

4.5 HAZARDS AND HAZARDOUS MATERIALS

4.5.1 INTRODUCTION

This section describes the existing conditions with respect to hazards and hazardous materials on the project site and its vicinity, and potential impacts related to hazards and hazardous materials that may occur as a result of the implementation of the proposed project. Regulations and policies related to hazards and hazardous materials are also described in this section. The analysis of the proposed project's potential effects from hazards and hazardous waste is based on Phase I and Phase II Environmental Site Assessments (ESAs) prepared for the site. All of the reports and sources used in the preparation of the analysis are listed in **Section 4.5.5, References**, and are on file with the City. Mitigation measures are included where appropriate.

No public or agency comments related to hazards and hazardous materials were received in response to the Notice of Preparation (NOP) issued for this EIR.

4.5.2 ENVIRONMENTAL SETTING

A number of properties may cause a substance to be considered hazardous, including toxicity, ignitability, corrosivity, or reactivity. According to the California Code of Regulations Section 66084, hazardous material is defined as

a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either: 1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating irreversible illness; or 2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, or contaminated, or are being stored prior to proper disposal. In California hazardous wastes include discarded materials that meet one or more of the criteria listed in the California Code of Regulations (CCR):

- The waste exhibits the characteristics of hazardous wastes identified in CCR Title 22, Division 4.5, Chapter 11, Article 3. Such characteristics include whether the material is ignitable, corrosive, reactive, or toxic.
- The waste is listed, contains a constituent that is listed, or is a mixture of hazardous waste that is listed in CCR Title 22, Division 4.5, Chapter 11.

Hazardous materials, in general, may include products such as pesticides, petroleum products, solvents, chemical intermediates, or heavy metals. Hazardous waste may include spent, discarded, spilled, or contaminated products, or wastes from certain industrial processes, as well as a mixture (e.g., soil, water, carbon, construction debris, building materials) that exhibits the characteristics of hazardous wastes. California regulates hazardous waste management under CCR Title 22, Division 4.5.

The need for or the level of site remediation related to soil or groundwater affected by hazardous materials depends on specific site conditions, including planned land use, the concentration of the hazardous materials present, potential receptors, and exposure pathways. Site remediation requirements are typically evaluated on a case-by-case basis by the lead regulatory agency overseeing a site.

Activities on the project site that could expose the public to hazardous materials or wastes during project construction and operation include: improper handling or use of hazardous materials; failure of storage containment systems; fire, explosion, or other emergencies; unsound disposal, transport or treatment methods; accidents during transport; or exposure to contaminated soil or groundwater (for example, during excavation and grading) or contaminated building materials during demolition of existing structures.

4.5.2.1 Existing Conditions

Project Site

The project site includes approximately 13.32 acres of undeveloped land. Vegetation on the site consists of ruderal non-native grasses that are mowed on occasion. In addition, a single oak tree is located in the western portion of the site near Business Center Drive and scattered trees are located along the eastern border of the site along Suisun Valley Road.

The project site is located 9.5 miles from the Travis Air Force Base in Fairfield. The closest school, Nelda Mundy Elementary School, is located 1.0 mile to the southwest of the project site. Surrounding land use consists of commercial, industrial, and residential buildings. Major roadways in the vicinity of the project site include Business Center Drive, Suisun Valley Road, and Green Valley Road.

The site is relatively flat, with ground surface elevations ranging from approximately 19 to 28 feet above mean sea level. Groundwater on the site ranges from approximately four to six feet below existing site grades (Wallace-Kuhl 2018).

Hazardous Materials and Waste

No buildings or structures are currently located on the project site and the site has not been developed in the past. Previous potential releases of hazardous materials within the project site may have included potential releases associated with historical agriculture activities.

Hazardous Materials Transportation

Hazardous materials are routinely transported by truck in the project vicinity. The California Vehicle Code and California Department of Transportation (DOT) regulations limit transportation of hazardous materials through residential neighborhoods, although local deliveries are allowed. These regulations also require that hazardous materials be transported via routes with the least overall travel time. The City of Fairfield Public Works Department does not have designated truck routes for hazardous materials transport.

