# 3.5 HAZARDS AND HAZARDOUS MATERIALS

This section describes the existing setting of the Fountain Valley Crossings Specific Plan (FVCSP) Project (Project) area as it relates to hazards and hazardous materials, and analyzes the potential impacts that could result from implementation of the Project. Primary issues pertaining to hazardous materials include the transport, storage, use, and disposal of hazardous materials and waste and the release of hazardous materials during construction. Hazards may also include exposure to safety hazards associated with aircraft operations at nearby airports.

The analysis of hazards and hazardous materials in this section are based on information gathered from hazardous release databases maintained by the California Department of Toxic Substances Control (DTSC), U.S. Environmental Protection Agency (USEPA), and information provided by the City of Fountain Valley (City) and the Fountain Valley Fire Department (FVFD) (acting as the Project area Participating Agency [PA] of the Certified Unified Program Agency [CUPA]). The Environmental Health Division of the Orange County Health Care Agency (OCHCA) is designated as the CUPA for Orange County (County).

This section of the Partial Recirculated Draft EIR has been revised to include clarification and expanded analysis in Impact HAZ-4 and cumulative Project impacts to address public comments and concerns that were raised following release of the pre-recirculation Final EIR.

## 3.5.1 Environmental Setting

The Project area is within the County on the southeastern side of the City. The Project area is bisected diagonally by Interstate 405 (I-405), and bordered to the east by the Santa Ana River. Land uses surrounding the Project area include fully developed urban uses such as residential, commercial, and manufacturing. The nearest schools are Robert Gisler Public Elementary School and James H. Cox Public Elementary School located 0.3 mile southwest and 0.35 mile north of the Project area, respectively. The nearest airport is the John Wayne Airport, located approximately 3.7 miles southeast of the Project area.

### 3.5.1.1 Hazardous Materials and Waste Background

Under Title 22 of the California Code of Regulations (CCR), the term hazardous substance refers to both hazardous materials and hazardous wastes that are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Products as diverse as gasoline, paint solvents, film solvents, household cleaning products, refrigerants, and radioactive substances are categorized as hazardous materials.

Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, or contaminated or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific CCR Title 22 criteria. While hazardous substances are regulated by multiple agencies, as described in Section 3.5.2, *Regulatory Framework*, cleanup requirements of hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the Project. The handling, transportation, and disposal of such materials and wastes are of concern in all communities. Improper handling of hazardous materials or wastes may result in significant effects to human health and the environment.

Hazards or the potential presence of hazardous materials can arise from the materials used in construction of existing buildings, from past uses of those structures, or from current operations. Current uses of the Project area have varying degrees of contamination risk. The existing Project area is developed as independent, commercial manufacturing sites. The risk of contamination for each site is dependent on previous and existing activities on the specific site, though large releases may have the potential to affect neighboring sites as well. Potential hazardous materials typically used in commercial manufacturing operations include motor oil, hydraulic oil, antifreeze, lubricants, compressed welding gases, paint, and paint thinner. These sources of hazardous materials, if encountered during construction by workers or the general public, can cause exposures that may result in adverse environmental and health effects.

Past industrial or commercial activities on a site could have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. Hazardous materials may also be present in building materials and released during building demolition activities. If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The four basic exposure pathways through which an individual can be exposed to a chemical agent include inhalation, ingestion, bodily contact, and injection. Exposure can come as a result of an accidental release during transportation, storage, or handling of hazardous materials. Disturbance of subsurface soil during construction can also lead to exposure of workers or the public from stockpiling, handling, or transportation of soils contaminated by hazardous materials or waste from previous spills or leaks.

#### 3.5.1.2 Potential Hazardous Building Materials

Existing buildings within the Project area were built primarily in the 1970s, though the oldest was originally built in 1965 and the newest was originally built in 1981. Based on the ages of these buildings, there is a potential for building materials to contain asbestos or lead-based paint (LBP). A potential release of hazardous materials could occur when asbestos-containing material (ACM) or LBP are disturbed during renovation or demolition activities. This disturbance could be harmful to human health. Typical hazardous materials of concern for existing older structures in the Project area include:

- **Asbestos** is a mineral fiber that is carcinogenic and harmful to respiratory health. Because of its fiber strength and heat resistance, it was widely used in a variety of building construction materials for insulation and as a fire-retardant, as well as in friction and heat-resistant products. Use of asbestos in the manufacturing of these products was common throughout California; however, it has been banned since 1977. Older buildings constructed prior to 1978 could contain ACM. Asbestos can be released when ACMs are disturbed by cutting, sanding, drilling, or other remodeling activities. Improper attempts to remove these materials can release asbestos fibers into the air, increasing asbestos levels and affecting indoor air quality.

