

3.9 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential hazards and hazardous materials impacts associated with the adoption and implementation of the proposed Project. This section describes the regulatory framework and existing conditions; identifies criteria used to determine impact significance; provides an analysis of the potential hazardous impacts; and identifies proposed General Plan 2045 goals and policies that would minimize potentially significant impacts.

This analysis is based in part on the Livermore General Plan Update Existing Conditions Report prepared in March 2022 (City of Livermore 2022). Where more recent data is available at the time of preparation of this Draft EIR, the analysis provided herein reflects such updated information.

As detailed in Chapter 3, *Environmental Analysis*, no concerns related to hazards and hazardous materials were received during the EIR scoping period.

3.9.1 Regulatory Framework

FEDERAL

United States Environmental Protection Agency

The United States Environmental Protection Agency (USEPA) is the primary federal agency that regulates hazardous materials and waste. In general, the USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs, delegating the responsibility for issuing permits, and monitoring and enforcing compliance to states and Native American tribes. USEPA programs promote handling hazardous waste safely, cleaning up contaminated land, and reducing waste volumes through such strategies as recycling. California falls under the jurisdiction of USEPA Region 9. Under the authority of the Resource Conservation and Recovery Act (RCRA) and in cooperation with State and tribal partners, the USEPA Region 9 Waste Management and Superfund Divisions manage programs for site environmental assessment and cleanup, hazardous and solid waste management, and underground storage tanks.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 gives the USEPA the authority to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. TSCA addresses the production, importation, use, and disposal of specific chemicals, including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint. Title IV of the TSCA directs the USEPA to regulate lead-based paint hazards.

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TSCA Section 402 and Section 404 require those engaged in lead abatements, risk assessments, and inspections in homes or child-occupied facilities before 1978 (e.g., in daycare centers and kindergartens) to be trained and certified in specific practices to ensure accuracy and safety. TSCA Section 403 sets standards for dangerous lead levels in paint, household dust, and residential soil.

United States Department of Transportation

The United States Department of Transportation (USDOT) has the regulatory responsibility for the safe transportation of hazardous materials between states and internationally. The USDOT regulations govern all means of transportation, except for those packages shipped by mail, which are covered by United States Postal Service regulations. The federal RCRA of 1976 imposes additional standards for the transport of hazardous wastes.

Hazardous Materials Transportation Act

The USDOT also regulates hazardous materials transportation under Code of Federal Regulations (CFR) Title 49. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are the agencies with the primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. The California State Fire Marshal's Office has oversight authority for hazardous materials liquid pipelines. The California Public Utilities Commission has oversight authority for natural gas pipelines. These agencies also govern permitting for hazardous materials transportation.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) requires specific training for hazardous materials handlers, provision of information to employees who may be exposed to hazardous materials, and acquisition of material safety data sheets from materials manufacturers. The material safety data sheets describe the risks, as well as proper handling and procedures related to specific hazardous materials. Employee training must include response and remediation procedures for hazardous materials releases and exposures.

Resource Conservation and Recovery Act

Federal hazardous waste laws are generally promulgated under the RCRA, as amended by the Hazardous and Solid Waste Amendments of 1984. These laws provide for the "cradle to grave" regulation of hazardous waste. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The Department of Toxic Substance Control (DTSC) is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Comprehensive Environmental Response, Compensation, and Liability Act

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as “Superfund,” on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other State and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased State involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to \$8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA), also known as SARA Title III, was enacted in October 1986. This law requires State and local governments to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by USEPA’s Office of Emergency Management. USEPA’s Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through California Accidental Release Prevention (CalARP) program.

The Disaster Management Act

The Disaster Management Act (DMA) of 2000 shifts federal emphasis toward planning for disasters before they occur. The DMA requires State and local governments to develop hazard mitigation plans and update them every five years as a condition of federal disaster grant assistance. The DMA encourages cooperation among State and local authorities in pre-disaster planning through the preparation of local hazard mitigation plans (LHMPs). The DMA also promotes sustainability in hazard mitigation. To be sustainable, hazard mitigation needs to incorporate sound management of natural resources and address hazards and mitigation in the largest possible social and economic context.

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Natural Gas and Pipeline Safety Act

The Natural Gas Pipeline Safety Act of 1968 authorizes the USDOT to regulate pipeline transportation of flammable, toxic, or corrosive natural gas and other gases as well as the transportation and storage of liquefied natural gas. The Pipeline and Hazardous Materials Safety Administration (PHMSA) within the USDOT develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6-million-mile pipeline transportation system. USDOT's and PHMSA's regulations governing natural gas transmission pipelines, facility operations, employee activities, and safety are found in the CFR Title 49, Parts 190 through 192, Part 195, and Part 199.

Pipeline Safety Improvement Act

The Pipeline Safety Improvement Act of 2002 mandates that the USDOT, the Department of Energy, and the National Institute of Standards and Technology in the Department of Commerce carry out a program of research, development, demonstration, and standardization to ensure the integrity of pipeline facilities. The purpose of the Research and Design Program is to identify safety and integrity issues and develop methodologies and technologies to characterize, detect, and manage risks associated with natural gas and hazardous liquid pipelines.

Pipeline Inspection, Enforcement, and Protection Act

The Pipeline Inspection, Enforcement, and Protection Act of 2006 confirms the commitment to the Integrity Management Program and other programs enacted in the Pipeline Safety Improvement Act of 2002. The 2006 legislation includes provisions on the following:

- Preventing excavation damage to pipelines through the enhanced use and improved enforcement of State "One-Call" laws that preclude excavators from digging until they contact the State One-Call system to locate the underground pipelines
- Minimum standards for Integrity Management Programs for distribution pipelines (including installation of excess flow valves on single-family residential service lines based on feasibility and risk)
- Standards for managing gas and hazardous liquid pipelines to reduce risks associated with human factors (e.g., fatigue)
- Authority for the Secretary to waive safety standards in emergencies
- Authority for the Secretary to assist in restoration of disrupted pipeline operations
- Review and update incident reporting requirements
- Requirements for senior executive officers to certify operator integrity management performance reports
- Clarification of jurisdiction between states and PHMSA for short laterals that feed industrial and electric generator consumers from interstate natural gas pipelines

Pipeline Safety, Regulatory Certainty, and Job Creation Act

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 was designed to examine and improve the state of pipeline safety regulations. This act accomplishes the following:

- Reauthorizes PHMSA's federal pipeline safety programs through fiscal year 2015
- Provides the regulatory certainty necessary for pipeline owners and operators to plan infrastructure investments and create jobs
- Improves pipeline transportation by strengthening enforcement of current laws and improving existing laws where necessary
- Ensures a balanced regulatory approach to improving safety that applies cost-benefit principles
- Protects and preserves Congressional authority by ensuring certain key rulemakings are not finalized until Congress has an opportunity to act

STATE

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) is authorized by the USEPA to enforce and implement certain federal hazardous materials laws and regulations. The California DTSC, a department of the CalEPA, protects California and its residents from exposure to hazardous waste, primarily under the authority of the RCRA and the California Health and Safety Code (HSC). The DTSC requirements include the need for written programs and response plans such as hazardous materials management plans. The DTSC programs include dealing with aftermath clean-ups of improper hazardous waste management; evaluation of samples taken from sites; enforcement of regulations regarding use, storage, and disposal of hazardous materials; and encouragement of pollution prevention.

