3.8 HAZARDS AND HAZARDOUS MATERIALS

This section addresses the potential presence of hazardous materials and conditions within the Project area and analyzes the potential risk of such materials in proximity to proposed development that could occur under implementation of the Housing Element and Safety Element Update (Project). This section discusses existing policies and regulations regarding hazards and hazardous materials, describes the existing conditions in the Project area, identifies hazardous materials that may affect public safety, and analyzes potential impacts. The primary source of information used for this analysis is the *City of Elk Grove General Plan Update Draft Environmental Impact Report* (City of Elk Grove 2018a). Section 3.2, "Air Quality," evaluates potential impacts from toxic air contaminant emissions; Section 3.6, "Geology and Soils," evaluates geologic hazards; and Section 3.9, "Hydrology and Water Quality," evaluates potential flooding risks and hazards related to water quality.

No comments pertaining to hazards and hazardous materials were received in response to the notice of preparation (NOP).

3.8.1 Regulatory Setting

In California, the U.S. Environmental Protection Agency (EPA) has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, the Hazardous Materials Division of the Sacramento County Environmental Management Department (EMD) has been granted authority by the State to enforce most regulations pertaining to hazardous materials in the City.

FEDERAL

Management of Hazardous Materials

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as requiring measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. Applicable federal regulations pertaining to hazardous materials are primarily contained in Code of Federal Regulations (CFR) Titles 29, 40, and 49. Hazardous materials, as defined in the Code, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws.

- ► The Toxic Substances Control Act of 1976 (15 U.S. Code [USC] Section 2601 et seq.) regulates the manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. Section 403 of the Toxic Substances Control Act establishes standards for lead-based paint hazards in paint, dust, and soil.
- ► The Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) is the law under which EPA regulates hazardous waste from the time the waste is generated until its final disposal ("cradle to grave").
- ► The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 USC 9601 et seq.) gives EPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.
- ► The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC Title 42, Chapter 116), also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.
- ► The Spill Prevention, Control, and Countermeasure (SPCC) rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan rule.

Transport of Hazardous Materials

The U.S. Department of Transportation (US DOT) regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act 49 USC 1801 et seq.) is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials transport regulations are enforced by the Federal Highway Administration, the U.S. Coast Guard, the Federal Railroad Administration, and the Federal Aviation Administration.

Worker Safety

The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.

STATE

Management of Hazardous Materials

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services. The federal law, SARA Title III or EPCRA, described above, encourages and supports emergency planning efforts at the State and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- emergency planning,
- emergency release notification,
- reporting of hazardous chemical storage, and
- inventory of toxic chemical releases.

The corresponding State law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). Under this law, qualifying businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. At such time as the applicant begins to use hazardous materials at levels that reach applicable State and/or federal thresholds, the plan is submitted to the administering agency.

The California Department of Toxic Substances Control (DTSC), a division of CalEPA, has primary regulatory responsibility over hazardous materials in California, working in conjunction with EPA to enforce and implement hazardous materials laws and regulations. As required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the State, known as the Cortese List. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up leaking underground storage tanks (USTs). The Central Valley RWQCB has jurisdiction over Elk Grove.

CalEPA adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The six 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.

Ascent Environmental Hazardo and Hazardous Materials

Transport of Hazardous Materials and Hazardous Materials Emergency Response Plan

The State has adopted U.S. Department of Transportation regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 California Code of Regulations (CCR). State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous materials incidents is one part of the plan. The plan is managed by the Governor's Office of Emergency Services, which coordinates the responses of other agencies in the project area.

Management of Construction Activities

Through the Porter-Cologne Water Quality Act and the National Pollution Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during project construction. For a detailed description of the Porter-Cologne Water Quality Act, the NPDES program, and the role of the Central Valley RWQCB, see Section 3.9, "Hydrology and Water Quality."

The State Water Board adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than one acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit. Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

Worker Safety

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts onsite evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR also includes regulations that provide for worker safety when blasting and explosives are utilized during construction activities. These regulations identify licensing, safety, storage, and transportation requirements related to the use of explosives in construction.