Existing Hazards

A Phase I Environmental Site Assessment (ESA) was prepared by Wallace Kuhl & Associates (WKA), in January 2018. In addition, WKA prepared a Phase II ESA in February 2018. The information and analysis from these documents and investigations are summarized below.

Historical land use research dating back to the late 1800's revealed that the project site was vacant land from at least 1896 to at least 1902, planted with vineyards from at least 1937 to at least 1952, fallow land in 1968, vineyard in 1974, and has been fallow or pasture land since at least 1982. According to an environmental lien search, no environmental liens are associated with the project site. Given the documentation reviewed concerning the agency listings for neighboring facilities, none of the facilities reviewed would have a negative impact on the project site. Lastly, based on the completion of the vapor encroachment condition (VEC) screening matrix, VEC can be ruled out because a VEC does not or is not likely to exist. Based on these findings, the Phase 1 ESA revealed that there are no recognized environmental conditions (RECs) in connection with the project site except for concerns from historical agriculture activities including the raising of vineyards and the potential for residues of historically applied persistent pesticides (WKA 2018a).

Due to on-site concerns from historical agriculture activities, a Phase II ESA was conducted where 24 soil samples were collected and analyzed. The Phase II ESA found that most contaminants in the soil would not exceed regulatory screening levels. The only exception was for arsenic. However, according to the United States Geological Survey, arsenic naturally occurs above screening levels in soils in the area, and the levels of arsenic in site soils are consistent with naturally occurring arsenic levels. As a result, the

Phase II ESA concluded that there are no detections of the target compounds present that would pose a threat to human health under a residential scenario (WKA 2018b). Further discussion regarding this issue is provided below.

Records Search

The Phase I ESA included the results of an environmental disclosure report compiled for the project site and its vicinity by Environmental Data Resources Inc. (EDR), which is included as **Appendix 4.5a** of this EIR. The search service reviewed the most recent versions of federal, state, and local regulatory agency lists to identify sites with known or potential soil or groundwater contamination, hazardous waste generators, wastewater dischargers, and dischargers of chemicals to air and water within a one mile radius of the project site. According to the EDR search, there are no historical contaminated sites on the project site but several in the vicinity of the project site. The potential for environmental threat was evaluated based on information in databases regarding the type of release, current case status, and distance and direction from the site. Brief descriptions of the nearby sites are provided below.

HAZNET

The EDR Radius Report identified six Department of Toxic Substances Control (DTSC) Haznet listings within 0.25 mile of the site. The DTSC Haznet database is a list of all facilities that have submitted manifests for the disposal of hazardous waste at a landfill. A listing on the database is not considered to be indicative of a release of a hazardous material or petroleum product at a property.

Mangels Ranch Property

The Mangels Ranch Property, 287 Suisun Valley Road, is located 900 feet north of the project site. The facility is listed on the State Water Resources Control Board's (SWRCB) Leaking Underground Storage Tank (LUST), the Department of Toxic Substances Control's Response, Historic Cal-Sites, and EnviroStor databases. According to information on the SWRCB's GeoTracker website, the LUST investigation received a "completed – case closed" status on July 22, 1998. According to a Final Removal Action Implementation Report, dated November 7, 2003, 3,500 cubic yards of toxaphene impacted soils were excavated and transported to two landfills for disposal. Confirmation samples collected from the excavations following the removal action, indicated that remaining toxaphene concentrations were below clean-up goals. According to a Removal Action Certification, dated November 13, 2003, the property was awarded a no further action status regarding the toxaphene impacted soils. Based on the information reviewed, this property has not impacted the project site.

Westamerica Bankcorp Building

The Westamerica Bankcorp Building, 4550 Mangels Boulevard, is located 450 feet to the north of the project site across Business Center Drive and Mangels Boulevard. The site is listed as a chemical storage facility; chemicals listed as present on the site include diesel fuel, elevator hydraulic oil and propane. CalEPA continues to monitor the Hazardous Materials Release Response Plans (HMRRP) filed by the facilities management at the site.