California Occupational Health and Safety Administration

Like OSHA at the federal level, the California Division of Occupational Safety and Health (CalOSHA) is the State-level agency responsible for ensuring workplace safety. CalOSHA assumes primary responsibility for the adoption and enforcement of standards regarding workplace safety and safety practices. If a work site is contaminated, a site safety plan must be crafted and implemented to protect the safety of workers. Site safety plans establish policies, practices, and procedures to prevent the exposure of workers and members of the public to hazardous materials originating from the contaminated site or building.

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California Governor’s Office of Emergency Services

The California Office of Emergency Services (Cal OES) was established as part of the Governor’s Office on January 1, 2009. It was created pursuant to Assembly Bill 38, which merged the duties, powers, purposes, and responsibilities of the former Governor’s Emergency Management Agency with those of the Governor’s Office of Homeland Security. Cal OES is responsible for the coordination of overall State agency response to major disasters in support of local government. The agency is responsible for ensuring the State’s readiness to respond to and recover from all hazards—natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts.

California Department of Transportation

Caltrans has the responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. Caltrans manages more than 50,000 miles of California’s highways and freeways, provides intercity rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Caltrans is also the first responder for hazardous material spills and releases that occur on highways, freeways, and intercity rail lines. In addition, the State of California regulates the transportation of hazardous waste originating or passing through the State.

California Highway Patrol

The CHP also has the responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. The CHP enforces hazardous materials and hazardous waste labeling and packing regulations designed to prevent leakage and spills of materials in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of the CHP, which conducts regular inspections of licensed transporters to ensure regulatory compliance.

Common carriers are licensed by the CHP, pursuant to Section 32000 of the California Vehicle Code. This section requires licensing every motor (common) carrier who transports, for a fee, more than 500 pounds of hazardous materials at one time and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards. Common carriers conduct a large portion of the business in the delivery of hazardous materials.

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC), which is in CCR Title 24, Part 2. The CBC is based on the International Building Code but has been modified for California conditions. It is updated every three years, most recently in July 2025 with an effective date of January 1, 2026. The CBC, as adopted by local cities or counties, may be further modified based on local conditions. Typical fire safety

requirements of the CBC include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Fire Code

The California Fire Code (CFC) is in CCR Title 24, Part 9. It is also updated every three years, most recently in July 2025 with an effective date of January 1, 2026. The CFC is based on the International Fire Code but has been modified for California conditions. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Similar to the CBC, the CFC is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions.

Hazardous Waste Control

HSC Division 20, Chapter 6.5, and CCR Title 22, Division 4.5, address and provide an effective process for hazardous waste management planning at the local level to ensure adequate handling, storing, transporting, treating, and disposing of hazardous materials.

Hazardous Materials Management Act

The Hazardous Materials Management Act (CCR Title 22) requires that businesses and public entities handling or storing certain amounts of hazardous materials prepare a hazardous materials business plan that includes an inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas at standard temperature and pressure require a hazardous materials business plan. Plans must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a change).

California Health and Safety Code

HSC Chapter 6.95 and CCR Title 19, Section 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled above certain quantities.

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California Accidental Release Prevention Program

The CalARP Program includes the Federal Accidental Release Prevention Program with certain additions specific to California and pursuant to HSC Article 2, Chapter 6.95. The purpose of this program is to prevent accidental release of regulated substances. Businesses using regulated substances exceeding a threshold quantity are evaluated under this program to determine the potential for and impacts of accidental releases. Depending on the potential hazards, business owners may be required to develop and submit a risk management plan.

Regulations for Hazardous Materials in Structures

Asbestos is regulated as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of federal OSHA. CalOSHA considers asbestos-containing materials (ACM) a hazardous substance when a bulk sample contains more than 0.1 percent asbestos by weight and requires a qualified contractor licensed to handle asbestos. Any activity that involves cutting, grinding, or drilling during building renovation or demolition or relocation of underground utilities could release friable asbestos fibers unless proper precautions are taken. Lead is regulated as a hazardous material, and inorganic lead is regulated as a toxic air contaminant. Lead-containing paints, according to CalOSHA, are defined as paints reported with any detectable levels of lead by paint chip analysis (CCR Title 8, Section 1532.1[d]). When disturbed for construction purposes, these surfaces are subject to CalOSHA exposure assessment requirements. Several regulations and guidelines pertain to abatement of and protection from exposure to ACM and lead-based paint, as follows:

- Asbestos
 - CCR Title 8, Subchapter 4, Section 1529
 - CFR Title 29, Section 1926, Subpart Z
 - CFR Title 40, Section 61, Subpart M
- Lead-based paint
 - CCR Title 8, Subchapter 4, Section 1532.1
 - CFR Title 29, Section 1926, Subpart D

These rules and regulations provide exposure limits, exposure monitoring, respiratory protection, and good working practice for workers exposed to lead and ACM. In California, ACM and lead-based paint abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services. HSC Sections 17920.10 and 105255 require lead to be contained during demolition activities.

PCBs were commonly used in the small capacitor in fluorescent light ballasts through 1979. PCB regulations are included in CFR Title 40, Section 761, which requires the material to be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The nonleaking ballasts can be removed and recycled or disposed of properly.

Government Code Section 65962.5 (Cortese List)

California Government Code Section 65962.5 requires CalEPA to compile, maintain, and update specified lists of hazardous material release sites. CEQA requires the lead agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether a project and any alternatives are identified (PRC Section 21092.6). The required lists of hazardous material release sites are commonly referred to as the “Cortese List” named after the legislator who authored the legislation. Because the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented, and in some cases, the information required in the Cortese List does not exist. Those requesting a copy of the Cortese Lists are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including DTSC’s online EnviroStor database and the State Water Resources Control Board’s (SWRCB) online GeoTracker database. These two databases include hazardous material release sites, along with other categories of sites or facilities specific to each agency’s jurisdiction. Additionally, CalEPA provides the following Cortese List Data Resources (CalEPA 2025):

- List of Hazardous Waste and Substances sites from DTSC EnviroStor database
- List of Leaking Underground Storage Tank Sites from SWRCB’s GeoTracker
- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from SWRCB
- List of hazardous waste facilities subject to corrective action pursuant to HSC Section 25187.5, identified by DTSC

REGIONAL

Tri-Valley Local Hazard Mitigation Plan

The purpose of hazard mitigation planning is to reduce the loss of life and property by minimizing the impact of disasters. The Tri-Valley LHMP was adopted in March 2024 for the purpose of identifying, assessing, and reducing the long-term risk to life and property from hazard events (City of Livermore 2024). The LHMP includes an assessment of hazards and vulnerabilities but does not include any mitigation actions related to hazardous materials for the EIR Study Area.

Alameda County Department of Environmental Health

The Alameda County Department of Environmental Health (ACDEH) is the Certified Unified Program Agency (CUPA) with jurisdiction in the EIR Study Area and coordinates and enforces numerous local, State, and federal hazardous materials management and environmental protection programs, including the following (ACDEH 2025):

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- Hazardous Materials Business Plan
- Hazardous Waste Generator
- Underground Storage Tank
- Aboveground Petroleum Storage Act
- CalARP

Livermore Municipal Airport Land Use Compatibility Plan

The Livermore Municipal Airport Land Use Compatibility Plan (ALUCP) was adopted by the Alameda County Airport Land Use Commission (ALUC) in 2012 (Alameda County ALUC 2012). The creation of the ALUC and the preparation of the ALUCP are requirements of the California State Aeronautics Act (Public Utilities Code Section 21670 et seq.). Provisions for creation of ALUCs were first established under State law in 1967 and the fundamental purpose of ALUCs to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses has remained unchanged. The ALUCP evaluates all surrounding land within the airport influence area (AIA), defined as any land on which current or future airport-related noise, overflight, safety, or airspace protection factors may impact existing land uses. The ALUCP requires that any project, specific plan, general plan, zoning ordinance, or building regulation proposed in the AIA is reviewed by the ALUC to ensure consistency with the ALUCP.

