

3.8 - Hazards and Hazardous Materials

3.8.1 - Introduction

This section describes the existing hazards and hazardous materials conditions in the project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to hazards and hazardous materials that could result from implementation of the project. Information included in this section is based on the Phase I Environmental Site Assessment (ESA) and Phase II ESA, included as Appendix G. During the Environmental Impact Report (EIR) scoping period no comments related to hazards and hazardous materials were received.

3.8.2 - Environmental Setting

Fundamentals

Hazards

This description of existing conditions focuses on hazards from fire and overhead power lines, as well as hazardous materials and wastes. A hazard is a situation that poses a level of threat to life, health, property, or the environment. Hazards can be dormant or potential, with only a theoretical risk of harm. However, once a hazard becomes active, it can create an emergency. A hazardous situation that has already occurred is called an incident. Emergency response is action taken in response to an unexpected and dangerous occurrence in an attempt to mitigate its impact on people, structures, or the environment. Emergency situations can range from natural disasters to hazardous-materials problems and transportation incidents.

Hazards Materials and Wastes

Hazardous materials include but are not limited to hazardous materials, hazardous substances, and hazardous wastes, as defined in Section 25501 and Section 25117, respectively, of the California Health and Safety Code (HSC). A hazardous material is any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released; and any material that a handler or an administering regulatory agency under Section 25501 has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment. Various properties may cause a substance to be considered hazardous, including:

- Toxicity—causes human health effects;
- Ignitibility—has the ability to burn;
- Corrosivity—causes severe burns or damage to materials; and
- Reactivity—causes explosions or generates toxic gases.

Hazardous waste is any hazardous material that is to be discarded, abandoned, or recycled. The criteria that define a material as hazardous also define a waste as hazardous. Specifically, materials and waste may be considered hazardous if they are poisonous (toxic); can be ignited by open flame (ignitable); corrode other materials (corrosive); or react violently, explode, or generate vapors when mixed with water (reactive). Soil or groundwater contaminated with hazardous materials above

specified regulatory state or federal thresholds is considered hazardous waste if it is removed from a site for disposal. If handled, disposed, or otherwise handled improperly, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous Building Materials

Many older buildings contain building materials that consist of hazardous materials. These materials include lead-based paint, asbestos-containing material, and polychlorinated biphenyls (PCBs).

Prior to the United States Environmental Protection Agency (EPA) ban in 1978, lead-based paint was commonly used on interior and exterior surfaces of buildings. Disturbances such as sanding and scraping activities, renovation work, gradual wear and tear, old peeling paint, and paint dust particulates have been found to contaminate surface soils or cause lead dust to migrate and affect indoor air quality. Exposure to residual lead can cause severe health effects, especially in children.

Asbestos is a naturally occurring fibrous material that was extensively used as a fireproofing and insulating agent in building construction materials before such uses were banned by the EPA in the 1970s. In addition, many types of electrical equipment contained PCBs as an insulator, including transformers and capacitors. After PCBs were determined to be a carcinogen in the mid to late 1970s, the EPA banned PCB use in new equipment and began a program to phase out certain existing PCB-containing equipment. For example, fluorescent lighting ballasts manufactured after January 1, 1978, do not contain PCBs and are required to have a label clearly stating that PCBs are not present in the unit.

Hazardous Substances

A hazardous substance can be any biological, natural, or chemical substance, whether solid, liquid, or gas, that may cause harm to human health. Hazardous substances are classified on the basis of their potential health effects, whether acute (immediate) or chronic (long-term). Dangerous goods are classified on the basis of immediate physical or chemical effects, such as fire, explosion, corrosion, and poisoning. An accident involving dangerous goods could seriously harm human health or damage property or the environment. Harm to human health may happen suddenly (acute), such as dizziness, nausea, and itchy eyes or skin; or it may happen gradually over years (chronic), such as dermatitis or cancer. Some people can be more susceptible than others. Hazardous substances and dangerous goods can include antiseptic used for a cut, paint for walls, a cleaning product for the bathroom, chlorine in a pool, carbon monoxide from a motor vehicle, fumes from welding, vapors from adhesives, or dust from cement, stone, or rubber operations. Such hazardous substances can make humans very sick if they are not used properly.