LOCAL

Sacramento County Environmental Management Department

Sacramento County EMD is responsible for promoting a safe and healthy environment in Sacramento County and enforcing hazardous waste laws and regulations at a local level. As the local CUPA, Sacramento County EMD oversees the proper use, storage, and cleanup of hazardous materials; monitoring wells; removal of leaky underground storage tanks; and permits for the collection, transport, use, or disposal of refuse. Sacramento County EMD's Hazardous Materials Business Plan, which is administered throughout Sacramento County and its incorporated cities, is an element of the County's CUPA program.

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 affected 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 in this evacuation plan include public alert and warning, transportation, and care and shelter.

Primary evacuation routes are established for each of the seven Sacramento County sheriff districts. These include major interstates, highways, and prime arterials in Sacramento County. Local jurisdictions will work with the county, and especially the Operations Section, Law Enforcement Branch, and the Evacuation Movement Unit, to identify and update evacuation routes and evacuation transfer points. The primary evacuation routes usually will be major interstates and other highways, and major roadways within and out of the county, unless otherwise determined by the Sacramento County Department of Transportation. During an evacuation, Sacramento County Department of Transportation 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 recalculate best traffic routes based on situational data.

Sacramento County Local Hazard Mitigation Plan

The City participates in the multijurisdictional Sacramento County Local Hazard Mitigation Plan (LHMP), last updated in 2016. The purpose of the plan is to guide hazard mitigation planning to better protect the people and property of the county from the effects of hazard events, such as flood, drought, earthquake, and severe weather. This plan also ensures that Sacramento County and participating jurisdictions, including the City, continue to be eligible for federal disaster assistance including the FEMA Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and the Flood Mitigation Assistance Program. The County LHMP provides policies and programs for participating jurisdictions to implement that reduce the risk of hazards and protect public health, safety, and welfare.

City of Elk Grove Emergency Operations Plan

The City's Emergency Operations Plan (EOP) provides a strategy for the City to coordinate and conduct emergency response (City of Elk Grove 2018b). The EOP establishes an Emergency Management Organization and assigns functions and tasks consistent with California's Standardized Emergency Management System and the National Incident Management System. The intent of the EOP is to provide direction on how to respond to an emergency from the initial onset, through an extended response, and into the recovery process. The EOP integrates and coordinates the planning efforts of multiple jurisdictions. This plan was reviewed and approved by representatives from each City department, local special districts with emergency services responsibilities in the City, and the Sacramento Operational Area Office of Emergency Services. The content is based upon guidance approved and provided by the State of California, FEMA, and the federal Department of Homeland Security.

City of Elk Grove General Plan

The City of Elk Grove General Plan (City of Elk Grove 2019) contains the following goals and policies that are applicable to the Project:

- ▶ Policy ER-1-1: 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 offsite 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 ER-1-2. Hazardous physical effects shall be determined in accordance with Policy ER-1-3.
- ▶ Policy ER-1-2: For the purpose of implementing Policy ER-1-1, the City considers an event to be "reasonably foreseeable" when the probability of the event occurring is as indicated in Table 8-1 [presented as Table 3.8-1 in this EIR].

Ascent Environmental Hazardo and Hazardous Materials

Table 3.8-1 Acceptable Probability of Reasonably Foreseeable Risks to Individuals by Land Use

Land Use	Risk of Death Over 365 Days of Exposure	
Agricultural, Light Industrial and Industrial: Uses involving continuous access and the presence of limited number of people but easy evacuation, e.g., open space, warehouses, manufacturing plants	Between 100 in one million and 10 in one million (10 ⁻⁴ to 10 ⁻⁵)	
Commercial: Uses involving continuous access but easy evacuation, e.g., commercial uses, offices	Between 10 in one million and 1 in one million (10 ⁻⁵ to 10 ⁻⁶)	
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 2019, Table 8-1.

Policy ER-1-3: For the purpose of implementing Policy ER-1-1, use the Threshold of Exposure standards shown in Table 8-2 [presented as Table 3.8-2 in this EIR] to determine the potential "hazardous physical effect" from either: (a) Placing a use near an existing hazardous facility which could expose the new use to hazardous physical effects, or (b) Siting a hazardous facility that could expose other nearby uses to hazardous physical effects. Reasonably foreseeable level of risk standards may be considered by the City when supported by substantial evidence.