Texaco Terminal Station

The Texaco Terminal Station, Inc. facility, 108 Suisun Valley Road, is located on the eastern adjoining property. According to a Solano County Environmental Management Department letter, dated May 3, 2001, the facility was awarded a no further action status. Based on the information reviewed, this facility has not impacted the project site.

Historical Uses of the Project Site

The historical land use research dating back to the late 1800s revealed that the project site was vacant land from 1896 to 1902, planted with vineyards from 1937 to 1952, fallow land in 1968, a vineyard again in 1974, and has been fallow or pasture land since 1982 (see **Table 4.5-1, Historical Use of Project Site and Adjoining Sites**, below). There is some on-site concern for RECs which could have occurred from historical agriculture activities including the raising of vineyards and the potential for residues of historically applied persistent pesticides.

Historical Use of Adjacent Sites

The sites adjoining the project site typically show the same uses and timeline as the project site. A summary of land uses on adjacent sites is presented below in **Table 4.5-1**.

Table 4.5-1
Historical Use of Project Site and Adjoining Sites

Years of Operation	Use
1937	<p>Project Site: The majority of the site is planted with a vineyard. The southwestern portion is grass-covered land.</p> <p>North: Vineyards.</p> <p>East: A road followed by orchards.</p> <p>South: Vineyards and grass-covered land.</p> <p>West: Vineyards and grass-covered land.</p>

Years of Operation	Use
1947	<p>Project Site: The southwestern portion appears to be planted with irrigated crop.</p> <p>North: No significant changes noted.</p> <p>East: No significant changes noted.</p> <p>South: No significant changes noted.</p> <p>West: Irrigated crop.</p>
1952	No significant changes noted for the site or the vicinity.
1968	<p>Project Site: Fallow land.</p> <p>North: Fallow land.</p> <p>East: A commercial development that includes a gasoline station is visible.</p> <p>South: Fallow land.</p> <p>West: Fallow land.</p>
1974	Only the northeastern portion of the project site is visible, which his planted with vineyard. No other significant changes are noted for areas visible on the photo.
1982	<p>Project Site: Fallow land.</p> <p>North: Fallow land and vineyard.</p> <p>East: No significant changes noted.</p> <p>South: Fallow land.</p> <p>West: Fallow land.</p>
1993	<p>Project Site: No significant changes noted.</p> <p>North: A road is visible followed by fallow land.</p> <p>East: No significant changes noted.</p> <p>South: No significant changes noted.</p> <p>West: A road is visible followed by vacant land.</p>
2005	<p>Project Site: No significant changes noted.</p> <p>North: The existing office building is visible.</p> <p>East: The commercial structure and gasoline station are no longer visible.</p> <p>South: No significant changes noted.</p> <p>West: No significant changes noted.</p>
2006	No significant changes noted for the site or the vicinity.
2009	<p>Project Site: No significant changes noted.</p> <p>North: No significant changes noted.</p> <p>East: No significant changes noted.</p> <p>South: No significant changes noted.</p> <p>West: The existing office building is visible.</p>
2010	No significant changes noted for the site or the vicinity.
2012	<p>Project Site: No significant changes noted.</p> <p>North: Business Center Drive has been realigned to be adjacent to the northern property boundary.</p> <p>East: No significant changes noted.</p> <p>South: No significant changes noted.</p> <p>West: No significant changes noted.</p>

Source: WKA 2018a

Site Reconnaissance

According to the Phase I ESA, an inspection of the project site was performed by WKA on January 23, 2018. On the day of site reconnaissance, the project site was vacant land and the majority of the site's surface was covered by dense, low-lying grasses. The central portion of the project site has been disced in the past for weed control. No high-voltage, tower-mounted electrical transmission lines or pole-mounted transformers were observed on or adjacent to the site.

