

5. Environmental Analysis

5.8 HAZARDS AND HAZARDOUS MATERIALS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the Laguna Niguel City Center Mixed Use Project (proposed project) on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary. The analysis in this section is based, in part, upon the following source(s):

- *Environmental Site Assessment: Phase I Environmental Site Assessment Update*, California Environmental, October 2021
- *Screening Subsurface Investigation: Phase II*, California Environmental, November 2019

Complete copies of these studies are included in the technical appendices to this Draft EIR (Appendices H1 and H2).

5.8.1 Environmental Setting

5.8.1.1 REGULATORY BACKGROUND

Federal

Emergency Planning and Community Right-To-Know Act

In 1986, Congress passed the Superfund Amendments and Reauthorization Act. Title III of this regulation is called the “Emergency Planning and Community Right-to-Know Act of 1986” (EPCRA). The act required the establishment of state commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plan. Under its requirements, local emergency planning committees (LEPC) are responsible for developing a plan for preparing for and responding to a chemical emergency, including:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting drills to test the plan.

The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The Orange County Environmental Health Department (OC EHD) is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city departments and local and state agencies. The

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goal is to improve public and private sector readiness and to mitigate local impacts resulting from natural or manmade emergencies.

Another purpose of the EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to state and local agencies the location and quantities of chemicals stored onsite. Under section 313 of EPCRA, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are also required to report offsite transfers of waste for treatment or disposal at separate facilities, pollution prevention measures, and chemical recycling activities. The US Environmental Protection Agency (EPA) maintains the Toxic Release Inventory database that documents the information that regulated facilities are required to report annually.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 (42 US Code Section 6901 et seq.) is the principal federal law that regulates the generation, management, and transportation of waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste. The RCRA gave the EPA the authority to control hazardous waste from “cradle to grave,” that is, from generation to transportation, treatment, storage, and disposal, at active and future facilities. It does not address abandoned or historical sites. The RCRA also set forth a framework for managing nonhazardous wastes. Later amendments required phasing out land disposal of hazardous waste and added underground tanks storing petroleum and other hazardous substances

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. The act addresses the production, importation, use, and disposal of specific chemicals, including polychlorinated biphenyls, asbestos, radon and lead-based paint.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (US Code Title 42, Chapter 103) protects the water, air, and soil resources from the risks created by past chemical disposal practices. It is also referred to as the Superfund Act and regulates sites on the National Priority List, which are called Superfund sites. This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. It establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

Clean Water Act

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges

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of pollutants into the waters of the United States¹ and gives the EPA the authority to implement pollution-control programs, such as setting wastewater standards for industry. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution.

Several sections of the Clean Water Act are discussed in Section 5.8, *Hydrology and Water Quality*, of this DEIR.

Hazardous Waste Operations and Emergency Response Standards

The Occupational Safety and Health Administration issued the Hazardous Waste Operations and Emergency Response (HAZWOPER) standards, Code of Federal Regulations (CFR) Title 29, Sections 1910.120 and 1926.65, to protect workers and enable them to handle hazardous substances safely and effectively. The latter standard is for the construction industry and is identical to 29 CFR 1910.120.

The HAZWOPER standard covers employers performing the following general categories of work operations:

- Hazardous waste site cleanup operations.
- Operations involving hazardous waste that are conducted at treatment, storage, and disposal facilities.
- Emergency response operations involving hazardous substance releases.

The HAZWOPER standards provide information and training criteria to employers, emergency response workers, and other workers potentially exposed to hazardous substances to improve workplace safety and health and reduce workplace injuries and illnesses from exposures to hazardous substances. It is critical that employers and their workers understand the scope and application of HAZWOPER and can determine which sections apply to their specific work operations.

Hazardous Materials Transportation

Section 31303 of the California Vehicle Code and the US Department of Transportation regulate hazardous materials transport. The California Highway Patrol and California Department of Transportation are the enforcement agencies. California Office of Emergency Services provides emergency response services involving hazardous materials incidents.

¹ Waters of the United States generally include surface waters—lakes, rivers streams, bays, the ocean, dry streambeds, wetlands, and storm sewers that are tributary to any surface water body.

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Hazardous Materials Incident Response

Under Title III of the Superfund Amendments and Reauthorization Act, the LEPC is responsible for developing an emergency plan to prepare for and respond to chemical emergencies in that community. This emergency plan must include:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting exercises to test the plan.

The plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The OC EHD is responsible for coordinating hazardous material coordination and inspection in the City.

Title 40 CFR Section 61 Subpart M

National Emissions Standards for Asbestos (40 CFR Section 61, Subpart M) sets emissions standards for asbestos from demolition and renovation activities, and for waste disposal from such activities.