Table 3.8-2 Policy Threshold of Exposure Criteria for Agricultural, Residential, and Nonresidential Land Uses

Landllan	Maximum Policy Threshold of Exposure				
Land Use	Overpressure	Airborne Toxic Substances	Radiant Heat	Shrapnel	
Agriculture	3.4 psig ^(a)	Dose = ERPG-2 ^(b) ppm for 60 min	Radiant dose = 200 kJ/m ^{2 (c)}	All uses will be located such that the possibility of injury to an unprotected person due to shrapnel released by a reasonably foreseeable event ^(d) is less than 1/10 ⁻⁶ (1/1,000,000)	
Residential (all density ranges) ^(e)	1.0 psig	Exposure time = 60 min For example: chlorine ERPG-2 = 3 ppm	Exposure time = 30 sec Target radiant energy = radiant dose/exposure time		
Office/Commercial	1.0 psig	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	Target radiant energy = (200 kJ/m²) / 30 sec Target radiant energy = 6.67 kW/m²		
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/m2 Exposure time = 15 sec Target radiant energy = radiant dose/exposure time		
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	Target radiant energy = (200 kJ/m²) / 15 sec Target radiant energy = 13.34 kW/m²		

^a psig: pounds per square inch gauge

^b 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.

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)

^d As defined in Policy ER-1-2.

^e Includes schools, parks, libraries, and other similar public gathering places regardless of their location Source: City of Elk Grove 2019, Table 8-2.

▶ Policy ER-1-4: Work to identify and eliminate hazardous waste releasees from both private companies and public agencies.

- Standard ER-1-4a: 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 which will be determined by the City of Elk Grove
- Policy ER-1-5: Storage of hazardous materials and waste shall be strictly regulated, consistent with state and federal law.
 - Standard ER-1-5a: Future land uses that are anticipated to utilize hazardous materials or waste shall be required to provide adequate containment facilities to ensure that surface water and groundwater resources are protected from accidental releases. This shall include double-containment, levees to contain spills, and monitoring wells for underground storage tanks, as required by local, state and federal standards.
 - Standard ER-1-5.b: 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 ER-1-7: To the extent feasible, uses requiring substantial transport of hazardous materials should be located such that traffic is directed away from the City's residential and commercial areas.
- ▶ Policy ER-1-8: Support continued coordination with the California Office of Emergency Services, the California Department of Toxic Substances Control, the California Highway Patrol, the Sacramento County Department of Environmental Health Services, the Cosumnes Community Services District Fire Department, the Elk Grove Police Department, and other appropriate agencies in hazardous materials route planning and incident response.

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 transport of hazardous materials comply with all applicable State laws (Section 65850.2 of the Government Code and HSC Section 25505 et seq.) and that appropriate information is reported to the Fire Department as the regulatory authority:

- A. Reporting Requirements. All businesses required by State law (HSC Section 6.95) 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 (HSC Section 6.7 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.

3.8.2 Environmental Setting

HAZARDOUS MATERIALS

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined in the CFR as "a substance or material that ... is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

"Hazardous material" means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous wastes" are defined in California Health and Safety Code Section 25141(b) as wastes that:

... because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

FACILITIES THAT USE OR STORE HAZARDOUS MATERIALS

Businesses and services where hazardous materials are used or stored include fuel stations (underground fuel tanks) and automotive service businesses, dry cleaners, schools, medical and dental facilities, and laboratories, among others. Consumer products such as cleaning and maintenance supplies, paints, pesticides, and herbicides are also used and/or stored at retail stores, businesses, and residences. Industrial land uses often use, store, and/or generate hazardous waste. Industrial land activity types in Elk Grove include heavy industrial, light industrial, and warehousing. The bulk of industrial uses are in the southeast part of the City between State Route (SR) 99 and the Union Pacific Railroad (UPRR) line.

Suburban Propane Facility

The Suburban Propane facility located in the industrial area east of SR 99 and north of Grant Line Road handles large quantities of hazardous materials. The Suburban Propane facility is considered one of the largest aboveground propane storage facilities in the United States. The facility receives pressurized ambient temperature liquid propane from tank trucks and railcars and stores both ambient and refrigerated liquid propane. The propane is subsequently loaded onto trucks or railcars for off-site transport. The major components at the Suburban Propane facility include four 60,000-gallon pressurized, ambient temperature propane storage tanks; two 12,000,000-gallon refrigerated, low-pressure storage tanks; a propane refrigeration system; a flare; safety alarms; and tank truck and railcar loading and unloading stations. The facility is also equipped with water deluge systems, which are intended to help prevent tank trucks and railcars from failing due to excessive heat and internal pressure.