- **Lead** is a recognized harmful environmental pollutant that can pose a hazard when exposed through air, drinking water, food, contaminated soil, deteriorating paint, and dust. Lead was widely used in paint, gasoline, water pipes, and many other products prior to documentation of its health hazards. In 1978, California banned the use of LBP. Older buildings constructed prior to 1978 could contain LBP. If LBP is improperly removed from surfaces by dry scraping or sanding, LBP can be absorbed into the body and could pose a potential public health risk.

- **Mold** can impair indoor air quality. The presence of visible water damage, damp materials, visible mold, or mold odor in buildings increases the potential risks of respiratory disease for occupants. According to the California Department of Public Health, known health risks include the development of asthma, allergies, and respiratory infections, the triggering of asthma attacks, and increased wheezing, coughing, difficulty breathing, and other symptoms (California Department of Public Health 2011).

- **Polychlorinated Biphenyls (PCBs)** are synthetic chemicals that were manufactured for use in various industrial and commercial applications - including oil in electrical and hydraulic equipment, and plasticizers in paints, plastics and rubber products - because of their non-flammability, chemical stability, high boiling point, and electrical insulation properties. When released into the environment, PCBs persist for many years and bioaccumulate in organisms. The USEPA has classified PCBs as probable human carcinogens. In 1979, the USEPA banned the use of PCBs in most new electrical equipment and began a program to phase out certain existing PCB-containing equipment.

- **Radon** is a naturally-occurring odorless, tasteless, and invisible gas produced from the decay of uranium in soil and water (USEPA 2016a). Structures placed on native soils with elevated levels of radon can be impacted by the intrusion of radon gas into breathing spaces of the overlying structures, which can cause lung cancer. Orange County is listed as a Zone 3 County with a predicted average indoor radon screening level of less than 2 picocuries per liter (pCi/L). This is considered a low level by the USEPA. The USEPA recommends remedial action for areas with levels above 4 pCi/L (USEPA 2016b). The City is designated to be in a low potential zone with levels between 0 and 2 pCi/L (USEPA 2016c).

### 3.5.1.3 Soil and Groundwater Contamination

The Project area has supported a range of industrial land uses since its development during the 1960s and 1970s, including existing or historic commercial businesses, such as various clothing outlets, furniture and hardware stores, auto body shops, industrial manufacturing sites, music stores, restaurants and eateries, etc. The majority of the properties have been developed to Light Manufacturing zoning standards. These types of uses have potential to create hazards or exposure to hazardous materials through handling, transporting, storage, and disposal of hazardous materials in the Project area. In some cases, past uses or spills have caused contamination of soil, groundwater, or structures. National and state databases (e.g., Geotracker, EnviroStor, Toxmap and Toxic Release Inventory [TRI]) that detail contamination at known hazardous sites were reviewed for contamination sites within the Project area. Multiple sites within the Project area were listed in databases identifying potential or known toxic releases or hazardous material cleanup sites. These include two inactive cleanup sites operating under tiered permits; one non-operating, historically permitted site; four completed cleanup Leaking Underground Fuel Tank (LUFT) sites, one completed non-LUFT cleanup program site, and two TRI Form A Reporting facilities (DTSC 2016). Table 3.5-1 summarizes the address, contaminant, and status for the sites within the Project area.

Sites identified as active indicate that an investigation and/or remediation is currently in progress and that DTSC is actively involved, either in a lead or support capacity. A site identified as inactive and needing evaluation indicates it is a non-active site where DTSC has determined a Preliminary Endangerment Assessment or other evaluation is required. A non-operating permitted site is a facility that has received a hazardous waste facility permit, but has no hazardous waste management operating units at this time. Cleanup sites identified as Complete indicate that DTSC was involved in the cleanup of a release, but that all actions are complete and no further cleanup is required.