LOCAL

Livermore Municipal Code

The Livermore Municipal Code (LMC) includes various directives to minimize adverse hazards and hazardous materials impacts. The LMC is organized by title, chapter, section, and in some cases, articles. Most provisions related to hazards and hazardous materials are in Title 11, *Airport*; Title 15, *Buildings and Construction*; and Title 16, *Environment*, as follows:

- **Chapter 11.04, *Airport Improvements and Revenue Financing***, includes provisions for the financing and implementation of capital improvements to the Livermore Municipal Airport.
- **Chapter 11.08, *Airport Rules and Regulations***, set policies to manage the Livermore Municipal Airport.
- **Chapter 15.02, *Building Code***, adopts the International Building Code, as amended and set forth in the California Building Standards Code, CCR Title 24.
- **Chapter 15.06, *Fire Code***, adopts the International Fire Code, as amended and set forth in CCR Title 24, Part 9.

- **Chapter 16.04, *Hazardous Materials Release and Response Plans***, authorizes the City of Livermore (City) to implement HSC Division 20, Chapter 6.95 related to hazardous materials release plans and inventory. It relinquishes the County from that task for the City to do so; the Livermore Pleasanton Fire Department is the designated administering agency to implement this chapter of the HSC.
- **Chapter 16.06, *Underground Storage Tanks and Hazardous Waste***, authorizes the City to assume enforcement responsibility related to the regulation of underground storage of hazardous materials. The Livermore Pleasanton Fire Department administers this program.

Livermore Development Code

The City regulates land use and design through the Livermore Development Code (LDC), an alternative approach to zoning that reinforces walkable, sustainable mixed-use environments and development, and builds on community character. The LDC provides development standards similar to typical zoning ordinances such as heights, setbacks, and site regulations for all zones. LDC Chapter 6.02.040, *Hazardous Materials*, sets standards for use of hazardous materials including avoiding any substantial adverse impact on public facilities or services on the environment. This section also includes disclosure and notification standards for uses of hazardous materials.

Livermore Emergency Operations Plan

The Livermore Emergency Management Division is responsible for coordinating agency response to disasters or other large-scale emergencies. The Livermore Emergency Operations Plan (EOP) establishes policy direction for emergency planning, mitigation, response, and recovery activities in the county (City of Livermore 2018). The EOP addresses interagency coordination, procedures to maintain communications with regional and State emergency response teams, and methods to assess the extent of damage and management of volunteers, as well as identifies the location of Emergency Operations Centers. The EOP uses the Standardized Emergency Management System, as required by California Government Code Section 8607(a) for managing responses to multiagency and multi-jurisdictional emergencies in California, including those related to hazardous materials.

Livermore-Pleasanton Fire Department

Fire services are provided by the Livermore-Pleasanton Fire Department (LPPFD). In 1996, the cities of Livermore and Pleasanton entered into a Joint-Powers Authority agreement, consolidating each City's fire department into the LPPFD. The LPPFD provides contract and automatic aid outside the cities of Livermore and Pleasanton within Alameda County and adjacent areas. The LPPFD provides core services to approximately 89,000 Livermore residents over an area of 26 square miles. These services include all-risk emergency response such as fire, emergency medical services, automobile accidents, hazardous materials, and county and statewide mutual aid. Additionally, LPPFD provides mandated emergency readiness training, fire

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prevention plan checks and inspections, community education, and Community Emergency Response Team instruction and coordination. The LPFD also supports law enforcement to implement evacuation orders. LPFD has worked to adopt AC Alert and Genasys Protect (formally Zonehaven AWARE), a community emergency and evacuation interface tool, to facilitate successful emergency preparation and evacuation (LPFD 2025b).

The LPFD is organized into three branches: Administration, Fire Prevention, and Emergency Operations. The Fire Prevention branch focuses on risk reduction to the community through a performance-based approach and application of the codes and laws pertaining to fire, hazardous materials, and use of buildings and facilities. The Emergency Operation team prepares for, responds to, and provides all services related to emergency fire suppression; emergency medical service; traffic collisions; specialized rescue; and emergency hazardous materials response and property losses (i.e., water leaks, fallen trees, and downed wires). Additionally, Emergency Operations conducts fire safety inspections for businesses and conducts public education outreach.

LPFD has 128 full-time-equivalent employees and four half-time employees, is headquartered in Pleasanton at 3560 Nevada Street, and operates and maintains five fire stations in the EIR Study Area (LPFD 2025a). Additional details about fire protection services are provided in Section 3.15, *Public Services, Parks, and Recreation*.

3.9.2 Existing Conditions

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; schools; and households (e.g., cleaners, solvents, paints, and pesticides). Accidental releases of hazardous materials can occur from a variety of causes, including traffic accidents, shipping accidents, and industrial/warehouse incidents.

HAZARDOUS MATERIALS SITES

Hazardous materials sites are documented on the DTSC's online EnviroStor and the SWRCB's online GeoTracker databases. Each site is identified by name, address, site type, and status. There are two primary types of hazardous material sites: permitted sites and cleanup sites.

A site that is used to operate a business which must, by nature of the business, store, treat, or dispose of hazardous materials, must obtain a permit or a grant of authorization from the DTSC. Such sites in the State are regulated through a five-tiered permitting program that enforces regulatory requirements imposed upon each category of hazardous material site. The permit ensures that any business that handles hazardous materials does so in compliance with the

federal RCRA and the State-adopted regulations to ensure hazardous materials are not released into the environment.

In cases where the storage, treatment, or disposal of hazardous materials has resulted in those hazardous materials being released into the environment, extensive investigation and cleanup actions are required. The USEPA, DTSC, SWRCB, and any other applicable agency actively conduct investigations into hazardous material sites to monitor the potential release of hazardous materials into the environment. When a release is identified, these agencies direct and supervise cleanup activities to ensure the hazardous materials are satisfactorily removed from the site and no longer pose a danger to the public or the environment.

The listing of status types is the mechanism by which the DTSC and the SWRCB identify their involvement at each site, status of cleanup activities, and whether the cleanup is active or complete. Status types are also an important tool for jurisdictions to understand where there are sites actively undergoing cleanup of a hazardous material that may pose a hazard to the public or the environment. The following status types identify active and ongoing cleanup activities:

- **Active:** Identifies that an investigation and/or remediation is currently in progress and that DTSC is actively involved.
- **Certified O&M – Land Use Restriction Only:** Identifies sites where a remedy is implemented which results in hazardous substances remaining at the site at concentrations above those acceptable.
- **Inactive – Needs Evaluation:** Identifies non-active sites where DTSC has determined an evaluation is required.
- **Open:** Active site with the Regional Water Quality Control Board (RWQCB) and the property/owner may upload data/files to GeoTracker. Sites that are open may have multiple investigations. A site is closed when data can no longer be uploaded since investigation/cleanup is done, and there is no more regulatory oversight.
- **Open – Operating:** An active clean up that may still be operation with a permit.
- **Open – Eligible for Closure:** A request for closure has been requested, meaning the extent of contamination has been defined, source areas, exposure pathways have been identified, cleanup has occurred if needed, post cleanup confirmation sampling, and a closure report submitted.
- **Open – Site Assessment:** The extent of soil and groundwater contamination being defined.
- **Open – Assessment and Interim Remedial Action:** An interim remedial action is occurring at the site simultaneously with other activities such as site characterization, investigation, risk evaluation, or site conceptual model development.
- **Open – Inactive:** Means no regulatory oversight activities are being conducted.