Interviews

As part of the Phase I ESA investigation, WKA contacted various persons familiar with the site vicinity, including representatives of public agencies, for the purpose of identifying past and present uses, which may have contributed to RECs on the site. Results of those interviews are discussed below:

Owner or Key Site Manager

WKA provided Mr. Harvey Shein, Green Valley Land, LLC, a copy of a questionnaire regarding the site. Mr. Shein stated that Green Valley Land, LLC has an option agreement for the site. He said that the site is owned by the Successor Agency to the City of Fairfield Redevelopment Agency. Mr. Shein did not know when or from whom the Successor Agency to the City of Fairfield Redevelopment Agency acquired the site. He stated that the site was pasture land in 2001, but that he did not have any information regarding the history of the site. Mr. Shein is not aware of any soil that has been imported to the site. He stated that no aboveground or underground storage tanks, wells, or septic systems are located at the site. Mr. Shein is not aware of any environmental liens that have been recorded for the site.

State Water Resources Control Board (SWRCB)

WKA contacted the State Water Resources Control Board (SWRCB) regarding files for the regulatory facilities located within the vicinity of the Site. A representative with the SWRCB indicated that all records for facilities are available for review on their GeoTracker website.

Project Site Soil Testing

Based on potential environmental issues on the project site identified in the Phase I ESA, additional soil testing was conducted on the project site which was documented in the Phase II ESA (**Appendix 4.5b**). Laboratory analysis of the surface soil samples indicated that there are no detections of the target compounds present that would pose a threat to human health under a residential scenario. Naturally occurring arsenic in California soils often exceeds the residential DTSC-SL, and the concentrations of arsenic reported within the soils at the project site are below naturally occurring arsenic levels.

4.5.2.2 Government Records Searches

Based on searches of government records conducted in conjunction with the preparation of the Phase I ESA, the project site is not on the current Cortese List prepared pursuant to Government Code Section 65962.5.

4.5.2.3 Fire Hazards

The majority of the City is urbanized and developed with limited open space. The project area is developed with office buildings, while the project site itself is vacant land. The project site is not located in a high or extreme wildfire hazard zone (City of Fairfield 2001) or within a state responsibility area categorized as a High Fire Hazard Severity Zone.¹

4.5.2.4 Asbestos Containing Materials and Lead-Based Paint

There are no existing buildings on the project site. Therefore, there would be no potential for Asbestos Containing Materials (ACMs) or lead-based paint (LBP) to be found on the project site.

4.5.2.5 Airport Hazards

The project site is located 9.5 miles from the Travis Air Force Base and is located outside of the Travis Air Force Base Land Use Compatibility Plan.

4.5.3 REGULATORY FRAMEWORK

4.5.3.1 Federal Laws and Regulations

The US Environmental Protection Agency (US EPA) is the main federal agency responsible for enforcing laws and regulations relating to hazardous materials and wastes, including evaluation and remediation of contamination and hazardous wastes. The US EPA works collaboratively with other agencies to enforce hazardous materials handling and storage regulations and site cleanup requirements. The Occupational Safety and Health Administration (OSHA) and the US Department of Transportation (DOT) are authorized to regulate safe transport of hazardous materials.

Federal regulations which regulate the handling (including transportation), storage, workplace safety, and disposal of hazardous materials and wastes are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR), and implement the Resource Conservation and Recovery Act of 1976

¹ California Department of Forestry and Fire Protection (Cal Fire), Solano County Map, http://frap.fire.ca.gov/webdata/maps/solano/fhszs_map.48.pdf, accessed June 18, 2019.

(RCRA). The National Contingency Plan, CFR Title 40, part 300, implements Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

RCRA created a major new federal hazardous waste “cradle-to-grave” regulatory program administered by US EPA. Under RCRA, US EPA regulates the generation, treatment, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. RCRA includes procedures and requirements for reporting releases of hazardous materials and for cleanup of such releases. RCRA also includes procedures and requirements for handling hazardous wastes or soil or groundwater contaminated with hazardous wastes. Individual states may apply to US EPA to authorize them to implement their own hazardous waste programs, as the primary hazardous waste regulator, as long as the state program is at least as stringent as federal RCRA requirements. California has been authorized by US EPA to implement its own hazardous waste program, with certain exceptions. The California program is handled by the DTSC as described below.