Leaking Underground Storage Tank (LUST) sites are managed by the State Water Resources Control Board (SWRCB), under the LUST Cleanup Program. Under this program, SWRCB staff, in coordination with designated local regulatory agencies, oversee investigation and cleanup of soil and groundwater contamination at sites with LUSTs. The program includes a LUST Fund, created in 1989 and administered by the SWRCB, to help with costs of cleanup for qualified projects (SWRCB 2016b).

The TRI is a database used to track information on the release of specific chemicals through disposal, recycling, energy recovery, treatment, or other release. Reporting Form A is required for any facility that meets employee number qualifications, are within certain industry categories, and manufactures, processes or otherwise uses any chemicals found on the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 list. Reporting indicates presence of a Section 313 chemical, but does not necessarily indicate the release through spill or discharge (USEPA 2014).

**Table 3.5-1. Permitted and Cleanup Site Listings in the Project Area**

| Address | EPA/CA ID | Site Type | Chemical | Cleanup/Compliance Status | Status Date |
|---|---|---|---|---|---|
| **18435 Bandilier Cir.** | CAD094718590 | Historically Permitted Hazardous Waste Facility | RCRA regulated hazardous waste | Non-operating; historically permitted (Protective Filer) | 2014 |
| **11200 Condor** | CAL000212803 (Active 2002) CAC001042648 (Inactive 2000) CAL000013693 (Inactive 1997) | LUFT Cleanup Site | Other solvent or non-petroleum hydrocarbon | Cleanup completed – case closed | 1985 |
| **18250 Euclid St.** | CAR000056002 | Cleanup Program Site | Other chlorinated hydrocarbons, other inorganic/salt | Cleanup completed – case closed | 2011 |
| **10865 Kalama River** | CAD983652025 (Inactive 2002) | USEPA TRI Form A Reporting | Styrene | Emissions release; no cleanup required | 2000 |
| **10870 Kalama River** | CAL000289014 (Active 2004) CAL000145489 (Inactive 2002) CAC000053021 (Inactive 2000) CAL922234338 (Inactive 1996) CAX000226159 (Inactive 1986) | LUFT Cleanup Site | Gasoline | Cleanup completed – case closed | 1987 |
| **18203 Mt. Baldy** | --- | LUFT Cleanup Site | Gasoline | Cleanup completed – case closed | 1998 |
| **18340 Mt. Baldy** | CAD041324237 | EPA TRI Form A Reporting | 1,1,1,-Trichloroethane | Emissions release; no cleanup required | 1990 |
| **18101 Mt. Washington** | CAD981368798 (Active) CAX000075028 (Inactive 1995) | LQG Tiered Permit | RCRA regulated hazardous waste | Site closure certification finalized | 2016 |
| **18240 Ward St.** | CA0001019926 | LUFT Cleanup Site | Diesel, gasoline | Cleanup completed – case closed | 2005 |
| **18330 Ward St.** | CA0000883322 | SQG Tiered Permit | Electroplating, plating, polishing, anodizing, and coloring | No further action required | 2015 |

Source: (DTSC 2016; SWRCB 2016a).
Notes: LQG – Large Quantity Generator SQG – Small Quantity Generator RCRA - Resource Conservation and Recovery Act

#### 3.5.1.4 Airport Safety Hazards

The Project area lies 3.7 miles northwest from John Wayne Airport. To address potential land use conflicts and hazards associated with the operations of aircraft near civilian populations, the Orange County Airport Land Use Commission (ALUC) developed the Airport Environs Land Use Plan (AELUP) for John Wayne Airport. The CLUP is also intended to ensure that new surrounding new land uses do not affect John Wayne Airport's continued operation. According to the AELUP, the Project area remains just outside of the Airport's Influence Area and is not subject to any development restrictions from the AELUP (Orange County Airport Land Use Commission (ALUC) 2008).

### 3.5.2 Regulatory Setting

A number of federal, state, and local laws and regulations have been enacted to ensure the safe handling and use of hazardous materials, as well as to manage and remediate sites contaminated by hazardous substances.

#### 3.5.2.1 Federal

***U.S. Environmental Protection Agency***

The USEPA's laws and regulations ensure the safe production, handling, disposal and transportation of hazardous materials. Specific regulations include those regarding asbestos, brownfields, toxic substances, underground storage tanks, and Superfund sites, as discussed below.

***Clean Water Act (33 USC Section 1251 et seq.)***

The Federal Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States (U.S.) and regulating quality standards for surface waters. Under the Act, the USEPA implements pollution control programs such as setting wastewater standards for industry and water quality standards for all contaminants in surface waters (USEPA 2015a).