Hazardous Wastes

Hazardous waste is any hazardous material that is to be discarded, abandoned, or recycled. The criteria that define a material as hazardous also define a waste as hazardous. Specifically, materials

and waste may be considered hazardous if they are poisonous (toxic); can be ignited by open flame (ignitable); corrode other materials (corrosive); or react violently, explode, or generate vapors when mixed with water (reactive). Soil or groundwater contaminated with hazardous materials above specified regulatory state or federal thresholds is considered hazardous waste if it is removed from a site for disposal. If handled, disposed, or otherwise handled improperly, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous Materials Listing

The Cortese List is a list of known hazardous materials or hazardous waste facilities that meet one or more of the provisions of Government Code Section 65962.5, including:

- The list of hazardous waste and substances sites from the California Department of Toxic Substances Control (DTSC) EnviroStor database.¹ The project site is not located on the EnviroStor database.
- The list of leaking underground storage tank (LUST) sites by county and fiscal year from the State Water Resources Control Board (State Water Board) GeoTracker database.² No LUST sites are listed in GeoTracker database for the project site.
- The list of solid waste disposal sites identified by the State Water Board with waste constituents exceeding hazardous waste levels outside the waste management unit.³ No such disposal site exists within the vicinity of the project site.
- The list of active cease-and-desist orders and cleanup and abatement orders from the State Water Board.⁴ The project site is not on this list.

The list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, as identified by the DTSC.⁵

Existing Fire Related Conditions and Presence of Hazardous Materials

The hazards in Contra Costa County and the project area discussed in this section are related primarily to fire hazards and hazardous materials. Fire hazards and hazards from hazardous

¹ California Department of Toxic Substances Control (DTSC). "Cortese" list of DTSC's EnviroStor database list of Hazardous Waste and Substances sites. DTSC's Hazardous Waste and Substances Site List—Site Cleanup (Cortese List). Website: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

² State Water Resources Control Board (State Water Board). "Cortese" List of Leaking Underground Storage Tank Sites by County (San Francisco County). Website: https://geotracker.waterboards.ca.gov/sites_by_county.

³ California Environmental Protection Agency (Cal/EPA). "Cortese" list of solid waste disposal sites identified with waste constituents above hazardous waste levels outside the waste management unit. Website: <http://www.calepa.ca.gov/files/2016/10/SiteCleanup-CorteseList-CurrentList.pdf>.

⁴ California Environmental Protection Agency (Cal/EPA). "Cortese" list of SWRCB sites with active Cease and Desist Orders or Cleanup Abatement Orders. Website: <http://www.calepa.ca.gov/files/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx>.

⁵ California Environmental Protection Agency (Cal/EPA). "Cortese" list of sites subject to Corrective Action pursuant to Health and Safety Code 25187.5. Available: <https://www.calepa.ca.gov/sitecleanup/cortese/section-65962-5a/>.

materials are typically site-specific, so existing conditions related to fire hazards and the transport, use, and disposal of hazardous materials are discussed below under “project site.”

Fire hazards present a considerable problem to vegetation and wildlife habitats throughout the County. Grassland fires are easily ignited, particularly in dry seasons. These fires are relatively easily controlled if they can be reached by fire equipment; the burned slopes, however, are highly subject to erosion and gullyng. While brushlands are naturally adapted to frequent light fires, fire protection in recent decades has resulted in heavy fuel accumulation on the ground. Wildfire is a serious hazard in undeveloped areas and on large lot home sites with extensive areas of unirrigated vegetation.⁶ Wildfire is a serious hazard in undeveloped areas, particularly near areas of natural vegetation and steep slopes, since fires tend to burn more rapidly on steeper terrain. Wildfire is also a serious hazard in areas of high wind, given that fires will travel faster and farther geographically when winds are higher.