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- **Open – Remediation – Land Use Restrictions:** Identifies sites for which approved remedies have been selected and that the remedies have been started and includes remedies that are both passive and active.
- **Open – Verification Monitoring:** Refers to sites where the remediation phases are essentially complete, and a monitoring/sampling program is occurring to confirm successful completion of the cleanup activities.
- **Refer:** Identifies sites that DTSC referred to other agencies for investigation, which often includes the RWQCB or local jurisdictions.

A search of the online databases on February 4, 2026, identified approximately 150 hazardous materials sites in the EIR Study Area (DTSC 2025; SWRCB 2025). Of the approximately 150 sites, 30 are designated as active or open, and the remaining approximately 120 are designated as “closed” or “completed – case closed.” The list and location of the open hazardous materials sites are shown in Table 3.9-1, *Hazardous Materials Sites in the EIR Study Area*.

Table 3.9-1 Hazardous Materials Sites in the EIR Study Area

Site Name	Address	Site Type	Oversight Agency	Cleanup Status
217 North N Street	217 North N Street	Clean Program Site	RWQCB	Open – Remediation
2617 South Vasco	2617 South Vasco	Cleanup Program Site	RWQCB	Open – Inactive
Cal Water LIV15 Facility	787 H Street	Clean Program Site	RWQCB	Open – Site Assessment
Chestnut Square	1651 and 1665 Chestnut Street	Clean Program Site	RWQCB	Open – Verification Monitoring
Chestnut Street (Livermore)	1625 and 1635 Chestnut Street	Clean Program Site	Livermore-Pleasanton	Open – Verification Monitoring
CFN Cardlock Facility*	533 Exchange Court	LUST Cleanup Site	RWQCB	Open – Site Assessment
GIG Facility Soil Cleanup	8467 Patterson Pass Road	Clean Program Site	ACDEH	Open – Verification Monitoring
Growth Brothers Chevrolet	57–59 South L Street	Clean Program Site	RWQCB	Open – Long-Term Management
Hexcel Corporation	10 Trevarno Road	State Response	RWQCB	Open
Industrial Ladder	115 North Mines Road	Cleanup Program Site	RWQCB	Open – Inactive
Intel Fab 3	250 North Mines Road	Clean Program Site	RWQCB	Open – Long-Term Management/ Land Use Restrictions

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Table 3.9-1 Hazardous Materials Sites in the EIR Study Area

Site Name	Address	Site Type	Oversight Agency	Cleanup Status
J Cleaners	2093 Railroad Avenue	Clean Program Site	RWQCB	Open – Assessment and Interim Remedial Action
Lawrence Livermore National Lab	7000 East Avenue	Federal Superfund/HAZ WASTE – RCRA	DTSC	Active – Operating Permit
Livermore Arcade Site	First Street and South P Street	Clean Program Site	RWQCB	Open – Remediation
Livermore Municipal Airport (LVK)	680 Terminal Circle	Clean Program Site	RWQCB	Open – Site Assessment
Livermore-Pleasanton Fire Station No. 10	330 Airway Blvd	Clean Program Site	RWQCB	Open – Site Assessment
Livermore Senior Housing	East of Murrieta Boulevard	Voluntary Cleanup	DTSC	Open – Certified / Operation and Maintenance (Land Use Restrictions)
Old Train Depot	2009 to 2073 Railroad Ave	Clean Program Site	RWQCB	Open – Assessment and Interim Remedial Action
Pacific Avenue Cleaners	3018 Pacific Avenue	Clean Program Site	RWQCB	Open – Assessment and Interim Remedial Action
Paul’s Sparkle Cleaners	1332 Railroad Avenue	Cleanup Program Site	RWQCB	Open – Inactive
Persiva/Metro Valley Cleaners	224 Rickenbacker Circle	Clean Program Site	RWQCB	Open – Assessment and Interim Remedial Action
Quality Cleaners	2048 First Street	Clean Program Site	RWQCB	Open – Assessment and Interim Remedial Action
NICA Metals	6491 Southfront Road	Cleanup Program Site	RWQCB	Open – Inactive
Salinas Reinforcing	355 South Vasco Road	Cleanup Program Site	RWQCB	Open – Site Assessment
Sandia National Laboratories	7011 East Avenue	HAZ WASTE – RCRA	DTSC	Active – Operating Permit
Sparklizing Cleaners	855 Rincon Avenue	Cleanup Program Site	RWQCB	Open – Inactive
TDW Construction	101 Greenville	Cleanup Program Site	RWQCB	Open – Inactive

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Table 3.9-1 Hazardous Materials Sites in the EIR Study Area

Site Name	Address	Site Type	Oversight Agency	Cleanup Status
Uptown, Long-Term Management	217 North N Street	Clean Program Site	RWQCB	Open – Long-Term Management
Vasco 76 Gas and Food*	115 South Vasco Road	LUST Cleanup Site	RWQCB	Open – Site Assessment
Vasco Property LLC	355 South Vasco Road	Cleanup Program Site	RWQCB	Open – Site Assessment

Source: CalEPA 2025; DTSC 2025; SWRCB 2025.

Notes: ACDEH = Alameda County Department of Environmental Health; DTSC = Department of Toxic Substances; LUST = Leaking Underground Storage Tank; RCRA = Resources Conservation and Recovery Act; RWQCB = Regional Water Quality Control Board.

* Site is included on the Cortese List (California Government Code Section 65962.5).

Oil and Natural Gas Fields

The Livermore Oil Field is in the eastern portion of the EIR Study Area, east of Greenville Road and south of Interstate 580 (I-580), and the abandoned Hospital Nose Gas Field is located along the southern edge of the EIR Study Area between Wetmore Road and Arroyo Road. According to the California Geologic Energy Management Division website, there currently are no active oil wells within the Livermore Oil Field (CalGEM 2025).

The Livermore Oil Field is listed in Table 3.9-1 as “GIG Facility Soil Cleanup.” The Local Oversight Program/Voluntary Remedial Action Program group within the ACDEH is responsible for regulatory oversight of site investigation and cleanup activities for the Livermore Oil Field. ACDEH has worked with E&B Natural Resources, the owners of the facility, to create a work plan to monitor the site. The Livermore Oil Field contained an oil storage tank that leaked. Soil contamination with petroleum hydrocarbon to approximately 15 feet below ground surface (bgs) was observed via soil sampling. The observed soil contamination compounds were not detected at concentrations above the reporting limit in soil samples collected below a depth of 15 feet bgs. E&B Natural Resources excavated approximately 1,340 cubic yards of impacted soil in November and December 2015. In 2016, E&B Natural Resources also installed three monitoring wells, and all analyzed groundwater samples were non-detect, indicating that the groundwater has not been impacted from the crude oil stock tank release. ACDEH concurs that the release from the stock tank does not pose a threat to water supply wells or groundwater resources in the area, and the site is undergoing closure (SWRCB 2025).

In addition, research indicates some oil wells are a major source of methane emissions. Though there has been no investigation for methane in shallow soil in this area, it is important to note this possible source of contamination from abandoned wells for future development.

Information on the Hospital Nose Gas Field is much more limited; the SWRCB determined that groundwater contamination from the field is unlikely to occur (City of Livermore 2022).

SCHOOLS

Because sensitive population groups include children, CEQA requires an evaluation of hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile (1,320 feet) of an existing or proposed private or public school. As discussed in detail in Section 3.15, *Public Services, Parks, and Recreation*, Livermore Valley Joint Unified School District, Las Positas College, and private education facilities are located throughout the EIR Study Area. There are currently no known proposals for new schools in the EIR Study Area.