The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. Industrial, municipal, and other facilities must obtain permits through the USEPA's National Pollutant Discharge Elimination System (NPDES) permit program if their discharges go directly to surface waters. In California, the USEPA has authorized the state to administer the NPDES permit program.

***Resource Conservation and Recovery Act (42 USC Section 6901 et seq.)***

The Resource Conservation and Recovery Act (RCRA) gives the USEPA the authority to control hazardous materials from "cradle to grave," including the generation, transportation, treatment, storage, and disposal of hazardous materials. The RCRA also sets forth a framework for the management of nonhazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to the RCRA that focus on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the USEPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program (USEPA 2015b).

***Comprehensive Environmental Response, Compensation, and Liability Act (42 USC Section 9601 et seq.)***

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a federal "superfund" to clean uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA identifies parties responsible for any release and ensures their participation in the cleanup.

The USEPA is authorized to implement CERCLA in all 50 states and in US territories, though Superfund site identification, monitoring, and response activities are coordinated through the state environmental protection or waste management agencies. The Superfund Amendments and Reauthorization Act of 1986 reauthorized CERCLA to continue cleanup activities around the country and included several site-specific amendments, definition clarifications, and technical requirements (USEPA 2015c).

***Occupational and Safety Health Act (29 USC Section 651 et seq.)***

The Occupational and Safety Health Act is intended to ensure worker and workplace safety by requiring that employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. The Occupational Safety and Health Administration (OSHA) is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states.

***Toxic Substances Control Act (15 USC Section 2601 et seq.)***

The Toxic Substances Control Act (TSCA) provides the USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. The TSCA addresses the production, importation, use, and disposal of specific chemicals, including PCBs, asbestos, radon, and LBP (USEPA 2015d).

Various sections of the TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture.
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found.
- Issue Significant New Use Rules, under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.

- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.
- Require, under Section 8, reporting and recordkeeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform the USEPA, except where the USEPA has been adequately informed of such information.

### *U.S. Department of Transportation – Federal Hazardous Materials Transportation Law and Hazardous Materials Regulations (49 USC Section 5101 et seq.)*

The federal hazardous materials transportation law is the basic statute regulating hazardous materials transportation in the U.S. Section 5101 of the federal hazardous materials law states that the purpose of the law is to protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce.

The Hazardous Materials Regulations are administered by the Pipeline and Hazardous Material Safety Administration (PHMSA) and implement the federal hazardous materials law. The Hazardous Materials Regulations govern the transportation of hazardous materials via highway, rail, vessel, and air by addressing hazardous materials classification, packaging, hazard communication, emergency response information, and training. They also issue procedural regulations, including provisions on registration and public sector training and planning grants (49 CFR Parts 105, 106, 107, and 110). The PHMSA issues the Hazardous Materials Regulations (U.S. Department of Transportation 2012).

The Federal Motor Carrier Safety Administration (FMCSA) issues regulations concerning highway routing of hazardous materials, hazardous materials endorsements for a commercial driver's license, highway hazardous material safety permits, and financial responsibility requirements for motor carriers of hazardous materials.

### *Clean Air Act (42 USC Section 7401 et seq.)*

Administered by the USEPA, the Federal Clean Air Act (CAA) regulates hazardous air pollutants from stationary and mobile sources via National Ambient Air Quality Standards (NAAQS). Section 112 of the CAA requires issuance of technology-based standards for major sources and certain area sources.

Major sources are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An area source is any stationary source that is not a major source. For major sources, Section 112 requires that the USEPA establish emission standards which require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as Maximum Achievable Control Technology, or MACT standards (USEPA 2015e).

#### 3.5.2.2 State

***California Environmental Protection Agency***

The California Environmental Protection Agency (CalEPA) regulates hazardous materials in the state and is authorized by the USEPA to enforce and implement federal hazardous materials laws and regulations. The DTSC, a department of the CalEPA, protects from exposures to hazardous waste primarily under the authority of RCRA and the California Health and Safety Code. DTSC programs include dealing with aftermath cleanups 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.

***Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program)***

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following six environmental and emergency response programs (CalEPA 2015):

- The Hazardous Waste Generator (HWG) program and Hazardous Waste Onsite Treatment activities
- The Aboveground Petroleum Storage Act (APSA) program
- The Underground Storage Tank (UST) program
- The Hazardous Materials Release Response Plans and Inventory (HMRRP) program
- California Accidental Release Prevention (CalARP) program
- The Hazardous Materials Management Plans and the Hazardous Materials Inventory Statement (HMMP/HMIS) requirements

The Secretary of CalEPA is directly responsible for coordinating the administration of the Unified Program. The Unified Program requires all counties to apply to the CalEPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification.

The state agencies responsible for these programs set the standards, while local governments implement the standards. CalEPA oversees implementation of the Unified Program as a whole, and the local CUPA is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities

for these six program elements. Most CUPAs have been established as a function of a local environmental health or fire department. The FVFD is the City PA of the CUPA.

***Occupational Safety***

The California Department of Industrial Relations Division of Occupational Safety and Health (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations in California. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the Code of Federal Regulations (CFR). Cal/OSHA regulations concerning the use of hazardous materials in the workplace require employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces hazard communication program regulations, which contain training and information requirements, including procedures for identifying and labeling hazardous substances, and communicating hazard information relating to hazardous substances and their handling. The hazard communication program also requires that Material Safety Data Sheets (MSDSs) be available to employees, and that employee information and training programs be documented. These regulations also require preparation of emergency action plans (escape and evacuation procedures, rescue and medical duties, alarm systems, and training in emergency evacuation).

***Utility Notification Requirements***

Title 8, Section 1541 of the CCR requires excavators to determine the approximate locations of subsurface installations such as sewer, telephone, fuel, electric, and water lines (or any other subsurface installations that may reasonably be encountered during excavation work) prior to opening an excavation. The California Government Code (Section 4216 et seq.) requires owners and operators of underground utilities to become members of and participate in a regional notification center. According to Section 4216.1, operators of subsurface installations who are members of, participate in, and share in the costs of a regional notification center are in compliance with this section of the code. Underground Services Alert of Southern California (known as DigAlert) receives planned excavation reports from public and private excavators and transmits those reports to all participating members that may have underground facilities at the location of excavation. Members will mark or stake their facilities, provide information, or give clearance to dig.

### 3.5.2.3 Local

***City of Fountain Valley Municipal Code***

As authorized by CalEPA, counties and cities may assume authority and responsibility within its boundaries for implementation of the Unified Program established by Health and Safety Code, Division 20, Chapter 6.11, Section 25404, et seq. As previously mentioned, the OCHCA is the regional CUPA, and the PA for the City is the FVFD. The CUPA implements the four state environmental programs within the local agency's jurisdiction. In addition, FVFD maintains the records regarding location and status of hazardous materials sites in the City and administers

programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials.

The City also adopts and enforces the California Fire Code (CFC), including those sections amended by the State of California and additional amendments set forth in Title 17.04 of the Fountain Valley Municipal Code. The CFC is based on the International Fire Code (IFC), and contains numerous requirements related to the safe storage and use of hazardous materials both inside and outside of buildings.

***City of Fountain Valley General Plan Public Safety Element***

The Public Safety Element of the General Plan contains several policies regarding flooding, fire hazards, and emergency management. The policies that are applicable to the Project and hazardous materials are listed below:

> **Policy 6.5.1** Cooperate with federal and state hazardous waste management plans to protect the health and welfare of the public, the environment and the economy of the City of Fountain Valley through comprehensive programs that ensure safe and responsible management of hazardous waste and materials.
>
> **Policy 6.5.2** Ensure the effective management and disposal of hazardous waste on a citywide level.
>
> **Policy 6.5.3** Promote public participation and education in the implementation of the programs identified in this Element and the County's Hazardous Waste Management Program.