CERCLA establishes a clean-up and liability regime and process for certain properties contaminated by hazardous substances that poses a threat to human health and the environment. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA provides for liability of persons responsible for releases of hazardous substances; a process for responding to environmentally impacted sites, and establishes a trust fund to provide for clean up when no responsible party is identified.

Finally the proposed project will be subject to National Pollution Discharge Elimination System (NPDES) permitting regulations, including the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). To address water quality during the project’s construction phase, the Project Applicant would be required to prepare and implement a SWPPP, in accordance with the NPDES General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during project construction. The SWPPP would include BMPs and erosion control measures to prevent pollution in storm water discharge.

4.5.3.2 State Laws and Regulations

State agencies that regulate the use of hazardous materials include the California Environmental Protection Agency (Cal/EPA), the Office of Emergency Services (OES), the Department of Health Services (DHS), and the Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB).

Generally, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste, and the investigation and remediation of hazardous waste sites. The DTSC implements the provisions of both federal and state hazardous waste laws through the California Hazardous Waste Control Law. The DTSC and the RWQCBs administer laws for the clean-up on of environmentally impacted sites. Lead responsibility for remediation depends on the proposed use of a parcel, the character of waste contaminants, and the need for site monitoring.

In addition, the DTSC, the State Water Resources Control Board, Cal EPA, and the RWQCBs agreed to a Brownfields Memorandum of Agreement (MOA), which establishes procedures and guidelines for identifying the lead agency for investigation and cleanup activities at brownfield sites, calls for a single uniform site assessment procedure, requires all cleanups to address the requirements of the agencies, defines roles and responsibilities, provides for ample opportunity for public involvement, commits agencies to review timeframes, and commits agencies to coordinate and communicate on brownfields issues.

The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. State regulations applicable to hazardous materials are contained in Titles 8, 22, and 26 of the California Code of Regulations (CCR) and implement mandates set forth in the State Water Code, Underground Storage Tank Code, Cortese Act (listing of hazardous waste and substances sites), and Proposition 65 (safe drinking water and toxics enforcement).

Cal/OSHA regulates work practices at asbestos levels less than 1 percent. Samples containing less than 1 percent asbestos are regulated as outlined in 8 CCR Section 1529. Cal/OSHA regulates work practices associated with the removal and abatement of lead-based paint.

The California Accidental Release Prevention (CalARP) program regulates facilities that store greater than a threshold quantity of a regulated toxic chemical and flammable substance, which the State has determined represents a potential health and safety hazard beyond the facility's boundary. The regulated substances include 276 toxic chemicals and 63 flammable substances. This program requires a facility to develop and implement a Risk Management Plan (RMP) that includes the following: (1) a Hazard Assessment, (2) Prevention Elements, (3) Management System, and (4) Emergency Response Program. The Hazard Assessment requires external event analyses, including seismic analysis, worst-case release scenario (WCRS) modeling, alternate release scenarios (ARS) modeling, and a review of historical accidents. The prevention elements, which are in place to prevent an accidental release, include operating procedures, mechanical integrity, training, incident investigation, and managing change that may occur in the processes. The facilities are required to have a management system in place to ensure that all of the

prevention elements are being implemented. The facilities are also required to have an emergency response program, including an emergency response plan. CalARP regulated facilities are required to submit their risk management plan (RMP) to the local CUPA. The Solano County Environmental Health Department is the Certified Unified Program Agency (CUPA) for the City of Fairfield.

California Department of Forestry and Fire Protection (CAL FIRE) The Wildfire Hazard Legislation Safety Element Planning and Zoning Law requires that cities and counties adopt a comprehensive general plan with various elements including a safety element for protection of the community from unreasonable risks associated with various hazards, including wildfires. CAL FIRE has a long history of knowing the importance of planning and its importance to wildland fire safety and risk mitigation. Land use planning incorporates safety element requirements for State Responsibility Areas (SRA) and Very High Fire Hazard Severity Zones (VHFHS Zones).

4.5.3.3 Local Agencies, Plans and Policies

Bay Area Air Quality Management District Regulations

The BAAQMD is the local National Emissions Standards for Hazardous Air Pollutants (NESHAPS) authority for the Bay Area. The BAAQMD requires 10 business days' notification prior to the commencement of demolition activities or work that affects regulated ACMs.

