3.9 HAZARDS, HAZARDOUS MATERIALS, AND WILDFIRE

Comments received on the Notice of Preparation (NOP) were reviewed during preparation of this SEIR. However, no comments related to hazards, hazardous materials, or wildfire were received.

3.9.1 Environmental Setting

HAZARDOUS MATERIALS

A Phase I Environmental Site Assessment (ESA) for the City-owned parcel was prepared by Blackburn Consulting, Inc. (BCI 2014). A detailed discussion of the results of the ESA was provided in the 2019 SOIA EIR, and the existing conditions at the City-owned parcel, and throughout the rest of the Project site, have not changed since the 2019 SOIA EIR was prepared.

As discussed in the 2019 SOIA EIR, the Project site includes several residences and associated outbuildings, along with wells, septic systems, and small propane tanks. Due to the age of some of these structures, asbestos and lead-based paint may be present. A small warehouse present at the Project site has contained small quantities of properly stored chemicals. BCI identified an orchard on a portion of the City-owned parcel from a 1947 topographic map and 1937 aerial photograph. By 1984, the orchard had been cleared. Persistent pesticides such as dichlorodiphenyltrichloroethane (DDT) and lead arsenate were commonly used in fruit/nut orchards prior to 1972.

The off-site drainage improvement areas consist of existing agricultural drainage channels, and three ponds (approximately 0.5 acre, 8 acres, and 15 acres, respectively).

KNOWN HAZARDOUS MATERIALS SITES

In support of this SEIR, AECOM performed an updated search of publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the "Cortese List") in 2020 to determine whether any known hazardous materials are present either in or within 0.25 mile of the Project site, in addition to those that were previously discussed in the 2019 SOIA EIR. The Hazardous Waste and Substances Site List (the "EnviroStor" database) is maintained by the California Department of Toxic Substances Control (DTSC) as part of the requirements of Public Resources Code Section 65962.5. The State Water Resources Control Board (SWRCB) maintains the GeoTracker database, an information management system for groundwater. The results of records searches from the EnviroStor and GeoTracker databases indicate there are no additional open or closed hazardous materials sites within 0.5 mile of the Project site or the off-site improvements areas that were not already discussed in the 2019 SOIA EIR (DTSC 2020, SWRCB 2020). No records of any toxic releases, hazardous waste, or other violations were found that would affect the Project site.

As discussed in the 2019 SOIA EIR, the Project site is not listed on any county, State, or federal government lists as a contaminated site. The off-site improvements areas are also not listed for any known contamination. There are no known contaminated municipal groundwater wells, active or inactive landfills, producing California Division of Oil and Gas petroleum wells, or registered underground storage tanks (USTs) located on, adjacent to, or within 0.5 mile of the Project site. No confirmed, State or federal "Superfund" sites were identified within 1 mile of the Project site or the off-site improvement areas.

Areas of Elk Grove north and west of the Project site along Grant Line Road and East Stockton Boulevard are zoned for commercial and industrial use. These areas include numerous warehouses, the City's solid waste collection facility, and the regional Suburban Propane facility.

SCHOOLS

The closest schools are Elk Grove High School and Markofer Elementary School, which are located approximately 1.5 miles northwest of the Project site.

AIRPORTS AND AIRSTRIPS

The closest public-use airport is Franklin Field, approximately 6.75 miles southwest of the Project site. The nearest active, privately operated airstrip—Mustang Airport (on Arno Road north of Galt)—is located approximately 3.2 miles southeast of the Project site.

WILDLAND FIRE HAZARDS

As described in the 2019 SOIA EIR, the Project site is located within a Local Responsibility Area (LRA) as designated by the California Department of Forestry and Fire Protection (CAL FIRE). LRAs include cities and unincorporated areas where fire protection is provided by local agencies (e.g., fire protection districts and counties). The Project site, off-site improvement areas, and the surrounding areas are within a Non-Very High Fire Hazard Severity Zone (CAL FIRE 2018).

3.9.2 REGULATORY FRAMEWORK

CITY OF ELK GROVE GENERAL PLAN

The City's General Plan (City of Elk Grove 2019), contains the following policies related to hazards, hazardous materials, and wildfire that are applicable to the proposed Project.