## 3.5.3 Impact Assessment and Methodology

### 3.5.3.1 Thresholds for Determining Significance

This analysis evaluates the Project's impacts from hazards and hazardous materials to human health and the environment based on the standards identified in State CEQA Guidelines Appendix G. The Project area does not contain and is not proximate to a private airstrip; therefore, the CEQA threshold pertaining to the hazards from a private airstrip has been determined to not result in an impact as described through the initial study process. The CEQA threshold pertaining to risk of loss, injury, or death involving wildland fires was determined to have no impact as described through the initial study process. The following thresholds of significance are based on Appendix G of the 2016 CEQA Guidelines. For purposes of this EIR, implementation of the Project may have a significant adverse impact from hazards or hazardous materials if it would do any of the following:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

2) 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.
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant of Government Code Section 65962.5, and as a result, it would create a significant hazard to the public or the environment.
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the project would result in a safety hazard for people residing or working in the Project area.
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

#### 3.5.3.2 Methodology

The impact analysis examines proposed goals and policies within the Project area to determine whether implementation of the Project would result in significant hazards and hazardous material impacts. The analysis further identifies and describes how the proposed goals and policies, in addition to existing regulations and standards (e.g. General Plan Public Safety Element), provide enforceable requirements and/or performance standards that avoid or minimize significant impacts.

### 3.5.4 Project Impacts and Mitigation Measures

**Impact HAZ-1 Description**

**HAZ-1 Demolition and construction activities associated with the Project could create hazards to the public and environment through the release of hazardous building materials and hazardous materials or waste within the existing buildings onsite (*Less than Significant with Mitigation*).**

The majority of existing buildings in the Project area were constructed in the 1960s and 1970s. Based on their age, these structures may have been constructed with hazardous building materials such as LBP and ACM. In addition, fluorescent light tubes containing mercury vapors, fluorescent light ballasts containing PCBs, and PCB-containing electrical equipment may be present in the buildings. Implementation of the Project would involve demolition and/or redevelopment of up to 958,122 sf of existing buildings and possible excavation of related subsurface improvements, which could result in the accidental release of hazardous materials. Construction workers and the public could be exposed to lead and asbestos that are present within structures to be demolished.

If asbestos is present, there is a potential for release of airborne asbestos fibers when ACM is disturbed, unless proper asbestos abatement precautions are taken. Such a release could expose construction workers, occupants of facilities within the Project area, and adjacent residents to airborne asbestos fibers. Similarly, if LBP is present and has delaminated or chipped from the surfaces on the building materials, there is a potential for the release of airborne lead particles, unless proper lead abatement procedures are followed. Any renovation or demolition would be required by law to follow South Coast Air Quality Management District (SCAQMD) and Cal/OSHA regulations regarding abatement of ACM and the Cal/OSHA Lead in Construction Standard for the abatement of LBP. If PCBs are present in the buildings to be demolished, leakage could expose workers to unacceptable levels of PCBs (greater than 5 parts per million, based on Title 22, California Code of Regulations). Together, these regulations require sampling, safe work practices, and appropriate disposal that would protect workers from harmful exposures to these substances during construction activities and prevent contamination of surrounding soil or water. This impact would be less than significant with compliance with existing laws and regulations; therefore, potential adverse effects related to the release of hazardous building materials would be *less than significant*.

Existing businesses within the Project area may use hazardous materials such as solvents, chemicals or other hazardous materials to support normal business operations. In the absence of proper precautions, demolition of these existing buildings or excavation of subsurface improvements could disturb hazardous materials or waste currently stored and used in the buildings which could expose workers and occupants of the Project area to hazardous materials or waste or result in an accidental release to the environment. This would be a significant impact. Prior to demolition, however, hazardous materials or waste stored at these locations would be removed and the hazardous materials and waste facilities in these buildings would be closed in accordance with applicable laws and regulations designed to address hazardous materials or waste and protect human health and the environment. Compliance with these regulatory requirements, including preparation of a Phase I Environmental Site Assessment (Phase I ESA) and/or additional technical investigations if required by local or state agencies would ensure that impacts related to exposure to hazardous materials or waste stored or used in the existing buildings would be *less than significant* with implementation of ~~mitigation measure~~ MM HAZ-1, which requires the preparation of a Phase I ESA prior to demolition.

***Mitigation Measures***

***MM HAZ-1 Phase I ESA****. Prior to demolition of a building or structure and/or excavation of subsurface improvements, project applicants of site specific development projects in the Project area shall prepare a Phase I ESA. Consistent with local, state and federal regulations, the Phase I ESA shall be subject to City review and address the following:*

> ***ACM, LBP, and PCBs****. Prior to the issuance of any demolition or excavation permit, the Applicant shall conduct a comprehensive survey of ACM, LBP, and PCBs. If such hazardous materials are found to be present, the Applicant shall follow all applicable local, state, and federal codes and regulations, as well as applicable best management*