A risk evaluation was prepared in 2003 as part of the EIR prepared for the previous General Plan. *The Review of Suburban Propane Hazards Analysis Studies and Evaluation of Accident Probabilities Report* (Quest 2003, cited in City of Elk Grove 2018a) assessed how a release of propane, either by accident or by intentional act, could affect surrounding areas in the event of a failure of one or both refrigerated storage tanks. Under the flash fire scenario, the impact extent could be out to 1.5 miles, with an accidental incident probability of one chance in 2.8 million in a year, and an intentional act probability of one chance in 2.1 million in a year. For a vapor cloud explosion, the impact extent could be out to 0.75 miles, with an accidental incident probability of one chance in 104 million in a year, and an intentional act probability of one chance in 3.2 million in a year.

The potential for an accidental or intentional event resulting in either a vapor cloud or a flash fire is not substantial. Additionally, because the Suburban Propane facility is not operated by the City and the Project would not involve any changes to facility operations, the potential for a catastrophic event and its effects on surrounding land activity types would not be exacerbated by the Project and is, therefore, not subject to further analysis in this SEIR.

Hazardous Material Sites

The General Plan EIR noted that there are approximately 54 sites in the Planning Area that are listed on the Hazardous Waste and Substances Site List (Cortese List) compiled pursuant to Government Code Section 65962.5(a) (DTSC 2017 as cited in City of Elk Grove 2018a:5.8-2; SWRCB 2017 as cited in City of Elk Grove 2018a:5.8-2). These are sites where soil or groundwater contamination has resulted from the use and/or disposal of hazardous materials or wastes and include fuel stations; commercial and industrial facilities; schools; government buildings; and private property. Most of the listed sites are shown as completed case closed, certified closure, no action required, or no further action required. Sites are typically investigated in cases where there is known contamination or the potential for contamination requires investigation. Only sites that have been investigated and/or cleaned up under the oversight of the California Department of Toxic Substances Control (DTSC) or the State Water Resource Control Board (SWRCB) are on the Cortese List. The seven sites where some State oversight is still under way are ARCO #2123 (8500 Elk Grove Boulevard), Conoco Asphalt Terminal (10090 Waterman Boulevard), a Shell service station (9100 Harbour Point Drive), proposed Laguna Ridge East Elementary School (8551 Poppy Ridge Road), Obie's Dump (8437 Sheldon Road), a proposed charter school site (9185 Grant Line Road), and Proto-Tech Industries, Inc. (9181 CMD CT #A) (DTSC 2020; SWRCB 2020).

The number, status, and locations of contaminated sites are subject to change after publication of this EIR. It is possible that a new site or sites could be added to the Cortese list, while other sites that are currently open cases may be removed from the list by a regulatory agency. Sites indicated as open or active are in the process of being investigated and/or remediated. Sites listed as closed, inactive, or no further action may have been investigated and/or remediated, but may have residual contamination as allowed by the regulatory agencies. For example, the State allows for deed restrictions that specify land use prohibitions or limitations on sites where contaminants may still be present. For any site included on a State or local list, regardless of its status, or sites that may be added in the future, the City will require future project applicants to submit up-to-date information regarding the status of the site.

There could also be sites in the Planning Area that may be contaminated but have not yet been identified or investigated, particularly in developed areas where infill development may occur under the proposed Project. In addition, past land activity types may have resulted in contamination outside the Planning Area, typically associated with migration of contaminated groundwater.

Residual Agricultural Chemicals

Much of the remaining vacant land in the Planning Area has been or is currently used for agricultural purposes. Past use of agricultural chemicals such as pesticides can result in residual chemicals in the soil that can expose people to possible health risks. Certain types of agricultural chemicals used in past decades can persist in soils for years. Irrigated pasture, dry-farmed crops, and natural grasses typically require little to no applications of environmentally persistent pesticides, but cultivated irrigated row crops may have been subject to applications of restricted agricultural chemicals, which could be persistent. Orchards and orchard-cultivated soils may have been contaminated through the repeated application of agricultural chemicals to fruit or nut trees.

POTENTIALLY HAZARDOUS BUILDING MATERIALS

Existing structures in the Planning Area that could be renovated or demolished in conjunction with future development projects under the proposed Project may contain asbestos-containing materials in building components, lead-based paint, or polychlorinated biphenyls (PCBs) in electrical equipment.