Solano County Airport Land Use Commission

The Solano County Airport Land Use Commission governs land use around the County's aviation facilities, including Travis Air Force Base. Land use policies for lands around Travis Air Force Base are established in the Travis Air Force Base Land Use Compatibility Plan. The plan designates various land use compatibility zones around Travis Air Force Base and specifies restrictions for each zone. The project site is within Zone D. The applicable policy of Zone D is structures cannot exceed 200 feet in height, pursuant to Federal Aviation Regulations (FAR) Part 77 height limits.

City of Fairfield General Plan

Hazardous Wastes and Materials

Objective HS 7: Minimize the risks associated with hazardous waste treatment, storage, disposal and transport to ensure that the residents of Fairfield and the surrounding environment are adequately protected.

- Policy HS 7.1** Support the Solano County Hazardous Waste Management Plan (CHWMP) and the policies, objectives and programs contained therein to the extent that they are applicable to the City of Fairfield.
- Policy HS 7.4** Involve the Fire Department and Solano County Department of Environmental Health in the review process for all projects located on commercial and industrial designated properties where potential for hazardous materials use has been identified so procedures for hazardous waste handling, treatment, storage or disposal can be implemented.
- Policy HS 7.5** Continue to address potential concerns associated with the transport, storage, use and disposal of hazardous materials and waste through the environmental review process and minimize risk through the use of proper mitigation measures.
- Policy HS 7.6** Through the project review process, require risk assessments for all commercial and industrial uses that store, use and produce hazardous materials and are adjacent to residential areas and immobile populations such as schools, hospitals, convalescent homes, prisons etc. Determine an adequate buffer between these uses.

4.5.4 IMPACTS AND MITIGATION MEASURES

4.5.4.1 Significance Criteria

In accordance with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, the impact of the proposed project related to hazards and hazardous materials would be considered significant if it would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;
- be located on a site that is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5 and, as a result, create a significant hazard to the public or the environment;

- for a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

In addition, the following topic related to geologic hazards is addressed in this sections:

- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

4.5.4.2 Methodology

Given the residential and mixed-use nature of the proposed development, the analysis below is focused on the potential for any existing on- or off-site contamination to affect the future site uses. Project impacts are evaluated relative to the above standards of significance by utilizing information from the Phase I and Phase II ESAs provided by WKA. In 2015, the California Supreme Court in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369 held that CEQA generally does not require a lead agency to consider the impacts of the existing environmental conditions on a proposed project's future residents or users. However, if a project risks exacerbating these environmental hazards or conditions that already exist, the lead agency is required to analyze the impact of that exacerbated condition on future residents and users of a project, as well as other impacted individuals.

4.5.4.3 Project Impacts and Mitigation Measures

Impact HAZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

Although small quantities of hazardous materials (e.g., fuels; paints and solvents; oils, lubricants and refrigerants associated with building, mechanical, and HVAC systems; grounds and landscape maintenance products; cleaners and degreasers, etc.) would be used during project construction and operation, compliance with local, state, and federal regulations, as well as the implementation of a construction-phase stormwater pollution prevention plan (SWPPP) in compliance with National Pollutant Discharge Elimination System (NPDES) requirements, would minimize risks associated with the routine transport, use, or disposal of hazardous materials during project construction.

The proposed project consists of the construction and operation of residential and commercial uses. During operation, these land uses do not generally involve the use, transport, or disposal of significant amounts of hazardous materials, including hazardous chemical, radioactive, and biohazardous materials. Furthermore, compliance with local, state, and federal regulations would minimize risks associated with the routine transport, use, or disposal of hazardous materials during project occupancy. As such, potential impacts from the routine transport, use, or disposal of hazardous materials during construction and operation of the proposed project are considered to be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact HAZ-2: **The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (*Less than Significant*)**