*practices, related to the treatment, handling, and disposal of ACM, LBP, and PCBs to ensure public safety.*

***Potential Onsite Hazardous Materials or Conditions**. A visual survey and reconnaissance-level investigation of the existing site shall be conducted to determine if there are any structures or features within or near the buildings that are used to store, contain, or dispose of hazardous materials or waste. For any development within the Project area that has not been subject to a Phase I ESA or successful remediation efforts in the past, a Phase I ESA shall be performed to determine the likelihood of contaminants in areas beyond what has already been assessed in accordance with USEPA ASTM Practice E 1527-05 as may be amended. If the Phase I ESA finds that contaminated soil or other hazardous materials or waste are suspected to be present within the area, the Applicant shall follow all applicable local, state and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of each hazardous material or waste.*

***Residual Impact***

Implementation of the recommended mitigation measure and compliance with federal, state, and local regulations related to the transport, use, storage, and cleanup of hazardous materials or waste would reduce the risk of hazardous materials and waste impacts to *less than significant*. Additionally, with implementation of the mitigation measure, land use changes anticipated to occur under the Project would facilitate the safe removal of potentially hazardous building materials and the cleanup of contaminated properties, thus reducing the level of risk on a particular site and within the Project area as a whole, compared to existing conditions.

**Impact HAZ-2 Description**

**HAZ-2 Operations associated with the Project would increase the routine transport, use, or disposal of hazardous materials or waste *(Less than Significant)*.**

The Project area would be redeveloped with approximately 213,070 sf of warehouse commercial building space, 147,000 sf of niche retail (and some mixed-use) building space, 786,503 sf of office building space, and 491 residential units over three of the distinct blocks to satisfy community interest in a balance between existing uses with business development needs in the area. The Project may intensify the range of high-tech and office uses. The new uses introduced to the Project area could involve the use of hazardous materials or the generation of hazardous waste. If accidentally released during storage, use, or transport, these materials and wastes could cause human health effects to occupants of the Project area, as well as surrounding populations, and could cause adverse environmental effects if released into the environment.

The increased space available for use would increase under the Project, which could result in increased use of hazardous materials and the generation of hazardous waste. However, all new

businesses would be required to comply with federal, state and local requirements for the proper storage and handling of hazardous materials and wastes as well as the requirements for regulated materials that could produce toxic gases which incorporate state and federal requirements. Permitted facilities would also be required to follow requirements for reporting and cleanup of a release of hazardous materials or waste which would ensure that any substantial release is appropriately contained and cleaned up. Compliance with all regulations and requirements would ensure that hazardous materials or waste are stored and handled safely, and that if a release did occur it would be appropriately reported and cleaned up in compliance with applicable regulatory standards.

As a result of potential for additional hazardous materials and waste to be generated within the Project area, the associated risk associated with transporting such materials would also increase. The transportation of hazardous materials would be subject to the requirements of federal, state, and local regulations. This regulatory framework provides specific guidance and measures for the proper handling and transporting of hazardous materials and waste. The measures include safety training and methodologies for conducting such activities. With compliance of the guidelines and requirements of the established regulatory framework, the potential for exposing the public to the release of hazardous materials and waste into the environment would be significantly reduced. Therefore, operational impacts related to the use, storage, and transportation of hazardous materials and waste would be *less than significant*.

***Mitigation Measures***

*No mitigation required*.

**Impact HAZ-3 Description**

**HAZ-3 The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school (*Less than Significant)*.**

There are no existing or proposed schools within the Project area. The nearest schools are Robert Gisler Public Elementary School and James H. Cox Public School located 0.3 mile southwest and 0.35 mile north of the Project area, respectively. As there are no existing or proposed schools within 0.25 mile of the Project area, impacts from emissions or handling of hazardous materials would be *less than significant*.

***Mitigation Measures***

*No mitigation required*.

**Impact HAZ-4 Description**

**HAZ-4 Land use changes anticipated under the proposed FVCSP could be located on a property that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, it would create a significant hazard to the public or the environment (*Less than Significant with Mitigation*).**

Pursuant to Government Code Section 65962.5, the EnviroStor database (previously referred to as the "Cortese" list) was reviewed and it was determined that the Project area contains listed sites; however, none of these sites are considered a site of concern (DTSC 2016). All sites shown within the Project area are either cleanup sites under a tiered permit, non-operating permitted sites, or underground fuel tanks undergoing cleanup. Nonetheless, land use changes could potentially occur on hazardous materials sites in the Project area and could result in potential hazards risk to the environment and public health, resulting in a potentially significant impact.