State

Hazardous Materials Release Notification

Many state statutes require emergency notification of a hazardous chemical release:

- California Health and Safety Code Sections 25270.8 and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673 (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5(a)
- Water Code Sections 13271, 13272,
- California Labor Code Section 6409.1 (b)10

Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. In addition, all releases that result in injuries or harmful exposure to workers must be immediately reported to the California Occupational Safety and Health Administration (Cal/OSHA) pursuant to the California Labor Code Section 6409.1(b).

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Uniform Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Program administered by the State of California consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs, which include: Hazardous Materials Release Response Plans and Inventories (business plans), the California Accidental Release Prevention (CalARP) Program, and the Underground Storage Tank (UST) Program. The Unified Program is implemented at the local government level by Certified Unified Program Agencies (CUPA).

The CUPA for Laguna Niguel is the OC EHD; it is responsible for regulating hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, USTs, aboveground storage tanks, and risk management plans.

Hazardous Materials Business Plans

Both the federal government (in the CFR) and the State of California (in the California Health and Safety Code) require all businesses that handle more than a specified amount—or “reporting quantity”—of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its CUPA. According to the OC EHD guidelines, the preparation, submittal, and implementation of a business plan is required by any business that handles a hazardous material or a mixture containing a hazardous material in specified quantities.

Business plans must include an inventory of the hazardous materials at the facility. Businesses must update the whole plan at least every three years and the chemical portion every year. Also, business plans must include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures for immediate notification of all appropriate agencies and personnel, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

The OC EHD currently reviews submitted business plans and updates. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. The OC EHD is also charged with the responsibility of conducting compliance inspections of regulated facilities in Orange County.

California Accidental Release Prevention Program

CalARP became effective on January 1, 1997, in response to Senate Bill 1889 (Chapter 715, Statutes of 1996). CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. This requirement is coupled with the requirements for preparation of hazardous materials business plans under the Unified Program, implemented by the CUPA.

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Leaking Underground Storage Tanks

Leaking USTs have been recognized since the early 1980s as the primary cause of groundwater contamination from gasoline compounds and solvents. In California, regulations aimed at protecting against UST leaks have been in place since 1983 (Health and Safety Code). This was a year before RCRA was amended to add Subtitle I, which required UST systems to be installed in accordance with standards that address the prevention of future leaks. The State Water Resources Control Board has been designated the lead California regulatory agency in the development of UST regulations and policy.

Older tanks are typically single-walled steel tanks. Many of these have leaked as a result of corrosion, punctures, and detached fittings. As a result, the State of California required the replacement of older tanks with new double-walled fiberglass tanks with flexible connections and monitoring systems. UST owners were given 10 years to comply with the new requirements—the deadline was December 22, 1998. However, many UST owners did not act by the deadline, so the state granted an extension for their replacement ending January 1, 2002. The California Regional Water Quality Control Boards, in cooperation with the Office of Emergency Services, maintain an inventory of leaking USTs in a statewide database.

California Code of Regulations, Title 22, Division 4.5

Title 22, Division 4.5, of the California Code of Regulations (CCR) sets the requirements for hazardous-waste generators; transporters; and owners or operators of treatment, storage, or disposal facilities. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste. These regulations specify the requirements for transporting shipments of hazardous waste, including manifesting, vehicle registration, and emergency accidental discharges during transportation.

California Fire Code

The 2016 California Fire Code (24 CCR Part 9) sets requirements pertaining to fire safety and life safety, including for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials.

California Building Code

The California Building Code has requirements for smoke alarms in 24 CCR Part 2, Section 907.2.11.2.

Smoke alarms shall be installed and maintained on the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms, in each room used for sleeping purposes, and in each story within a dwelling unit. The smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup.

8 CCR Sections 1532.1: Worker Safety Standards: Asbestos

Worker safety standards for asbestos exposure are in 8 CCR Section 1532.1 and apply to employees conducting demolition, construction, and renovation work, including painting and decorating.

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Regional

South Coast Air Quality Management District

SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing material (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage and disposal requirements for asbestos-containing waste materials.

County of Orange and Orange County Fire Authority Hazards Mitigation Plan

The mission of the County of Orange and Orange County Fire Authority (OCFA) Hazard Mitigation Plan is to promote sound public policy designed to protect residents, critical facilities, infrastructure, key resources, private property, and the environment from natural hazards in County unincorporated area, fire hazards in OCFA's service area, and County- and OCFA-owned facilities.

Orange County Fire Authority Fire Prevention Guidelines

The OCFA's guideline for "Fire Master Plan for Commercial and Residential Development" (Guideline B-09) is a general guideline pertaining to the creation and maintenance of fire department access roadways, access walkways to and around buildings, and hydrant quantity and placement as required by the 2016 California Fire and Building Codes (CFC and CBC) and as amended by local ordinance.