There is potential for subsurface contamination of the project site due to historical agriculture activities including the cultivation of vineyards and the potential for residues of historically applied persistent pesticides. Allowable target compounds are lowest for residential use (as compared to industrial or commercial use). Based on the evaluation of the soil on the project site conducted by WKA, there are no detections of the target compounds present that would pose a threat to human health under a residential scenario. Concentrations of arsenic were found above regulatory screening levels in some soil samples. However, naturally occurring arsenic in California soils often exceeds regulatory screening levels, and, as previously discussed above in section 4.5.2.1, Existing Conditions, the concentrations of arsenic reported within the soils at the project site are below naturally occurring arsenic levels reported by the U.S. Geological Survey. Therefore, the proposed project would not create a significant hazard to future residents and patrons on project site or to the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. This impact is less than significant.

Mitigation Measures: No mitigation measures are required.

Impact HAZ-3: **The proposed project would not expose future project site residents to substantial risk associated with hazardous materials storage and use on nearby properties. (*Less than Significant*)**

The proposed project involves the construction of a mixed-use development that would include residential apartments and commercial uses. The new apartments would be located in an area where commercial, industrial, and residential uses are currently present. These nearby uses could involve the storage and use of hazardous materials, typically household cleaning and maintenance products and minor amounts industrial related chemicals. Therefore, there is potential for an accidental release of certain hazardous materials on these nearby properties that could affect the future residents on the site.

A records search of regulated facilities was completed to determine whether there were any facilities within 0.5 mile of the project site boundary that are subject to CalARP regulations. Based on the records search, there are eight CalARP facilities within 0.5 mile of the project site boundary (CalEPA 2018). Six of the facilities are located to the south and west of the project site, and as the site slopes from the northeast to the southwest, would not affect the project site. The other facilities listed in CalARP records are the Mangels Ranch property, which located 900 feet north of the project site, and the Westamerica Bankcorp building, which is located 450 feet to the north of the project site across Business Center Drive and Mangels Boulevard. As discussed above, the Mangels Ranch property received regulatory closure in 2003 and thus would not pose a danger to future uses on the project site. The Westamerica Bankcorp building stores chemical compounds on site but the storage of these chemicals in the building does not pose a risk to the project site given the building's compliance with applicable federal, state, and local regulations. Finally, with respect to the Texaco Terminal Station, which is located 1,000 feet to the southeast of the project site across Interstate 80 (I-80) and is not listed in CalARP records, this site received regulatory closure in 2001 and is located down slope, and thus would not pose a danger to future uses on the project site. For these reasons the proposed project would not expose future project site residents to substantial risk associated with hazardous materials storage and use on nearby properties. The impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Impact HAZ-4: **The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (No Impact)**

The closest school, Nelda Mundy Elementary School, is located 1.0 mile to the southwest of the project site. No schools are located within 0.25 mile of the project site. Further, as discussed above, only small quantities of hazardous materials would be used on-site during construction of the proposed project and

construction and operation of the proposed project would comply with applicable local, state, and federal regulations. As no schools are located within 0.25 miles of the project site, no impact would occur.

Mitigation Measures: No mitigation measures are required.

Impact HAZ-5: **The project site is not located on a list of hazardous material sites subject to corrective action compiled pursuant to Government Code Section 65962.5 (Cortese List). (No Impact)**

The project site is not listed on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, there would be no impact from constructing the proposed project on this site.

Mitigation Measures: No mitigation measures are required.

Impact HAZ-6: **The proposed project would not result in a safety hazard to aircraft due to building construction or excessive noise for people living or working on the site. (No Impact)**

The project site is located 9.5 miles from the Travis Air Force Base in Fairfield and is not located within the Travis Air Force Base Land Use Compatibility Plan. Due to the distance from the Travis Air Force Base, no impact would occur.

Mitigation Measures: No mitigation measures are required.

Impact HAZ-7: **The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan nor would the proposed project expose people or structures to a significant risk of loss, injury, or death involving wildland fires. (No Impact)**

The project site is located in an urban area, and construction and operation of the proposed project would not substantially interfere with the operation of traffic along Business Center Drive, Suisun Valley Road, or I-80, such that emergency response could be affected (refer to Section 4.9, Transportation, page 4.9-44). In addition, the proposed project does not include any permanent road closures, lane reductions, or other measures that may adversely affect emergency response of evacuation. The project site is not located in a

high or extreme wildfire hazard zone (City of Fairfield 2001). No impacts with regard to implementation of an emergency plan or wildland fire hazards would occur.