AIRPORT HAZARDS

The 643-acre Livermore Municipal Airport is owned and operated by the City of Livermore. The Livermore Municipal Airport is classified as a General Aviation Reliever Airport, which means it serves private, business, and corporate tenants and customers. The Livermore Municipal Airport primarily serves the Tri-Valley region with a population of over 300,000 residents.

Land uses surrounding the Livermore Municipal Airport include Las Positas Golf Course to the west; commercial uses to the north; office, industrial, and residential uses to the east; and industrial uses to the south. As shown in Figure 3-9.1, *Livermore Municipal Airport Boundaries*, the Livermore Municipal Airport has an AIA that covers the northwestern portion of the EIR Study Area. Per the Livermore Municipal ALUCP, land uses that could conflict with airport operations include those with occupants that have reduced mobility or are unable to respond to emergency situations (Alameda County ALUC 2012). These land uses include children's schools, daycare centers, hospitals, nursing homes, and other uses in which most occupants are children, elderly, the ill or infirm, and/or handicapped. The land uses surrounding the Livermore Municipal Airport are generally consistent with airport operations (City of Livermore 2022).

EMERGENCY RESPONSE AND EVACUATION

As described in Section 3.9.1, *Regulatory Framework*, the EIR Study Area is in the planning area of the Livermore EOP and the Tri-Valley LHMP. There are several evacuation routes crossing the EIR Study Area. Evacuation routes are designated roadways that allow many people to quickly leave an area due to a potential or imminent disaster. These routes should have sufficient capacity to accommodate the needs of the community, be safely and easily accessible, and allow people to travel far enough away to be safe from emergency conditions.

The primary evacuation route in the EIR Study Area with capacity to transport the largest number of vehicles is I-580. Smaller potential routes include Holmes Street/Vallecitos Road, Concannon Boulevard, First Street, East Avenue, Vasco Road, Las Positas Road, Murrieta Boulevard, Railroad Avenue/Stanley Boulevard, Portola Avenue, East Airway Boulevard, and

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Livermore Avenue/Tesla Road. During emergencies, the LPPD coordinates evacuation warnings and orders. Evacuations are also coordinated through the Alameda County AC Alerts and Genasys Protect.

As described in Section 3.18, *Wildfire*, several neighborhoods in the EIR Study Area have evacuation constraints. Figure 3.18-3, *Evacuation-Constrained Residential Areas*, shows identified evacuation-constrained residential areas throughout the EIR Study Area. Evacuation-constrained residential areas in the EIR Study Area are north of I-580 in the northeast portion of the EIR Study Area, scattered neighborhoods throughout the central portion of the EIR Study Area, and generally south of Stanley Boulevard, College Avenue, and East Avenue.

3.9.3 Standards for Analysis

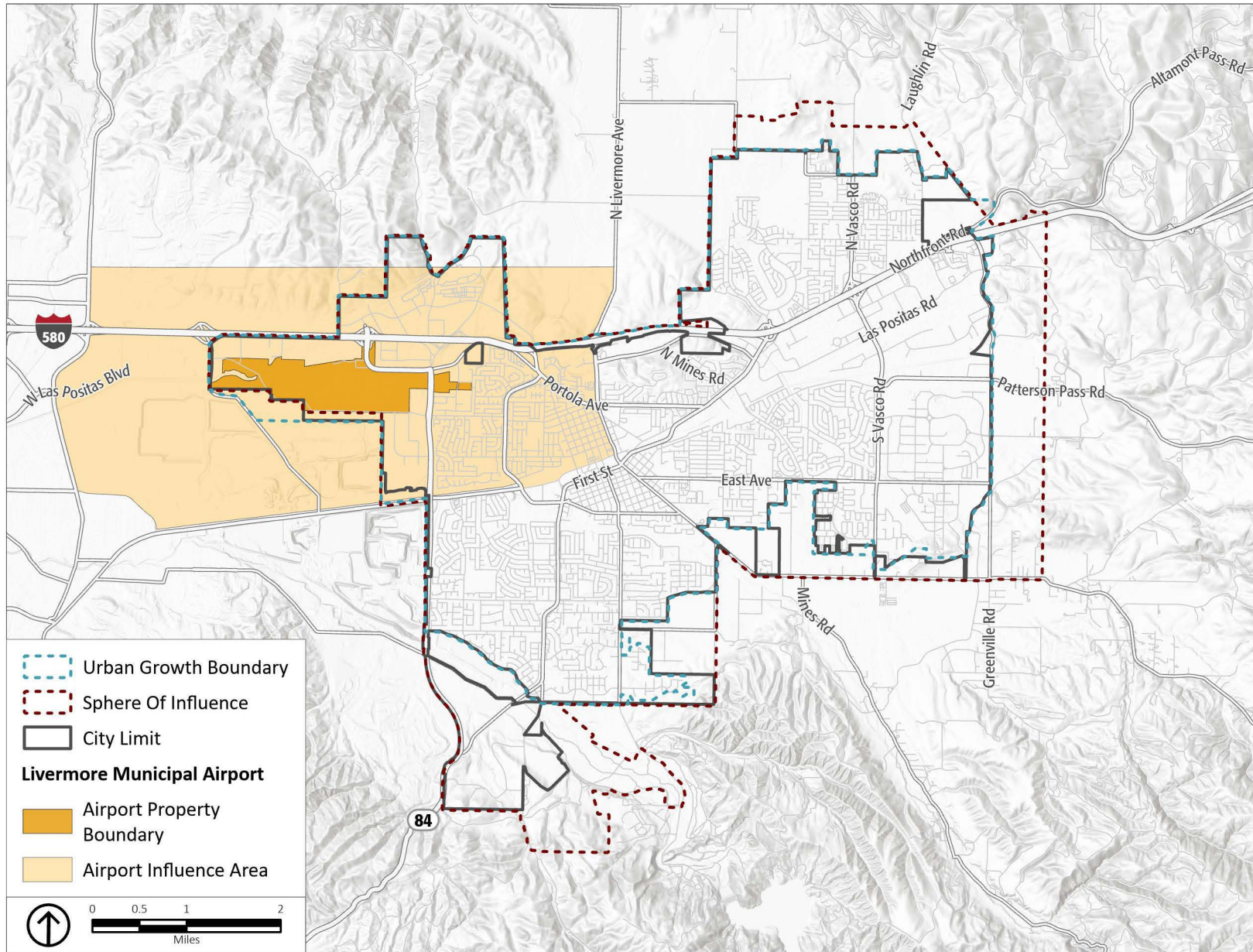
SIGNIFICANCE CRITERIA

Appendix G, *Environmental Checklist Form*, of the CEQA Guidelines states that the proposed Project would result in a significant impact related to hazards and hazardous materials if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- b) 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.
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- d) Be located on a site that is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- e) 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 result in a safety hazard or excessive noise for people residing or working in the project area.
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impacts related to wildland fires and wildfire evacuation are fully discussed in Section 3.18, *Wildfire*. Therefore, the following standard is not discussed in this section:

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.



Source: Livermore Municipal Airport Land Use Compatibility Plan, 2012; City of Livermore, 2022.

Figure 3.9-1
Livermore Municipal Airport Boundaries

HAZARDS AND HAZARDOUS MATERIALS

3.9.4 Project Impact Analysis

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant. Future residential land uses could use common cleaning products, building maintenance products, paints and solvents, fertilizers and pesticides used in landscaping and yard care, along with other similar items. In general, these potentially hazardous materials would not be of the type to occur in sufficient quantities to pose a significant hazard to public health and safety or to the environment.