The OCFA's guideline for "Vegetation Management Guideline Technical Design for New Construction Fuel Modification Plans and Maintenance Program" (Guideline C-05) pertains to fuel modification plans. Fuel modification plans require that landscaped areas adjacent to new buildings be dedicated for permanent vegetation management activities. This guideline covers the timing of plans for construction, plan criteria needed for approval, the resource agency plant list for the zones, new construction inspection requirements, and introductory maintenance information

Local

Laguna Niguel Municipal Code

Article 4, Hazardous Material Disclosure, implements the community's right and need for basic information on the use and disposal of hazardous materials in the City and provides for an orderly system for the provision of such information.

Division 3, Fire Protection and Explosives, has environmental performance standards for the use, handling, storage, and transportation of combustibles and explosives that require compliance with applicable provisions of the current California Fire Code.

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5.8.1.2 EXISTING CONDITIONS

Current Uses on the Project Site

The project site consists of the Orange County Fire Station No. 5, South County Justice Center (closed in 2008), the Orange County Library, a county maintenance yard, a former fire station, and undeveloped land. Site improvements include asphalt-paved parking areas and landscaping. The project site is immediately adjacent to the Laguna Niguel City Hall and is generally bounded by Pacific Island Drive to the north, Alicia Parkway to the east, Crown Valley Parkway to the south, and multifamily residential communities to the west (i.e., Niguel Summit Apartments, El Niguel Terrace townhomes, and Charter Terrace single-family homes). Access to the project site is via Crown Valley Parkway to the south, Alicia Parkway to the east, and Pacific Island Drive to the north (see Figures 3-2, *Local Vicinity*, and 3-3, *Aerial Photograph*). The public library and vehicle maintenance facility are still in operation.

Historical Uses on the Project Site

The project site was undeveloped until at least 1967. Historical aerial photographs show that the former courthouse and associated structures were developed by 1972. The existing structures and current building configuration on the project site are shown in the 1989 aerial photograph (see Figure 3-3, *Aerial Photograph*).

Phase I Environmental Site Assessment and Addendum

The Phase I Environmental Site Assessment (ESA) for the project site was completed in August 2019 and updated in October 2021. The Phase I ESA report provides information regarding the potential for hazardous material impacts to the soil and groundwater beneath the project site. Such threats or material threats are identified as recognized environmental conditions (REC). The presence of historical RECs and controlled RECs was also evaluated. The Phase I ESA included a site reconnaissance and research of land use records and other sources for preliminary indications of hazardous material use, storage, or disposal at the property and/or on contiguous parcels.

Orange County Health Care Agency (OCHCA) files indicate that one 5,000-gallon diesel UST was removed from the former fire station on September 30, 1993. Analytical results of samples collected beneath the removed tank showed an elevated concentration of diesel in one soil sample. Following the removal of the 5,000-gallon UST, a 50-gallon diesel tank was removed from the property on February 3, 1994. Soil samples collected beneath the 50-gallon diesel UST were “nondetect” for diesel. OCHCA issued case closure for the removed tanks on February 2, 1995.

A tank removal report, a site assessment workplan, and a site assessment report for the vehicle maintenance facility (VMF) portion of the property in 1999 (see Figure 3-3, *Aerial Photograph*) found that four 10,000-gallon, single-walled, fiberglass USTs; one 550-gallon new oil UST; and one 550-gallon waste oil UST were removed from this part of the subject property on January 27, 1999. In addition, four fuel dispensers and approximately 75 feet of piping were removed during field operations. Eight soil samples were collected from beneath the removed fuel storage tanks, and four samples were collected from beneath the fuel dispensers. The removed USTs were replaced by one 10,000-gallon diesel UST and one 20,000-gallon gasoline UST following sampling.

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An additional 15 soil samples were collected in the vicinity of the removed USTs and dispensers. No further assessment of remedial action was warranted or recommended for the VMF based on the sampling results. OCHCA issued a case closure for the removed USTs on December 12, 2001.

A Phase I ESA report for the project site dated January 14, 2014, identified RECs on the project site, including a clarifier at the old fire station; operations of the VMF for at least 30 years; and use of two USTs, two clarifiers, and six in-ground hydraulic hoists at the VMF. The Phase I ESA identified historical RECs on the project site, including the removal of two USTs and associated agency closure for the old fire station and the removal of four USTs and agency closure for the VMF. Pre-demolition asbestos sampling and hazardous materials surveys were conducted. All buildings on the Project Site were investigated except for the Orange County Fire Station No. 5 (because it is not planned for demolition) and the library structure. Asbestos was identified in the existing buildings due to the date of original construction. Asbestos containing material identified on the property included acoustic ceiling, roofing cement, floor tiles, and mastic. Subsurface sampling was recommended at the old fire station and VMF based on the findings of the Phase I ESA.