- ▶ **Policy EM-1-1:** Seek to maintain acceptable levels of risk of injury, death, and property damage resulting from reasonably foreseeable safety hazards.
- ▶ 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 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 ER-1.2. Hazardous physical effect 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 (see Table 3.9-1 below).
- ▶ Policy ER-1-3: For the purpose of implementing Policy ER-1.1, use the Threshold of Exposure standards shown in Table 8-2 (see Table 3.9-2 below) to determine the potential "hazardous physical effect" from either:

Table 3.9-1 Acceptable Probability of Reasonably Foreseeable Risks to Individuals by Land Use				
Land Use	Probability of Occurrence Per Year			
"Agriculture, Light Industrial, and Industrial" Uses involving continuous access and the presence of limited number of people but easy evacuation, e.g., open house, warehouses, manufacturing plants, etc.	Between 100 in 1 million and 10 in 1 million (10 ⁴ to 10 ⁵)			
"Commercial" Uses involving continuous access but of easy evacuation, e.g., commercial uses, offices.	Between 10 in 1 million and 1 in 1 million (10 ⁵ to 10 ⁶)			
"Residential" All other land uses without restriction including institutional uses, residential areas, etc.	1 in 1 million and less (10°)			
Source: City of Elk Grove 2019:8-10				

- 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.

- Policy ER-1-4: Work to identify and eliminate hazardous waste releases from both private companies and public agencies.
- ▶ Policy 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 will be strictly regulated, consistent with state and federal law.
- ▶ Policy 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.
- ▶ Policy ER-1-5b: 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-1-6: Seek to ensure that all industrial facilities are constructed and operated in accordance with upto-date safety and environmental protection standards.
- ▶ **Policy ER-1-7:** 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.

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	Radiant dose = $200 \text{ kJ/m}_{2(3)}$		
Residential (all density ranges) (5)	1.0 psig	min	Exposure time = 30 sec		
		For example: chlorine ERPG-2 = 3 ppm	Target radiant energy = Radiant		
Office/ Commercial 1.0	1.0 psig	Dose = $3 \text{ ppm x } 60 \text{ min} = 180 \text{ ppm-min}$	dose/Exposure time		
		Target concentration = Dose/Exposure time	Target radiant energy = $(200 \text{ kJ/m}_2)/30 \text{ sec}$		
		Target concentration = (180 ppm-min)/60 min	Target radiant energy = 6.67 kW/m ₂		
		Target concentration = 3 ppm chlorine		All uses shall be locate	
Light industrial 1	1.25 psig	Dose = ERPG-2 ppm for 60 min	Radiant dose = 200 kJ/m ₂	such that the possibilit of injury for an unprotected person due to shrapnel released by a reasonably foreseeable event (4) is less than 1/10-6	
		Exposure time = 30 min	Exposure time = 15 sec		
		For example: chlorine ERPG-2 = 3 ppm	Target radiant energy = Radiant dose/ Exposure time Target radiant energy = (200 kJ/m ₂)/15 sec Target radiant energy = 13.34 kW/m ₂		
		Dose = $3 \text{ ppm x } 60 \text{ min} = 180 \text{ ppm-min}$			
		Target concentration = Dose/Exposure time			
		Target concentration = (180 ppm-min)/30 min			
		Target concentration = 6 ppm chlorine		(1/1,000,000)	
Industrial	3.4 psig	Dose = ERPG-2 ppm for 60 min Exposure time = 15 min			
		For example: chlorine ERPG-2 = 3 ppm			
		Dose = $3 \text{ ppm x } 60 \text{ min} = 180 \text{ ppm-min}$			
		Target concentration = Dose/Exposure time			
		Target concentration = (180 ppm-min)/15 min			
		Target concentration = 12 ppm chlorine			

Notes:

Source: City of Elk Grove 2019:8-12

⁽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 ER-1-2.

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

▶ 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 CCSD Fire Department, the Elk Grove Police Department, and other appropriate agencies in hazardous materials route planning and incident response.

3.9.3 Environmental Impacts and Mitigation Measures

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact related to hazards, hazardous materials, and wildfire if it would:

- ► create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment or through the routine transport, use, or disposal of hazardous materials;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- ▶ be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would 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;
- expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires;
- if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
 - substantially impair an adopted emergency response plan or emergency evacuation plan;
 - due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
 - require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;
 - expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes;

ISSUES NOT DISCUSSED FURTHER

The following issues were dismissed from further detailed analysis in the 2019 SOIA EIR because it was determined that no impact would occur; for the reasons explained below, these issues would also result in no impact for the proposed Project as evaluated in this SEIR.

Emit Hazardous Emissions or Handle Hazardous Materials, Substances, or Waste within One-Quarter Mile of a School—The proposed Project would not emit hazardous air emissions or handle acutely hazardous materials within 0.25 mile of an existing or proposed school. The closest schools are Elk Grove High School and Markofer Elementary School, which are located approximately 1.5 miles northwest of the Project site. Thus, there would be no impact, and this issue is not addressed further in this SEIR.

Result in Airport Safety Hazards—The Project site and the off-site improvement area are not located within an airport land use plan or within 2 miles of any airport. The closest public-use airport is Franklin Field, approximately 6.75 miles southwest of the Project site. The nearest active, privately operated airstrip—Mustang Airport (on Arno Road north of Galt)—is located approximately 3.2 miles southeast of the Project site. Thus, there would be no impact, and this issue is not addressed further in this SEIR.