Future commercial or industrial uses could use, store, or generate hazardous materials for research, manufacturing, cleaning, or other commercial uses. The proposed Project would include agricultural uses within the EIR Study Area that may also use or transport hazardous materials such as pesticides. These commercial, industrial, and agricultural activities are subject to a variety of federal, State, regional, and local regulations, as described in Section 3.9.1, *Regulatory Framework*. Any handling, transport, use, or disposal of hazardous materials would comply with applicable laws, policies, and programs set by various federal, State, and local agencies and regulations, including the EPA, RCRA, Caltrans, the LHMP, Title 22 and 26 of the California Code of Regulations governing hazardous materials transport. All hazardous materials to be transported must also be in compliance with USDOT regulations pertaining to the packaging, labeling, routing, and transporting of hazardous materials, spill response procedures, and trained transporters. Additionally, future development in the EIR Study Area would be subject to regulatory programs such as those overseen by DTSC, SWRCB, and ACDEH that regulate hazardous materials handling and management in accordance with applicable State and local regulations.

Nonresidential development that would require the use of hazardous materials regulated by federal, State, regional, and local agencies would issue permits for the use of the hazardous materials, which would be monitored and routinely updated by the responsible agency depending on the type of material. These agencies also require applicants for development of potentially contaminated properties to perform investigation and cleanup if the site is found to be contaminated with hazardous substances.

In addition to existing regulations, the Safety (S) Element of the proposed General Plan 2045 contains the following goals and policies that are designed to ensure safe transport, use, and disposal of hazardous materials:

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- **Goal S-2:** Integrate Hazard Risk, Vulnerability Information, and Climate Adaptation into Land Use Planning and Development Decisions.
 - **Policy S-2.1: Hazard Information and Risk Reduction for New Development.** Provide natural and human-made hazard information to project applicants and recommend ways to reduce risks and inform design, siting, or construction measures to reduce risks and protect public health, safety, property, and the environment.
- **Goal S-11.** Minimize Livermore residents' exposure to the harmful effects of hazardous materials and waste.
 - **Policy S-11.1: Residual Repositories.** Prohibit residual repositories in city limits. This includes facilities used for the long-term storage or disposal of residual waste materials such as industrial byproducts, contaminated soils, or treated sludge.
 - **Policy S-11.2: Hazardous Waste Management Facility Location.** Permit hazardous waste management facilities only in areas with a land use designation of High Intensity Industrial, and only if other siting criteria can be met and potential environmental impacts are mitigated as part of conditional approval.
 - **Policy S-11.3: Hazardous Materials Transport.** Promote the safe transport of hazardous materials in Livermore through implementation of the following measures:
 - a. Maintain formally designated hazardous material carrier routes to direct hazardous materials away from populated and sensitive areas;
 - b. Prohibit parking of vehicles transporting hazardous materials on city streets;
 - c. Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the greatest extent possible.
 - **Policy S-11.4: Hazardous Material Transportation Coordination.** Work with other Tri-Valley jurisdictions to coordinate transportation of hazardous materials and hazardous materials release response across jurisdictional boundaries.
 - **Policy S-11.7: Hazardous Waste Reduction.** Continue to encourage the reduction of solid and hazardous waste generated in the city, in accordance with countywide plans.
 - **Policy S-11.9: Reuse and Recycling Post-Disaster.** Encourage reuse and/or recycling of debris following a disaster, in accordance with all applicable regulations.
 - **Policy S-11.10: Hazardous Material Processing and Siting.** Continue to implement processing procedures and local siting criteria to implement relevant and applicable provisions consistent with the hazardous materials and waste management plans for Alameda County.
 - **Policy S-11.11: Hazardous Waste Disposal.** Ensure convenient access for Livermore citizens for the disposal of household hazardous waste.

Specifically, proposed Policy S-11.3 requires measures that promote the safe transport of hazardous materials, and Policy S-11.4 requires coordination with nearby jurisdictions for the transportation of hazardous materials and hazardous materials release response across

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jurisdictional boundaries. Proposed Policies S-11.7 and S-11.11 would promote the reduction of hazardous waste production and provide convenient access for disposal, which would reduce hazardous waste entering the waste stream. Proposed Policy 11.2 would ensure hazardous waste is only managed in areas with a land use designation of High Intensity Industrial, which would ensure it is managed in places where it would not expose residents or sensitive populations to hazardous waste. Policy S-11.10 would implement processing procedures and local siting criteria consistent with the Alameda County hazardous materials and waste management plans.

Future development that would introduce hazardous materials to a site, or that would generate or result in the transportation of hazardous waste, would be regulated pursuant to federal, State, regional, and local laws, including the proposed General Plan 2045 goals and policies. Compliance with these regulations would minimize the potential for a significant adverse effect on the environment due to the routine use, transport, and disposal of hazardous materials. Therefore, impacts would be **less than significant**.

b) Would the project 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?

Less than significant. As indicated in Table 3.9-1, there are hazardous material sites in the EIR Study Area that are contaminated and inactive, undergoing evaluation, and/or undergoing corrective action. Furthermore, the EIR Study Area consists of older structures built prior to the regulation of hazardous building materials (e.g., asbestos, lead paint).

Compliance with existing regulations (see "Regulations for Hazardous Materials in Structure" subheading in Section 3.9.2, *Existing Conditions*) would ensure that construction workers and the public are not exposed to risks related to hazardous materials during demolition and construction. Construction safety and exposure standards for lead and asbestos are set in Title 8 of the California Code of Regulations, which establishes Cal/OSHA requirements related to public and worker protection. Future projects would be required to comply with CalOSHA regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. All contaminated waste must be collected and disposed of at an appropriately licensed disposal or treatment facility. Compliance with regulations for hazardous materials in structures would ensure identification, disclosure, controlled handling, and licensed abatement in older structures to prevent exposure and release during demolition, renovation, and occupancy. Topics addressed include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. The local CUPA is responsible for ensuring that the California Code of Regulations and all other programs related to hazardous materials are implemented during construction activities.

Future development would be required to comply with the existing federal, State, and local regulations, including those pertaining to hazardous materials business plans, CalARP, and regulations for hazardous materials in structures, as detailed in Section 3.9.1, *Regulatory Framework*. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a hazardous materials business plan to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. Businesses using regulated substances exceeding a threshold quantity are evaluated under CalARP to determine the potential for, and impacts of, accidental releases and may be required to develop and submit a risk management plan depending on potential hazards.

As described under impact discussion (a), commercial or industrial uses could also use, store, or generate hazardous materials for research, manufacturing, cleaning, or other commercial uses. Agricultural uses within the EIR Study Area may also use or transport hazardous materials such as pesticides. These commercial, industrial, and agricultural activities are subject to a variety of federal, State, regional, and local regulations, as described in Section 3.9.1, *Regulatory Framework*. All hazardous materials to be transported must remain in compliance with USDOT regulations pertaining to the packaging, labeling, routing, and transporting of hazardous materials, spill response procedures, and trained transporters. Future development in the EIR Study Area would be subject to regulatory programs such as those overseen by DTSC, SWRCB, and ACDEH that regulate hazardous materials handling and management in accordance with applicable State and local regulations. Nonresidential development that use of hazardous materials regulated by federal, State, regional, and local agencies would be required to obtain permits for the use of the hazardous materials, which would be monitored and routinely updated by the responsible agency depending on the type of material. These agencies also require applicants for development of potentially contaminated properties to perform investigation and cleanup if the site is found to be contaminated with hazardous substances. As described in Section 3.10, *Hydrology and Water Quality*, future development that disturbs one acre or more of soil, or that is part of a common plan of development that disturbs one acre or more of soil, must obtain permit coverage under the Construction General Permit by filing a Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP) with the RWQCB prior to commencement of construction. The SWPPP must describe the site, facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion, maintenance responsibilities, and non-stormwater management controls. The best management practices in the SWPPP include measures to prevent spills and require on-site materials for cleanup.