Asbestos

Structures constructed or remodeled between 1930 and 1981 have the potential to contain asbestos-containing materials. These materials can include, but are not limited to, resilient floor coverings, drywall joint compounds, acoustic ceiling tiles, piping insulation, electrical insulation, and fireproofing materials.

Lead-Based Paint

Lead-based paints were phased out of production in the early 1970s. Exposure to lead from vintage paint is possible when the paint is in poor condition or during its removal. In construction settings, workers can be exposed to airborne lead during renovation, maintenance, or removal work.

Polychlorinated Biphenyls

In 1976, the United States Congress enacted the Toxic Substances Control Act (TSCA), which reviewed all industrial chemicals, including polychlorinated biphenyls (PCBs). Since the passage of the TSCA, the production and use of PCBs has been prohibited, limited, or phased out. Potential sources of PCBs in older buildings in the Planning Area include fluorescent light ballast and some electrical equipment such as elevators. However, according to a U.S. Environmental Protection Agency (EPA) database of federally registered PCB transformer data, the City is not listed as having PCB transformers in the Planning Area (City of Elk Grove 2018a:5.8-4).

TRANSPORTATION OF HAZARDOUS MATERIALS

Hazardous materials may be legally transported on area roadways, including SR 99 and I-5. The transportation of hazardous materials within and through the City is subject to various federal, State, and local regulations. The only roadway and transportation route approved for the transportation of explosives, poisonous inhalation hazards, and radioactive materials in the City is I-5. Smaller quantities of hazardous materials, such as medical supplies, pool chemicals, cleaning agents, paint, and household chemicals, may be transported on all roadways throughout the City. Hazardous materials may also be transported via rail along the UPRR, which passes through Elk Grove.

Since the City's incorporation in 2000, there have been 56 reported incidents involving the transport of hazardous materials. These incidents did not result in releases to the environment or human fatalities or injuries but rather damage to containers (crushed boxes or drums) in vehicles transporting them or while moving the items (e.g., with a forklift). There have been no rail incidents in the City (PHMSA 2020; NTSB 2020).

3.8.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The following impact analysis is based primarily on review of the information and analysis presented in the General Plan EIR as well as available literature, including documents published by the City of Elk Grove, State and federal agencies, and published information dealing with hazards and hazardous materials in the Elk Grove area. The analysis of the impacts related to hazards and hazardous materials is qualitative and based on the possible housing sites proposed by the City and assumptions associated residential development. As discussed in the Regulatory Setting, the transport, use, storage, and disposal of hazardous materials are governed by a substantial body of existing regulations. These regulations are intended to reduce the potential for exposure by controlling the pathways by which persons could be exposed to hazardous substances. Compliance with these regulations is required, not optional. In determining the level of significance, the analysis assumes that the proposed Project would comply with all applicable laws, ordinances, and regulations, and this SEIR does not present mitigation measures that duplicate existing regulations or state that the City or future applicants must comply with.

THRESHOLDS OF SIGNIFICANCE

An impact related to hazards and 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 the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

ISSUES NOT DISCUSSED FURTHER

Wildland Fire

Wildfire hazards were scoped out from analysis in the NOP because the City is not located in or near a Very High Fire Hazard Severity Zone. Therefore, there would not be a significant impact related to wildfire, and this issue will not be discussed further.

Airports

There are no active airports located within two miles of the Planning Area. The closest airports are Franklin Field, Sky Way Estates Airport, and Borges-Clarksburg Airport, which are each located approximately 3 miles from the Planning Area. Therefore, implementation of the Housing Element and Safety Element Update would not result in a safety hazard or excessive noise for people residing or working in the Planning Area, and this issue will not be discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: Risks to Human Health and the Environment Resulting from the Routine Use, Transport, Storage, and Disposal of Hazardous Materials or the Accidental Release of Hazardous Materials

General Plan EIR Impact 5.8.1 determined that potential impacts from the use, transport, storage, and disposal of hazardous materials would be reduced to a less-than-significant level through compliance with General Plan policies and applicable federal, State, and local policies and regulations. Implementation of the Housing Element and Safety Element Update would be required to comply with these standards and would not result in a new or substantially more severe soil stability impacts that was addressed in the General Plan EIR. Project impacts would be **less than significant**.