IMPACT ANALYSIS

Impact 3.9-1: Routine Transport, Use, or Disposal of Hazardous Materials.

Construction of future regional commercial, light and heavy industrial, and mixed uses at the Project site, as well as the off-site drainage improvements, would involve the routine storage, use, transport, and disposal of small quantities of hazardous materials such as fuels, oils and lubricants, paints and paint thinners, glues, and cleaning fluids (e.g., solvents). The Project site could be developed with home improvement, hardware, or auto parts stores. Medical uses may use or store pressurized oxygen tanks, medical waste, biohazardous materials, and/or radioactive materials. The Project site would also be developed with light manufacturing uses that could potentially use, store, or dispose of hazardous materials.

The California Highway Patrol (CHP) and Caltrans enforce regulations for transport of hazardous materials on local roadways, and DTSC regulates the use of these materials, as outlined in CCR Title 22. Project developers and their construction contractors would be required to comply with the California EPA's Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous materials management plans and inventories). The federal and State Departments of Transportation (through the Hazardous Materials Transportation Act) and other regulatory agencies provide standards designed to avoid releases, including provisions regarding securing materials and container design.

Facilities that would use hazardous materials 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 Office of Emergency Services, the designated Certified Unified Program Agency (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 policies and Municipal Code requirements through project conditions of approval. Therefore, this impact is considered **less than significant.**

Impact 3.9-2: Potential Human Health Hazards from Exposure to Existing On-Site Hazardous Materials.

There are no known areas of existing soil or groundwater contamination, either on- or off-site, that would pose a hazard for project-related construction or operation.

Older buildings on the Project site that would be demolished as part of the project could have asbestos, electrical equipment containing polychlorinated biphenyls (PCBs), fluorescent lights containing mercury vapors, and/or lead-based paints. Section 19827.5 of the California Health and Safety Code requires local agencies to comply with hazardous air pollutant regulations for asbestos. The City of Elk Grove would regulate asbestos through conditions of approval and Sacramento Metropolitan Air Quality Management District (SMAQMD) would be notified 10 days in advance of any proposed demolition or abatement work. Site-specific development within the Project site is required to comply with the California Health and Safety code for abatement of lead-based paint. Requirements for disposal and recycling of fluorescent light tubes containing mercury are specified in 22 CCR Section 66261.50; requirements for disposal of PCB-containing equipment are specified in 22 CCR Section 66261.24 and Part 761 of CFR Title 40.

Pasture, dry-farmed crops, and natural grasses, such as those historically and currently grown in and around the Project site, typically require little to no applications of environmentally persistent pesticides. However, orchards and orchard-cultivated soils in the Project area may have been contaminated through the repeated application of agricultural chemicals to fruit or nut trees. If evidence of soil or groundwater contamination exceeding ambient or background concentrations is discovered during project-related construction, work would cease until appropriate worker health and safety precautions, as specified by Title 8 of the California Code of Regulations (Section 5194) promulgated by the California Occupational Safety and Health Agency (Cal OSHA), are implemented. A qualified hazardous materials specialist would be notified for an evaluation and the appropriate regulatory agency would be contacted. If deemed necessary by the appropriate agency, remediation would be undertaken in accordance with existing federal, State, and local regulations/requirements and guideline established for the treatment of hazardous substances.

In addition, the City of Elk Grove would enforce its General Plan and Municipal Code through project conditions of approval, specifically General Plan Policy ER-1-5b 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.

For all of the reasons discussed above, this impact is considered less than significant.

It should be noted that, the prior 2019 EIR included the following Mitigation Measure 3.9-2. This mitigation measure remains applicable to the Project.

Mitigation Measure 3.9-2: Hazardous Materials Identification and Remediation (2019 SOIA Mitigation Measure 3.9-2)

For development proposed after 5 years have passed (after 2023), update the review of environmental risk databases for the presence of potential hazardous materials. This evaluation should consider the SOIA Area and any off-site improvement areas and if this assessment or other indicators point to the presence or likely presence of contamination, Phase I environmental site assessments and/or Phase II soil/groundwater testing and remediation shall be required before development. The sampling program developed as a part of the Phase II EA shall be conducted to determine the degree and location of contamination, if any, exists. If contamination is determined to exist, it will be fully remediated, by qualified personnel, in accordance with federal, State, and local regulations and guideline established for the treatment of hazardous substances. The designation of encountered contamination will be based on the chemicals present and chemical concentrations detected through laboratory analysis. Based on the analytical results, appropriate disposal of the material in accordance with EPA, Department of Toxic Substances Control, and Regional Water Quality Control Board guidelines shall be implemented. Any land disturbance near potential hazardous sites should occur only after the remediation and clean-up of the existing site is complete.

Impact 3.9-3: Upset and Accident Conditions.