Additionally, the proposed General Plan 2045 goals and policies identified under impact discussion (a), in addition to the following goal and policies from the Safety (S) Element, are designed to avoid release of hazardous materials in the environment through reasonably foreseeable upset and accident conditions:

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- **Goal S-11.** Minimize Livermore residents' exposure to the harmful effects of hazardous materials and waste.
 - **Policy S-11.5: Hazardous Waste Emergency Response Plan.** Require facilities subject to the City's hazardous materials regulations to submit an emergency response plan as part of any discretionary application. This includes businesses required to prepare a Hazardous Materials Business Plan under California Health and Safety Code Chapter 6.95 and Livermore Development Code 6.02.040, *Hazardous Materials*. The requirement applies to large generators of hazardous waste, defined as businesses that handle hazardous materials in reportable quantities of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas.
 - **Policy S-11.6 Environmental Investigation.** When reviewing applications for new development in areas historically used for commercial or industrial uses, require environmental investigation, and remediation, as necessary to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, and lead and asbestos potentially present in building materials, would not have the potential to affect the environment or the health and safety of future property owners or users.
 - **Policy S-11.8: Hazardous Material Release Investigation.** Ensure that new development and redevelopment protect public health and safety through environmental investigations, such as a Phase I investigation pursuant to ASTM standards (E1527-05). Require recommendations from the investigation pursuant to State and Alameda County regulations, relating to potential hazardous material releases from prior uses and lead and asbestos present in building materials.

Specifically, proposed Policy S-11.5 would require facilities subject to the City's hazardous materials regulations to submit an emergency response plan. Proposed Policies S-11.6 and S-11.8 require investigations and remediation to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, and lead and asbestos potentially present in building materials, would not have the potential to affect the environment or the health and safety of future property owners or users, consistent with State and Alameda County regulations.

Compliance with the federal, State, regional, and local laws, as well as implementation of the proposed General Plan 2045 goals and policies, would ensure future development 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; therefore, impacts would be **less than significant**.

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c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school?

Less than significant. There are public schools and private schools dispersed throughout the EIR Study Area. Accordingly, it is possible that future development could emit or handle hazardous materials, either through construction or operation of new development, within 0.25 mile of an existing or proposed school. As described in impact discussions (a) and (b), while some future development could be reasonably expected to handle hazardous materials or generate hazardous emissions, the storage, use, and handling of these materials would be subject to existing federal, State, and local regulations as described in Section 3.9.1, *Regulatory Framework*. Compliance with existing applicable local, State, and federal regulatory requirements related to the handling and storage of hazardous materials would minimize the potential release of hazardous materials associated with development.

In addition to protections afforded by State and local regulations, the same proposed General Plan 2045 goals and policies from the Safety (S) Element identified under impact discussions (a) and (b) would also serve to minimize impacts related to the emission and handling of hazardous materials near schools. Specifically, proposed Policies S-11.2 and S-11.10 would consider the siting of hazardous waste management facilities and implement processing procedure and local siting criteria consistent with the Alameda County hazardous materials and waste management plans. Proposed Policies S-11.6 and S-11.8 require investigations and remediation to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, and lead and asbestos potentially present in building materials, would not have the potential to affect the environment or the health and safety of future users, such as a school, consistent with State and Alameda County regulations.

Compliance with existing applicable local, State, and federal regulatory requirements and proposed General Plan 2045 goals and policies would ensure potential impacts related to emitting hazardous emissions or handling hazardous or acutely hazardous materials proximate to a school would be **less than significant**.

d) Would the project be located on a site that is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Less than significant. As discussed in Section 3.9.2, *Existing Conditions*, at the time of preparation of the Draft EIR, the EIR Study Area contains 30 hazardous materials sites that have not been fully remediated or had their cases closed, two of which are on the Cortese List compiled pursuant to Government Code Section 65962.5. The complete list and location of active cleanup sites in the EIR Study Area is shown in Table 3.9-1. The cleanup of a leaking

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storage tank at the E&B Resources oil field site has been completed, and the site is in the process of undergoing closure with ACDEH.

For development projects on such a site, further site characterization and/or remediation work would be conducted in accordance with the regulations and policies of the agency assigned to the site (e.g., DTSC, RWQCB, and ACDEH). Site-specific Environmental Site Management Plans (ESMPs) for locations with known contamination would summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations. The ESMP would include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP would include the following:

- Provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively
- Describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations
- Designate personnel responsible for implementation of the ESMP

For sites with potential residual contamination in soil or groundwater that are planned for redevelopment with an overlying occupied building, a soil vapor intrusion assessment would indicate the potential for significant vapor intrusion into an occupied building. Project design shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include vapor barriers, passive venting, and/or active venting.

In addition, the same proposed General Plan 2045 goals and policies from the Safety (S) Element identified under impact discussions (a) and (b) would also serve to minimize impacts related to the development on hazardous materials sites. Specifically, proposed Policy S-11.6 requires investigations and remediation to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, and lead and asbestos potentially present in building materials, would not have the potential to affect the environment or the health and safety of future property owners or users.

Compliance, with applicable federal, State, and local laws and regulations regarding cleanup and reuse of a listed hazardous materials site, as well as proposed General Plan 2045 goals and policies, would ensure future development would not create a significant hazard to the public or the environment. Therefore, impacts would be **less than significant**.

-
- e) **For a project 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 result in a safety hazard or excessive noise for people residing or working in the project area?**
-

Less than significant. As shown in Figure 3.9-1, the Livermore Municipal AIA covers the northwestern portion of the EIR Study Area. All development projects within the AIA must be reviewed by the Alameda County ALUC to ensure consistency with the ACLUP. The ACLUP establishes height and use restrictions for structures within the parts of the EIR Study Area that extend into the AIA. As discussed in Section 3.11, *Land Use and Planning*, the proposed General Plan 2045 is consistent with the ALUCP and does not include development that would result in safety hazards.

In addition, the Safety (S) Element and Noise (N) Element of the proposed General Plan 2045 contain the following goals and policies that are designed to avoid safety hazard or excessive noise within ALUCP boundaries:

- **Goal S-12:** Facilitate safe and efficient aircraft operations at the Livermore Municipal Airport.
 - **Policy S-12.1: Airport Safety Zones.** Define, maintain, and enforce airport safety zones consistent with adopted risk-based criteria to protect public safety and minimize potential hazards associated with airport operations in addition to Federal Aviation Administration, State, and local regulations.
 - **Policy S-12.2: Safety of Surrounding Development.** Prohibit noise-sensitive or safety-sensitive uses in airport influence areas, as defined in the Airport Land Use Compatibility Plan.
 - **Policy S-12.3: Airport Layout Plan.** Prepare, maintain, and periodically update the Airport Layout Plan to identify existing and planned facilities needed to support the safe and efficient operation of the Livermore Municipal Airport.
 - **Policy S-12.4: Traffic Patterns and Airspace Management.** Coordinate with the Federal Aviation Administration to establish and monitor aircraft traffic pattern altitudes, turning movements, and airspace limitations, including radar coverage constraints, to ensure safe and consistent flight operations.
 - **Policy S-12.5: Taxiing and Ground Operations.** Make pilots and airport users aware of established ground movement protocols, including holding short of runways at designated taxiways, obtaining landing clearance, storing aircraft with designated spaces, and avoiding obstruction of adjacent taxiways and operations areas.
 - **Policy S-12.6: Minimization of Navigational Hazards.** Coordinate with surrounding jurisdictions and developers to prevent or reduce potential navigational hazards, including electrical interference, glare, or other obstructions that may affect safe aircraft operation.