A tank removal report for the VMF portion of the property, dated February 23, 2015, documents the removal of one 10,000-gallon diesel UST, one 20,000-gallon gasoline UST, and associated piping and dispensers. The tanks were removed from the project site on February 4, 2015. OCHCA issued a completion of tank removal letter on March 10, 2015.

The nearest property to the project site listed in State regulatory agency databases is a Mobil Service Station approximately 450 feet to the north. The Regional Water Quality Control Board's (RWQCB) GeoTracker database indicates a leaking UST of gasoline that affected the soil was discovered at the Mobil Service Station in 1998. The OCHCA issued case-closed status for the release on July 7, 2000. Because of the distance from the project site and because the regulatory agency closed its case, the Mobil Service Station is not considered an environmental concern.

Phase II Screening Subsurface Investigation

A Phase II Screening Subsurface Investigation (Phase II Investigation) was implemented following recommendations in the Phase I ESA. The purpose of the Phase II Investigation was to determine if the soil and/or groundwater beneath the project site was impacted by the extended use of the VMF and the use of clarifiers and UST releases at the VMF and the former fire station. The subsurface investigation included soil and soil gas sampling.

Soil gas sampling beneath the project site was performed on October 16 and 17, 2019. Soil gas concentrations detected on-site were evaluated for future vapor intrusion into indoor air at the proposed buildings. The predicted future air concentration for tetrachloroethylene (PCE)² and trimethylbenzene³ at the VMF exceed the Department of Toxic Substances Control (DTSC) residential screening level.

² PCE is used in metal-cleaning operations and does not degrade quickly in the environment. PCE may remain in subsurface soils for decades following a spill and may cause migration of toxic vapors from contaminated soils into overlying buildings.

³ Trimethylbenzene is used as a solvent and paint thinner. It is released directly to the environment as a component of gasoline.

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Soil sampling was conducted on October 16, 2019. Laboratory analysis of the samples found all metal concentrations were typical of background concentrations for the region. Concentrations of total petroleum hydrocarbons showed low volatile organic compound impacts associated with the former refueling system at the VMF.

Emergency Preparedness

The City's police and fire departments, the Orange County Sheriff's Department (OCSD), and the OCFA are responsible for coordinating all emergency management activity in the City and implementing the County's Emergency Operations Plan (EOP). The County's EOP addresses how the County should respond to extraordinary events or disasters (aviation accidents, civil unrest and disobedience/riot, dam and reservoir failure, disease, earthquake, flood, etc.) from preparedness phase through recovery.

In the event of a wildfire or other emergency, law enforcement and fire agencies issue evacuation warnings or evacuation orders for affected areas. These notices may be issued in conjunction with a particular zone. Authorities may use zone designations or specify another area in emergency alerts, media releases, and on social media to notify residents which areas are under an evacuation warning or order. The City has an evacuation zone map that includes nine all-hazard evacuation zones throughout the entire City that are broken down by neighborhood location. The project site is in zone 08. Major evacuation routes for the project site and surrounding areas include Pacific Island Drive, Crown Valley Parkway, and Alicia Parkway.