The Project site is approximately 3,000 feet from the Suburban Propane facility. City General Plan Policy ER-1-2 defines the probability of reasonably foreseeable for different land uses (see Table 3.9-1) and General Plan Policy ER-1-3 states that placing a land use not consistent with the criteria defining reasonably foreseeable events would be a significant adverse impact. The policy defines agriculture, light industrial, and industrial as allowed land uses in areas where the probability of an accident is between 10^{-4} and 10^{-5} (between 10 and 100 in 1 million), and commercial uses as allowed uses when the probability of accident is between 10^{-5} and 10^{-6} (between 1 and 10 in 1 million). Residential and institutional uses are allowed in areas where the probability of an incident is less than 10^{-6} (1 in 1 million).

Using the General Plan EIR's approach, only the extreme northwestern corner of the Project site falls within the 10^{-6} contour indicating a 1-in-one-million risk, with much lower risks (as shown by the 10^{-7} and 10^{-8} contours) at greater distances for the rest of the Project site and the off-site improvement areas. The land uses evaluated under the proposed Project for this SEIR would be consistent with risk factors defined by the City General Plan.

Information about Suburban Propane is provided in detail in this SEIR to promote public disclosure. Per CEQA, this is not considered an adverse physical environmental effect because it is an existing condition (i.e., predating initial consideration of the proposed Project) unrelated to any of the CEQA significance thresholds for hazards and hazardous materials. However, since the proposed land uses evaluated in this SEIR would be consistent with risk factors defined as acceptable by the City General Plan, this impact is considered **less than significant.**

Impact 3.9-4: Interfere with Emergency Response or Evacuation Plans.

Sacramento County, along with other area agencies including the City of Elk Grove, have prepared the *Sacramento Countywide Local Hazard Mitigation Plan* (Foster Morrison Consulting 2016). In the event of an emergency that would require citizens to evacuate, including those citizens who live in the City of Elk Grove, the City (and possibly Sacrament County) would implement its emergency operations plan, evacuation plan, and mass care and shelter plan. Future streets included within the Project site will be required to comply with the City's and Cosumnes Community Service District (CCSD) Fire Department's design standards pertaining to emergency access.

Nearby roadways in the vicinity of the Project site, such as Waterman Road and Grant Line Road, could be affected intermittently during construction at the Project site resulting in decreased emergency response times. Construction activities for the off-site drainage improvements would have no effect on local roadways, since this work would occur a long distance from any paved roadway. However, construction activities at the Project site could result in temporary lane closures, increased truck traffic, and other roadway effects that could slow or stop emergency vehicles, temporarily increasing response times and impeding existing services. Potential reduction of emergency response services during construction of the proposed land uses at the Project site would be a **potentially significant** impact.

Mitigation Measure 3.9-4: Implement Traffic Control Plans (2019 SOIA EIR Mitigation Measure 3.9-4).

Implement traffic control plans for construction activities that may affect road rights-of-way during Project construction. The traffic control plans shall be designed to avoid traffic-related hazards and maintain emergency access during construction phases. The traffic control plan will illustrate the location of the proposed work area; provide a diagram showing the location of areas where the public right-of-way would be closed or obstructed and the placement of traffic control devices necessary to perform the work; show the proposed phases of traffic control; and identify the time periods when traffic control would be in effect and the time periods when work would prohibit access to private property from a public right-of-way. The plan may be modified in order to eliminate or avoid traffic conditions that are hazardous to the safety of the public. Traffic control plans should be submitted to the affected agencies, as appropriate, shall be submitted to the City for review and approval before approval of improvement plans, where future construction may cause impacts on traffic.

Significance after Mitigation

Implementation of Mitigation Measure 3.9-4 would reduce Project impacts related to interference with emergency response or emergency evacuation plans to a **less-than-significant** level because a traffic control plan, designed to avoid traffic-related hazards and maintain emergency access during construction phases, would be prepared and submitted to the City for approval.

Impact 3.9-5: Risks from Wildfires.

Areas at risk for extreme wildfires are designated by CAL FIRE as those lands where dense vegetation with severe burning potential prevails, as well as areas with limited access due to topography or lack of roads. The Project site, off-site improvement areas, and Project vicinity are not located in or near a State Responsibility Area; rather, they are located in a Local Responsibility Area (CAL FIRE 2018). Furthermore, the Project site, off-site improvement areas, and vicinity are classified as a non-very high fire hazard severity zone (CAL FIRE 2018), which is defined as an area not prone to intense, damaging wildfires.

Fire protection services would continue to be provided by the nearby CCSD (see Section 3.13, "Public Services and Recreation," for further discussion of the CCSD Fire Department). The proposed land use assumption changes to allow regional commercial and additional industrial development would not require additional fire department personnel or equipment as compared to what was previously analyzed in the 2019 SOIA EIR. Therefore, this impact is considered **less than significant.**

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