Under the Project, individual development projects engaging in activities involving the handling of hazardous substances or waste would be required to receive all necessary permits and authorization by appropriate governing agencies, such as the State Water Resources Control Board, U.S. Environmental Protection Agency, Occupational Safety and Health Administration, etc. Additionally, the Orange County Health Care Agency would review all activities in and around sites already regulated by the DTSC and the USEPA. Therefore, ~~C~~compliance with the regulatory codes ~~existing permits~~ and permit requirements by individual development projects within the proposed Project, the potential for the Project to result in substantial adverse impacts related to redevelopment of an existing known hazardous waste site would be low. Further, with implementation of ~~and mitigation measure~~ MM HAZ-1 requiring individual development projects occurring under the FVCSP to prepare a Phase 1 ESA prior to commencement of demolition or excavation, would ensure that impacts resulting from implementation of the proposed Project ~~existing sites~~ would be *less than significant with mitigation*.

***Mitigation Measures***

*MM HAZ-1 shall apply.*

***Residual Impact***

With implementation of MM HAZ-1, requiring preparation of a Phase I ESA to identify potentially hazardous material or conditions and appropriate remediation processes, residual impacts of the Project with regard to construction or redevelopment of sites with both known and unknown history of hazardous activities or contamination would be reduced to a *less than significant* level.

**Impact HAZ-5 Description**

**HAZ-5 Implementation of the Project would not expose additional workers and visitors to aircraft-related safety hazards by locating additional development within an airport land use plan or 2 miles of a public airport *(Less than Significant)*.**

While the Project area lies 3.7 miles northwest from John Wayne Airport, it remains just outside of the Airport's Influence Area. Therefore, the Project area is not considered to be subject to substantial hazards from airport operations at John Wayne Airport, and is not subject to any development restrictions from the Airport Environs Land Use Plan (AELUP). Therefore, this impact would be *less than significant*.

***Mitigation Measures***

*No mitigation required*.

**Impact HAZ-6 Description**

**HAZ-6 The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (*Less than Significant)*.**

The Project would guide future development within approximately 155 acres of light industrial/commercial uses and is anticipated to intensify the range of high-tech and office uses in the Project area, adding additional buildings, infrastructure, and industrial activities to the area. This growth would increase demand for emergency response capabilities in the immediate vicinity. However, this intensification would be consistent with general development in the region and would not result in a substantial increase in emergency response requirements beyond the capacity of existing services as discussed in Section 3.10. *Public Services*. Further, the Project would be built in compliance with the City of Fountain Valley General Plan Public Safety Element and the 2004 Huntington Beach/Fountain Valley Hazard Mitigation Plan including all applicable building, fire, and emergency response plans. Individual development projects would require approval of the City and payment of fees to support any required increases and services that would potentially occur. Therefore, this impact would be *less than significant*.

***Mitigation Measures***

*No mitigation required*.

### 3.5.4.1 Cumulative Impacts

Cumulative land use changes within the Project area would have the potential to expose future area residents, employees, and visitors to chemical hazards through redevelopment of sites and structures that may be contaminated from either historic or ongoing uses. The severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Therefore, specific projects proposed in the

City would be required to undergo individual environmental review, including review of potential impacts related to hazards and hazardous materials that are applicable to that particular development site and proposed use. As required under MM HAZ-1, after preparation of a Phase I ESA, if lead and asbestos are found to be present in buildings planned for demolition or renovation, these conditions would require appropriate mitigation to include implementation of standard regulatory conditions and remedial action of contaminated sites. All Phase I ESAs, mitigation measures, and remedial actions proposed to address hazardous buildings materials shall comply with all applicable local, state and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of each hazardous material. Further, because restrictions on development or remediation requirements would be applied in the event that hazardous materials or waste posed a risk to safety, ~~it is anticipated that~~ cumulative impacts from exposure to hazards or hazardous materials or waste would be *less than significant*. Additionally, land use changes anticipated to occur under the Project would facilitate the safe removal of potentially hazardous building materials and the cleanup of contaminated properties, thus reducing the level of risk on a particular site in the nearby vicinity and within the Project area as a whole, compared to existing conditions.