Airport-Related Hazards

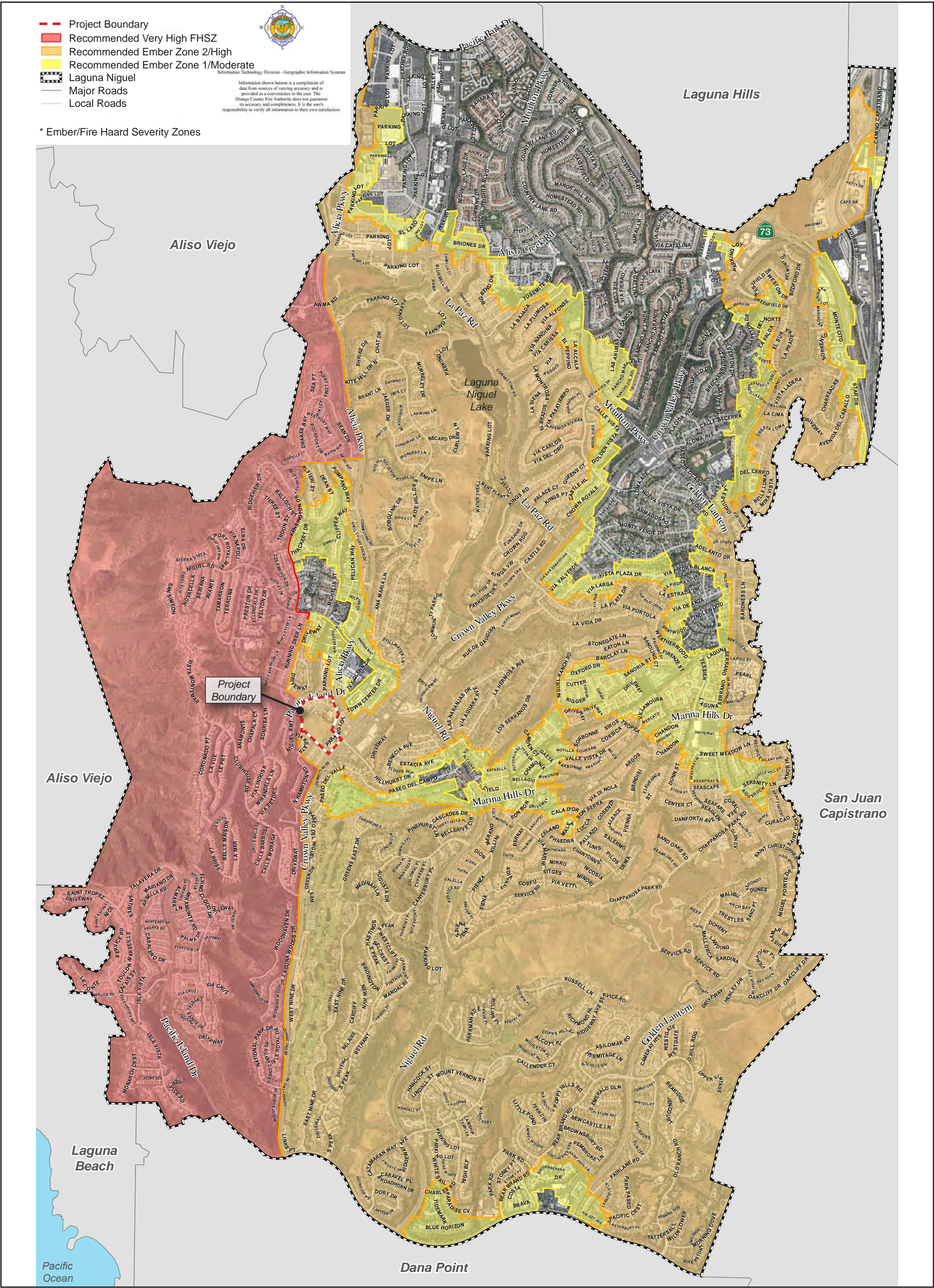
There are no airports in the vicinity of the project site, and the site is not within an airport land use plan. The closest airport is the French Valley airport, six miles to the northeast.

Wildfire Hazards

The topography, vegetation, and development patterns in Laguna Niguel make the City susceptible to fire hazards. The City is marked by rolling hills and valleys, and development is on/within the many ridgelines and valleys. Vegetation in the City, including native plant communities (chaparral and ruderal vegetation), is highly combustible. The fire hazard is at its peak during the summer months when plant material that has built up during the spring dies and becomes fuel (Laguna Niguel 1992).

Pursuant to Public Resources Code Sections 4201 to 4204 and Government Code Sections 51175 to 51189, the California Department of Forestry and Fire Prevention (CAL FIRE) is mandated to identify fire hazard severity zones for all communities in California based on fuels, terrain, weather, and other relevant factors. CAL FIRE has mapped fire hazard severity zones (FHSZ) moderate, high, and very high for most regions of California. Local governments must consider CAL FIRE's determination in adopting their own determinations and planning for fire services. A Very High FHSZ encompasses parts of the western side of the City and covers residential and open space areas. The project site borders, but is located outside, the Very High FHSZ in a local responsibility area to the east (see Figure 5.8-1, *Very High Fire Hazard Severity Zone in Laguna Niguel*). Local responsibility areas are areas where local governments have the primary responsibility for preventing and suppressing fires.

Figure 5.8-1 - Very High Fire Hazard Severity Zone
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Source: Orange County Fire Authority (City of Laguna Niguel CEQA Manual, 2021)



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5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines and the City's CEQA Manual, a project would normally have a significant effect on the environment if the project would:

- H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- H-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.
- H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- H-4 Be located on a site which 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.
- H-5 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.
- H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

5.8.3 Plans, Programs, and Policies

- PPP HAZ-1 Any project-related hazardous materials and hazardous wastes will be transported to and/or from the project site in compliance with any applicable state and federal requirements, including the US Department of Transportation regulations listed in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); California Department of Transportation standards; and the California Occupational Safety and Health Administration standards.
- PPP HAZ-2 Any project-related hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with Subtitle C of the Resource Conservation and Recovery Act (Code of Federal Regulations, Title 40, Part 263), including the management of nonhazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The proposed project will be designed and constructed in accordance with the regulations of the Orange County Environmental Health Department, which is the designated Certified Unified Program Agency and implements state and federal regulations for the following programs: (1) Hazardous Waste Generator Program, (2) Hazardous Materials

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Release Response Plans and Inventory Program, (3) California Accidental Release Prevention Program, (4) Aboveground Storage Tank Program, and (5) Underground Storage Tank Program.