Implementation of the Project would not directly construct new housing in the City but would promote and facilitate development of new residential land uses, especially encouraging the provision of affordable housing and housing for special needs groups. However, implementation of the Housing Element and Safety Element Update would facilitate new residential construction in order to meet the City's RHNA allocation. Implementation of the Safety Element Update could result in future emergency access improvements in the City. Construction activities would use hazardous materials such as fuels (gasoline and diesel), oils and lubricants, paints and paint thinners, glues, cleaners (which could include solvents and corrosives in addition to soaps and detergents), and possibly pesticides and herbicides. Future residential land uses would not be expected to transport, use, store, or dispose of substantial amounts of hazardous materials. Impacts related to the routine use, transport, storage, and disposal were evaluated in Impact 5.8.1 of the General Plan EIR, which concluded that impacts would be less than significant.

The City of Elk Grove General Plan provides several policies designed to reduce the potential for the release of hazardous materials during their routine use, transport, storage, and disposal. Policy ER-1-1 requires the evaluation of hazards posed by reasonably foreseeable events, which are concurrently defined in Policy ER-1-2. This evaluation of hazards must address the potential for events at facilities to create hazardous physical effects at offsite locations that could result in death, significant injury, or significant property damage. Policy ER-1-3 provides the Threshold of Exposure standards which determine the potential hazardous physical effect from placing a new land use near an existing hazardous facility or placing a new hazardous facility near another existing land use. The exposure standards include overpressure, airborne toxic substances, radiant heat, and shrapnel. Policy ER-1-4 requires industries which store and process hazardous or toxic chemicals to provide a buffer zone sufficient to protect public safety. The adequacy of the buffer zone is to be determined by the City. Policy ER-1-5 requires the storage of hazardous materials and waste to be strictly regulated and consistent with State and federal law.

As discussed in Section 3.8.1, "Regulatory Setting," the use, storage, and transportation of hazardous materials is also regulated on the federal and State level. The General Plan policies listed above help support these regulations. Facilities that store or use certain types or quantities of hazardous materials are required to obtain permits and comply with appropriate regulatory standards designed to avoid hazardous material releases, as well as appropriate actions to take in the event of an accidental release. These regulations include, but are not limited to, the Hazardous Materials Business Plan requirements, Department of Transportation requirements, Occupational Safety and Health Act, and Toxic Substances Control Act. The California Accidental Release and Prevention Program (CCR Title 19, Division 2, Chapter 4.5) ensures that accidental release scenarios are considered, and measures are included to reduce the risk of accidental spills.

Construction activities from implementation of the Housing Element and Safety Element Update would use hazardous materials such as fuels (e.g., gasoline and diesel), oils and lubricants, paints and paint thinners, glues, cleaners, and possibly pesticides and herbicides. The use and handling of hazardous materials during construction activities would occur in accordance with applicable federal, State, and local laws. Once operational, housing sites developed are not expected to transport, use, store, or dispose of substantial amounts of hazardous materials, with the exception of common residential-grade hazardous materials such as household cleaners and paint, among others. Potential future emergency access improvements would also not involve the use hazardous materials.

The Project could result in an increase in hazardous materials used, stored, and transported in the City mostly during construction. However, risks to human health and the environment would be minimized through implementation of General Plan policies and other applicable federal, State, and local regulations. Individual development projects and emergency access improvement projects would be reviewed by City staff for consistency and conformance with applicable requirements as part of the approval process. There is no new significant effect and the impact is not more severe than the impact identified in the General Plan EIR. This impact would be **less than significant**.

Mitigation Measures

No additional mitigation is required beyond compliance with General Plan Policies ER-1-1 through ER-1-4 and State regulations including CCR Title 19, Division 2, Chapter 4.5.

Impact 3.8-2: Locating Hazardous Materials Within One-Quarter Mile of an Existing or Proposed School

General Plan EIR Impact 5.8.3 evaluated the potential for hazards and hazardous emissions within one-quarter mile of existing or proposed schools and concluded that compliance with General Plan policies as well as applicable regulations would ensure that impacts would not be significant. The Project could result in additional residential development than evaluated in the General Plan EIR. Implementation of the Housing Element and Safety Element Update would be required to comply with regulations and General Plan policies and would not result in a new or substantially more severe impacts that was addressed in the General Plan EIR. This impact would be **less than significant**.

