately (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of Sacramento County EMD, RWQCB, and DTSC (as applicable). The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction and contract specifications of the project. Evidence of compliance with this mitigation measure shall be provided in the annexation application to LAFCo.

Significance after Mitigation

With enforcement of the above mitigation measures and adherence to existing hazardous materials regulations, impacts from any existing hazardous materials would be minimized. Preparation of, and compliance with, a Phase I ESA for properties at risk of potential hazardous materials and/or waste contamination would avoid adverse impacts associated with build-out. This would minimize the risk of an accidental release of hazardous substances that could adversely affect human health or the environment.

Mitigation Measure 3.15-2b would establish a hazardous materials contingency plan to address potential soil and groundwater contamination, if discovered during construction activities. This impact would be reduced to a **less-than-significant** level.

Impact 3.15-3: Create a significant hazard to the public or environment due to upset and accident conditions.

Future development of the SOIA area upon annexation would not 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 through compliance with existing regulations. This impact would be **less than significant**.

Construction future development could result in impacts related to use of hazardous materials and disturbance of potentially hazardous materials. The most likely incidents involving construction-related hazardous materials are generally associated with minor spills or drips. Small fuel or oil spills are possible, but would have a negligible impact on public health. All hazardous materials would be stored, handled, and disposed of according to the manufacturers' recommendations, and spills would be cleaned up in accordance with applicable regulations. Hazardous materials spills or releases, including petroleum products such as gasoline, diesel, and hydraulic fluid, regardless of quantity spilled, must be immediately reported if the spill has entered or threatens to enter a water of the State, including a stream, lake, wetland, or storm drain, or has caused injury to a person or threatens injury to public health. Immediate notification must be made to the local emergency response agency, or 911, and the Governor's Office of Emergency Services Warning Center. For non-petroleum products, additional reporting may be required if the release exceeds federal reportable quantity thresholds over a release period of 24 hours as detailed in HSC Section 25359.4 and Title 40, Section 302.4 of the CFR.

The disturbance of undocumented hazardous wastes could also result in hazards to the environment and human health. Grading and excavation activities may expose construction workers and the public to hazardous substances present in the soil or groundwater, but which may not have been anticipated based on information about existing conditions. Potential hazards to human health include ignition of flammable liquids or vapors, inhalation of toxic vapors in confined spaces such as trenches, and skin contact with contaminated soil or water.

During operation, businesses that store hazardous materials could potentially experience accidents or upset conditions that result from their routine use. These businesses are required to prepare spill prevention, containment, and countermeasures plans (pursuant to 40 CFR 112) or, for smaller quantities, a spill prevention and response plan, that identify best management practices for spill and release prevention and provide procedures and responsibilities for rapidly, effectively, and safely cleaning up and disposing of any spills or releases. Oversight is provided by the CUPA. As discussed above, the severity of potential effects varies with the activity conducted and the concentration and type of hazardous materials involved; however, most minor spills associated with vehicle maintenance would be remediated immediately pursuant to the requirements and liabilities of applicable regulations and would not pose a substantial hazard to the public or the environment. The possible adverse effects on the public or environment from these and other activities would more likely be acute (immediate, or of short-term severity) as a result of short-term exposure.

Future development projects could increase the potential for unintentional upset and accident conditions. Existing regulations effectively reduce the potential for individual projects to create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.15-4: Emit hazardous emissions or handle hazardous materials within 0.25 mile of a school.

Future development of the SOIA area upon annexation could include the construction of new on-site schools. However, compliance with CDE school siting criteria ensures schools would not be located near hazardous material handlers and emitters. This impact would be **less than significant**.

The SOIA area is approximately 0.14-mile south of Carrol Elementary. However, land uses identified in the SOIA conceptual land use plan (see Exhibit 2-4) would not place any land uses that could handle hazardous materials within 0.25 miles of the school. Any new commercial or industrial operations in proximity to existing schools would be required to comply with regulations related to the routine use, storage, and transport of hazardous materials. As discussed in detail above, compliance with existing regulations would reduce the exposure to potential hazards associated with these land uses.

For new schools that may be developed within the SOIA area, the California Education Code, including *Education Code* Section 17213(b), establishes requirements for assessments and approvals that address the potential for existing contamination on the site, and whether nearby land uses might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials. Assessment of existing contamination is conducted in coordination with DTSC's School Property Evaluation and Cleanup Division, which is responsible for assessing, investigating, and cleaning up proposed school sites. This Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy a new school. All proposed school sites that would receive State funding for acquisition or construction are required to go through a rigorous environmental review and cleanup process under DTSC's oversight.

During construction, demolition, and excavation activities, projects could potentially produce hazardous air emissions or involve the handling of extremely hazardous wastes. During operation, projects could use and produce hazardous materials that may be transported on roadways included in the SOIA area. As discussed above, all projects would comply with federal and state regulations that are designed to reduce the potential for the release of large quantities of hazardous materials and wastes into the environment to an acceptable level, and in particular to protect schools. This impact would be **less than significant.**

Mitigation Measure

No mitigation is required.

Impact 3.15-5: Impair emergency response or evacuation plans.

Future development in the SOIA area upon annexation would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact would be **less than 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. The emergency evacuation plan identifies Interstate 5 as a key evacuation route, but is adapted to specific situations and updated in response to changes in growth patterns and development.

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. Construction activities in the SOIA area do not, however, have the potential to substantially hinder emergency response activities or physically interfere with established evacuation routes. Projects requiring encroachment permits for temporary construction activities in public roadways that could be used for emergency response or evacuation are required to prepare traffic mitigation plans that address traffic control during the period the project is occurring within public right of way. To address any temporary road

closures that would be required during construction, standard construction mitigation includes notification of emergency responders.

The closest fire stations to the SOIA area are Station 72 or Station 74, at 10035 Atkins Drive and 6501 Laguna Park Drive, respectively. Station 72 is located approximately 1.3 miles north and Station 74 is located approximately 4.4 miles north of the project site near 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. Any future changes in land use would be reflected in updated emergency evacuation plans.

The potential for construction activities or development to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan would be **less than significant**.

Mitigation Measure

No mitigation is required.

Impact 3.15-6: Create a significant risk from wildfires.

Future development of the SOIA area upon annexation 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 SOIA area is within a Local Response Area 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 3.12, "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 2017), which is defined as an area not prone to intense, damaging wildfires.

The SOIA area is actively farmed and vegetation would generally be cleared before earthwork on the site. Adjacent properties are developed or farmed and actively irrigated. New construction is subject to the CFC, which includes safety measures to minimize the threat of fire. Title 14 of the CCR sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent damage to structures or people by reducing wildfire hazards. Therefore, future development within the SOIA area would not be exposed to significant risks of wildfire. This impact would be **less than significant**.

Mitigation Measure

No mitigation is required.