RR HAZ-3 Any project-related demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing materials will be conducted in accordance with applicable regulations, including, but not limited to:

- South Coast Air Quality Management District's Rule 1403
- California Occupational Safety and Health Administration regulations (California Code of Regulations, Title 8, Section 1529)
- Code of Federal Regulations (Title 40, Part 61, Part 763; Title 29, Part 1926)

PPP W-1 The proposed project is required to comply with the California Building Code, the California Fire Code, and the Orange County Fire Authority Fire Prevention Guidelines.

5.8.4 Environmental Impacts

5.8.4.1 METHODOLOGY

This analysis evaluates the potential impacts of the proposed project on human health and the environment due to potential exposure of hazardous materials or conditions associated with the project site, project construction, and project operations. The hazards and hazardous materials evaluation was prepared in accordance with the requirements of CEQA and the City's CEQA Manual. The Phase I ESA prepared for the project site was conducted in accordance with the American Society for Testing and Materials' Standard of Practice E1527-13 and the standards of care and diligence normally practiced by recognized consulting firms in performing similar services. Soil-gas samples were obtained and analyzed for volatile organic compounds (EPA Method TO-15) in general accordance with the DTSC/RWQCB guidelines in an on-site, state-certified mobile laboratory (California Environmental, November 2019).

5.8.4.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.8.1: Project construction and operations would involve the transport, use, and/or disposal of hazardous materials. [Thresholds H-1, H-2, and H-3]

The Phase I ESA found that the extended use of the VMF on-site is considered an REC. The two USTs removed from the former fire station and six USTs removed from the VMF with the associated regulatory "No Further Action" determinations are considered historical RECs. The Phase I ESA recommended soil and soil gas sampling at the VMF and former fire station to assess impacts to the subsurface from the extended use of the VMF, the use of clarifiers at both locations, and the UST releases at both locations. The Phase II Investigation showed PCE and trimethylbenzene concentrations at the vehicle VMF that exceed the DTSC's

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residential screening level. Soil sample analyses found volatile organic compound impacts at the same location. Residential 1 (apartments) is proposed for this area.

Destructive sampling for ACM was conducted on all buildings except the library and Orange County Fire Station No. 5, which are still in use and Fire Station No. 5 is not planned for demolition. Regulated asbestos materials were identified in acoustic ceilings, roofing cement, floor tile, and mastic. No significant areas of lead-based paint were identified in the existing buildings.

Construction

Project-related construction activities would involve the use of larger amounts of hazardous materials than would project operation. Construction activities would include the use of materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction. However, the materials used would not be in such quantities or stored in a manner that would pose a significant safety hazard. These activities would also be short term or one time and would cease upon completion of the proposed project's construction phase. Project construction workers would be trained in safe handling and hazardous materials use.

The use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities must be immediately contained, the hazardous material identified, and the material remediated in compliance with state and local regulations. All contaminated waste would be collected and disposed of at an appropriately licensed disposal or treatment facility. Furthermore, strict adherence to all emergency response plan requirements of Orange County and the OCFA would be required throughout the project construction phase. Therefore, hazards to the public or the environment arising from the routine use of hazardous materials during project construction would be less than significant.

Grading Activities

Grading activities required to develop the project would involve the disturbance of on-site soils. The handling and transport of contaminated soils found at the VMF could expose workers and the surrounding environment to hazardous materials, and impacts could be potentially significant.

Demolition

Demolition of buildings and equipment on-site has the potential to expose and disturb ACM found in existing buildings on-site. Destructive sampling for ACM was conducted on all buildings except the library. Therefore, a follow-up investigation would need to be conducted for the library structure after that building is vacated. ACM releases could pose significant risks to persons living and working in and around the project site as well as to project construction workers. These materials must be removed by a licensed and Cal/OSHA-registered asbestos abatement contractor prior to any demolition or renovation activity that would disturb the material. Demolition and ACM removal activities would be conducted in accordance with the South Coast Air Quality

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Management District's Rule 1403, California OSHA regulations, 40 CFR Parts 61 and 763, and 29 CFR Part 1926.