General Plan EIR Impact 5.8.3 evaluated the potential for hazardous emissions within one-quarter mile of existing or proposed schools. The analysis noted that there are several elementary schools, middle schools, and high schools as well as several private schools, preschools, and childcare facilities within the City. The analysis concluded that while the General Plan could result in activities that would involve the use of hazardous materials within one-quarter mile of a school, adherence to existing regulations and General Plan policies would ensure that impacts would be less than significant. Eighteen potential housing sites (Sites C-3, C-4, C-5, C-6, C-8, C-9, C-10, C-13, C-14, C-16, C-21, C-22, C-23, C-25, E-2, E-4, E-15, and E-18) are located within one-quarter mile of an existing or proposed school. Implementation of the Project could result in a net increase in the number of residential units in the City over what is planned for under the General Plan by up to 2,722 net new residential units depending on the final selection of housing sites for the Housing Element Update. Residential land uses do not typically involve the storage or usage of substantial quantities of hazardous materials, and thus, Project implementation would not result in a substantial increase of hazardous materials located near schools. Additionally, the General Plan includes several policies to protect the public from exposure to hazardous materials and waste, and all residential development would be required to comply with applicable federal, State, and local regulations and policies regarding hazardous materials and waste. For example, General Plan Policy ER-1-5 regulates the storage of hazardous materials and waste, and Policies ER-1-1, ER-1-2, and ER-1-3 provide regulations and thresholds for reasonably foreseeable risks to individuals in residential areas. The proposed revisions to the Safety Element include language regarding evacuation routes that could result in future emergency access improvements in the City but would not result in any activities that would locate hazardous materials within one-quarter mile of a school. There is no new significant effect, and the impact is not more severe than the impact identified in the General Plan EIR. Therefore, this impact would be less than significant.

Mitigation Measures

No additional mitigation is required beyond compliance with General Plan Policies ER-1-1, ER-1-2, ER-1-3, and ER-1-5.

Impact 3.8-3: Development on Land Registered in a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5

General Plan EIR Impact 5.8.2 identified that implementation of the General Plan could result in impacts related to contaminated sites and identified that implementation of Mitigation Measure 5.8.2 would reduce this impact to a less-than-significant level. All projects within the City would be subject to adopted General Plan Mitigation Measure 5.8.2 and all applicable local, State, and federal regulations. Site development activities resulting from implementation of the Housing Element and Safety Element Update would be required to comply with this mitigation measure and would not result in a new or substantially more severe impact to contaminated sites than what was addressed in the General Plan EIR. With implementation of adopted General Plan Mitigation Measure 5.8.2, the project would result in a less-than-significant impact.

General Plan EIR Impact 5.8.2 evaluated the potential for construction on lands that may be contaminated. The analysis noted that while new sites may be added and some removed from the Cortese List, not all locations in the Planning Area where future development may occur have been evaluated for potential contamination. The following mitigation measure was adopted to mitigate the impact to a less-than-significant level.

Ascent Environmental Hazardous Materials

Adopted Mitigation Measure 5.8.2

Prior to approval of improvement plans, grading permits, and or demolition permits for properties in the Planning Area that have not already been evaluated for the potential for the presence of hazardous materials and hazardous conditions, Phase I ESAs shall be prepared by a qualified professional. Each Phase I ESA shall assess the potential for hazards and provide recommendations whether additional investigation (Phase II ESA) should be completed. If determined necessary, a Phase II ESA shall be conducted to determine the lateral and vertical extent of soil, groundwater, and/or soil vapor contamination, as recommended by the Phase I ESA. The City shall not issue a grading or building permit for a site where contamination has been identified until remediation or effective site management controls appropriate for the site use have been completed consistent with applicable regulations and to the satisfaction of the Sacramento County Environmental Management Department, the California Department of Substances Control, and/or Central Valley Regional Water Quality Control Board, as appropriate. If the Phase I ESA determines there are no recognized environmental conditions, no further action is required. However, the City shall ensure any grading or improvement plan or building permit includes a statement that if hazardous materials contamination is discovered or suspected during construction activities, all work in the vicinity of the contamination shall stop immediately until a qualified professional has evaluated the site and determined an appropriate course of action.