Mitigation Measures: No mitigation measures are required.

Impact GEO-7: The proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life and property. (*Less than Significant with Mitigation*)

The project site is underlain with a combination of Brentwood (85%), Yolo (10%) and Rincon (5%) soils. Soil expansiveness, or shrink-swell potential, usually occurs within soils containing a high percentage of expansive clay minerals. These soils, when subjected to an increase in water content, are prone to expansion. Expansive soils are usually measured with an index test such as the expansive index potential. In order for a soil to be a candidate for testing, the soil must have high clay content, and the clay must have a high shrink-swell potential and a high plasticity index. Near-surface clay soils on the project site can significantly shrink and swell based on fluctuating moisture contents. As a result, these soils have the potential to cause vertical movements of building foundations, interior floor slabs, exterior flatwork, and pavements (Wallace Kuhl 2018). This represents a potentially significant impact. However, with implementation of Mitigation Measure GEO-7, which requires the placement of 12 to 18 inches of imported, compactable, very low-expansive soil underneath interior and exterior concrete slabs, sidewalks, and pool deck slabs, this impact would be reduced to a less than significant level.

Mitigation Measures:

GEO-7 During construction, approximately 12 to 18 inches of imported, compactable, very low-expansive (Expansion Index ≤ 20) granular soils shall be placed beneath interior and exterior concrete slabs-on-grade, including PT slabs, sidewalks, and pool deck slabs. Alternatively, chemical amendment of on-site or approved imported clay soils (i.e., lime-treatment) may also be considered to reduce the shrinking and swelling potential of on-site or imported clays.

Significance after Mitigation: Less than significant

4.5.4.4 Cumulative Impacts and Mitigation Measures

The geographic scope of the cumulative hazards and hazardous materials analysis is the project vicinity (generally within 0.5 mile of the project site). Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project site would be most affected by project activities.

Cumulative Impact HAZ-1: The proposed project, in conjunction with other past, present and reasonably foreseeable future development, would not result in significant cumulative impacts related to hazardous materials. (*Less than Significant*)

The proposed project's hazardous materials impacts, discussed above under **Project Impacts and Mitigation Measures**, focus on the use, transportation, storage, and disposal of hazardous materials and hazardous wastes during construction and occupancy of the proposed development. Construction-related hazardous materials impacts would generally be site-specific and limited to the duration of the construction activity, and would continue to be highly regulated under federal, state, and local regulations, and would therefore not result in a cumulatively considerable contribution to a significant cumulative impact. With respect to the use, storage, transportation, and disposal of hazardous materials during project occupancy, as a mixed-use, largely residential project, the proposed project would not involve the use of hazardous materials in substantial quantities. The other foreseeable development projects in the City, as listed in **Tables 4.0-1**, are also predominately residential and commercial projects. The majority of the nearby projects are residential that use minimal hazardous materials and are not likely be sources of new substantial hazardous materials use. However some of the cumulative projects are commercial developments which could potentially use, store, transport, and dispose hazardous materials. These projects, however, would also be required to comply with local, state, and federal hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment. Additionally, the City of Fairfield Fire Marshall would oversee potential storage of hazardous materials. Each cumulative project has been or will be subject to environmental review, including risks from wildfire, and if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. For the reasons presented above, the cumulative impact would be less than significant.

Mitigation Measures: No mitigation measures are required.

Cumulative Impact GEO-1: The proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life and property. (*Less than Significant*)

Geologic hazards such as expansive soils are generally site specific as they relate to conditions on a particular site. As such, the proposed project in combination with other projects would not result in a cumulative impact.

4.5.5 REFERENCES

Wallace Kuhl & Associates (WKA). 2018a Phase I Environmental Site Assessment for Green Valley II Property. January.

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