Operation

Operation of the proposed project would involve the use of small amounts of hazardous materials, such as industrial cleansers, greases, and oils for cleaning and maintenance purposes. The use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the EPA, US Department of Transportation, California Division of Occupational Safety and Health, and the OC EHD. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. The proposed project would be operated with strict adherence to all emergency response plan requirements of the OCFA. Mandatory compliance with laws and regulations would ensure that operational impacts would be less than significant.

However, the presence of PCE and trimethylbenzene concentrations at the VMF exceed the DTSC's residential screening level and could pose a significant impact due to indoor vapor intrusion.

Schools within one-quarter mile of the project site include the Laguna Niguel Kinder Care, immediately north of the OCFA fire station across Pacific Island Drive, and Ocean View School, approximately 0.2 mile east of the project site. The proposed project would not include industrial land uses that could routinely emit toxic air contaminants in concentrations that could be hazardous to persons at schools within one-quarter mile of the site. As stated above, the proposed development of residential and commercial uses would use relatively small amounts of hazardous materials and would be required to comply with state and local hazardous materials regulations.

Mitigation measures HAZ-1 through HAZ-3 would require the preparation of a soil management plan, which will assist in the identification and safe removal of petroleum and VOC-impacted soil, post-grading soil vapor survey to verify hazards are fully remediated, and asbestos survey to prevent the unanticipated release of asbestos-containing materials. Impacts related to the transport, use, and/or disposal of hazardous materials would be mitigated to less than significant with the implementation of mitigation measures HAZ-1 through HAZ-3.

Level of Significance Before Mitigation: With the implementation of PPP HAZ-1 through HAZ-3, Impact 5.8-1 would be potentially significant.

Impact 5.8-2: The project site is on a list of hazardous materials sites and, as a result, could create a hazard to the public or the environment. [Threshold H-4]

DTSC tracks any reports received from cities, counties, or state agencies of hazardous waste disposal on land owned or leased by a city, county, or state agency where hazardous waste was released into the environment, and provides the information to CalEPA for inclusion in the Cortese list. The Cortese list includes hazardous materials sites compiled pursuant to Government Code Section 65962.5.

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The project site was identified on the Cortese List due to the USTs removed from the VMF and former fire station. As noted in Impact 5.8-1, there is the potential for the discovery of contamination during grading activities, and impacts are potentially significant.

Mitigation measures HAZ-1 through HAZ-3 would require the preparation of a soil management plan, which will assist in the identification and safe removal of petroleum and VOC-impacted soil, post-grading soil vapor survey to verify hazards are fully remediated, and asbestos survey to prevent the unanticipated release of asbestos-containing materials. Impacts related to the transport, use, and/or disposal of hazardous materials would be mitigated to less than significant with the implementation of mitigation measures HAZ-1 through HAZ-3.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.8-3: The project site is not in the vicinity of an airport or within the jurisdiction of an airport land use plan. [Threshold H-5]

The City of Laguna Niguel, including the project site, is not within an airport land use plan or within two miles of a public airport. The closest public airport is the John Wayne Airport in Santa Ana, approximately 13.6 miles northwest of the site (AirNav 2019). Therefore, no impact would occur.

Level of Significance Before Mitigation: No impact.

Impact 5.8-4: Project development could affect the implementation of an emergency responder or evacuation plan. [Threshold H-6]

The OCSD, and the OCFA are responsible for coordinating all emergency management activity in the city and implementing the County's EOP.

Construction activities associated with the proposed project, including staging and stockpiling, would occur within the project boundaries and not on any major arterials or highways that could be used during potential emergency situations. The proposed project would also be required to provide adequate access for emergency vehicles per the California Fire Code.

Additionally, storage of construction materials and construction equipment—such as construction office trailers, cranes, storage containers, and trailers detached from vehicles—is prohibited on City property, including City streets, without a permit. Project construction and operation would comply with City requirements regarding storage on City property, including City streets. Construction material and equipment would be staged or stored on-site and would not interfere with emergency access to or evacuation from surrounding properties. Impacts would be less than significant.

Development of the proposed project would be required to incorporate all applicable design and safety requirements from the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards, such as those in the Laguna Niguel Municipal Code, which incorporates by reference the latest

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California Fire Code. The City would be responsible for reviewing project compliance with related codes and standards prior to issuance of building permits.

Additionally, during the building plan check and development review process, the City would coordinate with the OCFA and OCSD to ensure that the necessary fire prevention and emergency response features are incorporated into the proposed project and that adequate circulation and access (e.g., adequate turning radii for fire trucks) are provided in the traffic and circulation components of the proposed project.