Implementation of the Project does not, in and of itself, construct new housing in the City, but would promote and facilitate development of new residential land uses. Seven locations in the City are on the Cortese List and are listed as being open, active, or needing evaluation. The remaining sites within the City and its Planning Area have completed cleanup or require no further action. Table 3.8-3 lists these seven sites, site type, cleanup status, and location within the City.

Table 3.8-3 Hazardous Material Sites with Open, Active, or Need Evaluation Status

Site Name	Site Type	Cleanup Status	Address
Proposed Laguna Ridge East Elementary	School Evaluation	Active	8551 Poppy Ridge Road
Obie's Dump	Voluntary Cleanup	Inactive – Needs Evaluation	8437 Sheldon Road
Proposed Charter School Site	School Evaluation	Inactive – Needs Evaluation	9185 Grant Line Road
Proto-Tech Industries, Inc.	Tiered Permit	Inactive – Needs Evaluation	9181 CMD Court #A
ARCO #2123	LUST Cleanup Site	Open	8500 Elk Grove Boulevard
Conoco Asphalt Terminal	LUST Cleanup Site	Open	10090 Waterman Road
Shell Service Station	LUST Cleanup Site	Open	9100 Harbour Point Drive

Source: SWRCB 2020; DTSC 2020

Potential housing site C-6 is located on the same parcel as Obie's Dump, shown in Table 3.8-1 above.

Contaminated soil could be encountered during soil-disturbing activities such as excavation and trenching, which could pose a risk to construction workers through direct contact and inhalation of contaminated dust. Dust from contaminated soil could be dispersed beyond a construction site and adversely affect public health. If contaminated groundwater were encountered and disposed of improperly, this could pose a human health or environmental risk. Single-family homes, multifamily residences, and structures with subterranean features (e.g., parking garage) constructed on a site where hazardous materials contamination has not been remediated to acceptable risk levels could pose a risk to occupants through direct contact (e.g., soil disturbance) or inhalation (soil vapor). The proposed update to the Safety Element could result in future emergency access improvements in the City that may also encounter contamination during construction.

Future projects associated with the Housing Element and Safety Element Update would be subject to adopted General Plan Mitigation Measure 5.8.2, which would reduce or avoid potential impacts related to contaminated sites by requiring preparation of a Phase I ESA if such a report has not already been prepared. Additionally, all future development would be required to comply with all applicable federal, State, and local policies and regulations, including policies regarding site assessment and remediation prior to any construction activity. This would ensure that

any hazardous materials on-site would be properly removed so that they would not pose a threat to human health or the environment. There is no new significant effect and the impact is not more severe than the impact identified in the General Plan EIR. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional mitigation is required beyond implementation of adopted General Plan EIR Mitigation Measure 5.8.2

Impact 3.8-4: Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan

The Project would not interfere with the Sacramento County LHMP or the City's EOP. Therefore, this impact would be less than significant.

General Plan EIR Impact 5.8.4 evaluated whether implementation of the General Plan would affect roadways and increase the number of people who may need to evacuate in the event of an emergency. The analysis noted that Elk Grove participates in the multijurisdictional Sacramento County LHMP, last updated in 2016 (Sacramento County 2016). The purpose of the plan is to guide hazard mitigation planning to better protect the people and property of the county from the effects of hazard events. The Sacramento LHMP includes policies and programs for participating jurisdictions to implement that reduce the risk of hazards and protect public health, safety, and welfare. The City's EOP provides a strategy for the City to coordinate and conduct emergency response. The intent of the EOP is to provide direction on how to respond to an emergency from the initial onset, through an extended response, and into the recovery process. The analysis concluded that ensure that compliance with local requirements to provide adequate emergency response would ensure that implementation of the General Plan would not result in significant impacts related to emergency response or evacuation plans.

The Housing Element and Safety Element Update would not propose any policies or programs that would conflict with the City's EOP or the County's LHMP. Future development facilitated by the Project would be located on existing parcels within the City and is not anticipated to encroach on or obstruct any existing evacuation routes. All new development would be required to comply with existing fire codes and ordinance regarding emergency access. Implementation of potential emergency access and evacuation improvements under the Safety Element Update would provide beneficial impacts.

There is no new significant effect and the impact is not more severe than the impact identified in the General Plan EIR. Therefore, this impact would be **less than significant**.

Mitigation Measures

No additional mitigation is required beyond compliance with Sacramento County LHMP and the City's EOP.