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- **Goal N-1:** Minimize the exposure of community residents to excessive noise.
 - **Policy N-1.3: Airport Noise Contours.** Within the 2030 Airport Community Noise Equivalent Level Noise Contours illustrated in Figure N-4 (of the General Plan), apply the Noise Compatibility contained in Section 3.3.1 et seq. of the Livermore Airport Land Use Compatibility Plan, dated August 2012, in conjunction with citywide General Plan Noise Element policies. Evaluate potential noise impacts and recommend mitigation measures through discretionary review procedures such as environmental review, design review, and evaluation of use permits.
- **Goal N-4:** Adopt design standards and identify effective noise attenuation measures to prevent noise or reduce noise to acceptable levels.
 - **Policy N-4.5: Airport Voluntary Noise Abatement.** Encourage voluntary compliance with noise abatement procedures, including the avoidance of nighttime operations between 10 p.m. and 6 a.m., particularly by jet aircraft.

Specifically, proposed Policy S-12.1 would define, maintain, and enforce airport safety zones to minimize potential hazards associated with airport operations, and Policy S-12.2 would prohibit noise-sensitive or safety-sensitive uses in AIAs. Proposed Policy N-1.3 would require evaluation of potential noise impacts and recommend mitigation measures for development within the 2030 Airport Community Noise Equivalent Level Noise Contours, and Policy N-4.5 would encourage voluntary compliance with noise abatement procedures.

Compliance with the requirements of the Alameda County ALUC as well as the proposed General Plan 2045 goals and policies would ensure that future development would not result in a safety hazard or excessive noise for people residing or working in the project area. Therefore, impacts would be **less than significant**.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant. The proposed General Plan 2045 is the primary planning document for Livermore and is intended to ensure the safety of the residents and visitors of Livermore. The proposed Project has been prepared in coordination with the City's Emergency Manager, who is responsible for coordinating agency response to disasters or other large-scale emergencies and the LPFD. The LPFD provides all-risk emergency response such as fire, emergency medical services, automobile accidents, hazardous materials, and county and statewide mutual aid.

Additionally, the Safety (S) Element of the proposed General Plan 2045 contains the following goals and policies that are designed to ensure adequate evacuation and emergency response:

- **Goal S-1:** Strengthen community preparedness, response, and resilience to hazards.
 - **Policy S-1.1: Integrated Emergency Planning and Coordination.** Regularly update, test, and incorporate the adopted *Tri-Valley Local Hazard Mitigation Plan* into this Safety Element by reference, as permitted by California Government Code Section 65302.6. Coordinate with regional partners and conduct periodic mock exercises to ensure effective emergency preparedness and response.
 - **Policy S-1.2: Emergency Communications and Alerts.** Expand and maintain reliable emergency communication systems that provide timely warnings and updates. Ensure communications are accessible to people in multiple languages and formats, and for people with access and functional needs. Participate in regional and State emergency alert systems as appropriate.
 - **Policy S-1.3: Evacuation Route Management.** Maintain and improve designated evacuation routes within the city, including roadway repairs and vegetation management. Coordinate with regional transportation agencies to ensure the safety and integrity of State-owned evacuation routes, such as Interstate 580 and State Route 84.
 - **Policy S-1.6: Community Emergency Response Team.** Continue to support and expand the Livermore-Pleasanton Community Emergency Response Team (CERT) to strengthen the City's volunteer emergency response capacity and community resilience.
 - **Policy S-1.7: Community Education and Preparedness.** Improve public safety through education, outreach, and training programs that engage residents, businesses, and community groups, especially those with access and functional needs. Activities may include emergency drills, first-aid training, hazard retrofits, and encouraging residents to maintain emergency supplies. Provide clear information on hazard risks and encourage participation in emergency alert systems.
- **Goal S-2:** Integrate hazard risk, vulnerability information, and climate adaptation into land use planning and development decisions.
 - **Policy S-2.4: Two Evacuation Routes.** Require that new major residential and nonresidential developments have access to at least two points of ingress and egress.

Specifically, proposed Policy S-1.1 would require coordination with regional partners to conduct periodic mock exercises to ensure effective emergency preparedness and response, and Policy S-1.2 would support reliable emergency communication systems that provide timely warnings and updates to facilitate efficient evacuation during an emergency. Proposed Policy S-1.3 and S-2.4 would ensure adequate evacuation routes are provided for new development and throughout the EIR Study Area. Proposed Actions S-A-1.2 through S-A-1.4 would further support these policies by working with other agencies to increase access to and participation in emergency response systems, conducting an evaluation study to identify evacuation routes and constraints, and coordinating with transit providers to develop evacuation plans for those with special access or functional needs.

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Compliance with applicable federal, State, and local laws and regulations regarding emergency response or emergency evacuation, as described in Section 3.9.1, *Regulatory Framework*, and proposed General Plan 2045 goals and policies would ensure future development would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be **less than significant**.

3.9.5 Cumulative Impact Analysis

The geographic context for impacts resulting from hazards and hazardous materials tend to be site specific rather than cumulative in nature, because each project site has a different set of hazards considerations that would be subject to uniform site development and construction standards and unique standards depending on the outcome of a project-specific hazards materials investigation. The following discussion considers how buildout of the EIR Study Area and the region has the potential to result in a cumulative impact related to hazards and hazardous materials in the eastern Alameda County region.

Would the project have a cumulative effect related to hazards and hazardous materials?

Less than significant. As discussed previously, potential future development would not result in significant impacts from the increased use of hazardous materials. In addition, potential project-level impacts associated with the transport, use, or disposal and release of hazards and hazardous materials would be reduced through compliance with existing local, regional, State, and federal regulations as well as the proposed General Plan 2045 goals and policies. While impacts resulting from hazardous materials tend to be site specific rather than cumulative in nature, other future projects in the eastern Alameda County region would be required to comply with federal, State, and local laws and policies, including the Tri-Valley LHMP, and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts related to hazards and hazardous materials. Environmental review of specific development proposals, as applicable, would serve to reduce potential impacts. Accordingly, the less-than-significant impacts within the EIR Study Area from the proposed Project would not contribute to a cumulative increase in hazards in the immediate vicinity of the EIR Study Area or throughout the region.

The proposed General Plan 2045 includes goals and policies that support emergency preparedness, evacuation planning, and coordination with local and regional emergency service providers. These efforts align with and build upon the Tri-Valley LHMP, which establishes regional strategies for emergency response coordination and evacuation planning across participating jurisdictions. Other jurisdictions in the region are responsible for maintaining and updating their own emergency response and evacuation plans consistent with the LHMP framework, and future development would be required to comply with these plans. As a result,

the proposed Project would not contribute to cumulative impacts related to emergency response or evacuation plans.

Similarly, the proposed Project would not contribute to cumulative airport safety or noise hazards. Only properties within designated airport influence areas are subject to airport land use compatibility requirements, and development within these areas must comply with the Alameda County ALUC. Other jurisdictions in the region are subject to the same regulatory framework. Because the proposed General Plan 2045 land use map does not designate land uses that would conflict with airport safety zones or introduce new hazards for aircraft operations, the proposed Project would not contribute to cumulative airport-related safety or noise impacts.

For these reasons, the proposed Project's incremental contribution to cumulative hazard-related impacts would be **less than significant**.

3.9.6 References

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