During project operation, Pacific Island Drive, Crown Valley Parkway, and Alicia Parkway would still be available as major evacuation routes. No policy or procedural changes to an existing risk management plan, emergency response plan, or evacuation plan would be required due to project implementation. Furthermore, during an unanticipated disaster event, the emergency response agencies (i.e., OCSD and OCFA) would implement operational protocols, plans, and programs on a case-by-case basis to facilitate emergency evacuations and/or response, which would consider traffic conditions at the time of the emergency. In such instances, traffic would be routed along the City's numerous disaster routes, as determined appropriate by the responding agencies.

Based on the above, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Level of Significance Before Mitigation: Less than significant.

Impact 5.8-5: The project site is in adjacent to a Very High Fire Hazard Severity Zone and could expose structures and/or residences to fire danger. [Threshold H-7]

The project site is adjacent to a local responsibility area for Very High FHSZ (CAL FIRE 2011, 2019). OCFA provides fire and emergency medical response to the City of Laguna Niguel. The OCFA and the OCSD implement the County EOP, which addresses how the County should respond to extraordinary events or disasters (including urban and wildland fires), from preparedness phase through recovery. OCFA Fire Station No. 5 is located within the project site at 23600 Pacific Island Drive. The proposed project would provide site-specific on- and off-site access and circulation for emergency vehicles and services during the proposed project's construction and operational phases. Also, design of the proposed project would comply with the California Building Code, the California Fire Code, and the OCFA Fire Prevention Guidelines.

Level of Significance Before Mitigation: With the implementation of PPP W-1, Impact 5.8-5 would be less than significant.

5.8.5 Cumulative Impacts

The geographic area considered for cumulative impacts is the City of Laguna Niguel. Hazards and hazardous waste impacts are typically unique to each site and do not usually contribute to cumulative impacts. Cumulative development projects would be required to assess potential hazardous materials impacts on the development site prior to grading. The project and other cumulative projects would be required to comply with laws and regulations governing hazardous materials and hazardous waters used and generated as described in Section

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5.8.1.1. Therefore, cumulative impacts from past, present, and reasonably foreseeable future projects related to hazards and hazardous materials would be less than significant after regulatory compliance.

5.8.6 Level of Significance Before Mitigation

Impact 5.8-3 has no impacts and Impact 5.8-4 would be less than significant.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.8-1** Hazards to the public or the environment due to contaminated soils could be potentially significant. Furthermore, the County Library has not been inspected for ACMs.
- **Impact 5.8-2** Hazards from contaminated soils may be encountered during construction.

5.8.7 Mitigation Measures

Impact 5.8-1

- HAZ-1 Prior to issuance of grading permits, the project applicant shall prepare and implement a soils management plan (SMP) for the vehicle maintenance facility and the former fire station. The SMP shall be approved by the City and the appropriate oversight agency, such as Orange County Environmental Health Department or Department of Toxic Substances Control. Prior to grading, proper identification and removal of petroleum (>100 mg/kg) and VOC-impacted soil shall occur. The SMP will ensure that safe and appropriate handling, transportation, off-site disposal, reporting, oversight, and protocols are used during removal of the contaminated soil. The SMP shall establish methodology and procedures to perform additional testing during grading if unknown hazardous materials are encountered. If, during grading activities, additional contamination is discovered, grading within that area shall be temporarily halted and redirected around the area until the appropriate evaluation and follow-up remedial measures are implemented in accordance with the SMP to render the area suitable to resume grading activities. Soil remediation and/or export of hazardous materials must be performed in accordance with the appropriate agency's requirements (Regional Water Quality Control Board, Orange County Environmental Health Department, Department of Toxic Substances Control, and/or South Coast Air Quality Management District).
- HAZ-2 After grading is complete, the project applicant shall perform a post-grading soil vapor survey within the footprint of future structures in the areas of the vehicle maintenance facility and former fire station. The survey shall be approved by the City and the appropriate oversight agency (OC EHD or DTSC) prior to sign-off of the grading permit.
- HAZ-3 Prior to the issuance of a demolition permit for any structure on the property, the project applicant shall conduct a comprehensive survey for asbestos-containing materials to identify the locations and quantities of asbestos-containing materials in above-ground structures. The

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project applicant shall retain a licensed or certified asbestos consultant to inspect buildings and structures on-site. If asbestos is discovered, the project applicant shall retain a licensed or certified contractor to remove and dispose of all asbestos containing materials in accordance with the appropriate South Coast AQMD asbestos-containing material removal practices and procedures.

Impact 5.8-2

Mitigation measures HAZ-1 and HAZ-2 apply to Impact 5.8-2.

5.8.8 Level of Significance After Mitigation

The mitigation measures would reduce potential impacts of hazards and hazardous materials to less than significant levels. No significant unavoidable adverse impacts relating to hazards have been identified.

5.8.9 References

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