Contra Costa County

Contra Costa County contains extensive heavy industrial development that may be associated with hazardous materials uses along its west and north coasts. These heavy industrial uses present potential risks to public safety due to explosion and flammability of petroleum and chemical materials.⁷ In addition, storage tanks and pipelines are located throughout the County and could present public safety risks due to geologic conditions. No particular routes for hazardous materials transportation are designated in the County.⁸

Hazardous materials such as asbestos and lead are also likely present in building materials and paints in older structures. Emergency response in Contra Costa County and the project area is coordinated by the Contra Costa County Fire Protection District (CCCFPD). The CCCFPD provides response services to hazardous materials incidents, as well as fire protection and emergency medical services, as discussed further in Section 3.13, Public Services.

The Contra Costa County Office of the Sheriff: Emergency Services Division is responsible for planning, outreach, and training or disaster management and emergency preparedness.⁹ Land uses in Contra Costa County range from rural, agricultural, and open space to urban and developed. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone Map, much of Contra Costa County is located in a moderate, high, and very high fire hazard zone due to the mountainous terrain and natural vegetation.

Project Site

A Phase I and limited Phase II ESA were prepared for the project site (Appendix F).

Phase I ESA

As part of preparation of the Phase I ESA, ENGEO reviewed local, State and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical

⁶ Contra Costa County General Plan, page 10-42.

⁷ Contra Costa County General Plan, page 10-34.

⁸ *Ibid.*

⁹ Contra Costa County Office of the Sheriff. 2018. http://www.cocosherriff.org/bureaus/support_services/emergency.htm.

setting sources. ENGEO also conducted a reconnaissance of the project site to review site use and current conditions to check for the storage, use, production or disposal of hazardous or potentially hazardous materials; and interviewed persons knowledgeable about current and past site use.

Based on the findings of Phase I ESA, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the project site. However, the Phase I ESA identified the following potential environmental concerns:

- A review of historical records indicates that the project site was used as an orchard from at least the 1930s until the 1950s. Pesticides or other agricultural chemicals might have been applied to the project site at that time, and could be present in near-surface soils on the project site. These chemicals are persistent in the environment and toxic concentrations may remain many years after application.
- Given the age of the existing structures on the project site, it is conceivable that asbestos-containing materials and lead-based paint materials may exist within the structure.

A site reconnaissance of the project site was conducted on March 14, 2018. The site reconnaissance did not identify storage tanks, hazardous substances, or other hazardous materials on the project site.

Limited Phase II ESA

Initial field sampling activities associated with the limited Phase II ESA were performed on May 4, 2018. Laboratory results indicated detectable concentrations of metallic analytes and organochlorine pesticides in excess of respective residential screening levels in the upper one foot of soil on the project site. No detectable concentrations of target analytes were reported in the soil samples recovered from a depth of five feet below the surface.

As part of the limited Phase II ESA effort, on August 7, 2018, additional subsurface soil sampling was performed to further delineate the vertical extent of impact to soils on the project site. Review of the laboratory test results found detectable concentrations of several metallic analytes, including arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. The reported metal concentrations were either below the applicable residential screening levels and/or background concentrations observed in the San Francisco Bay area. Detectable concentrations of the pesticide dieldrin, were reported for samples S5 and S8. Additionally, sample S8 exhibited detectable concentrations of the pesticides dichlorodiphenyldichloroethylene (DDE) and dichlorodiphenyltrichloroethane (DDT).

3.8.3 - Regulatory Framework

Federal

Occupational Health and Safety Act

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor is responsible for implementing and enforcing federal laws and regulations that address worker health and safety. OSHA requires specific training for hazardous materials users and handlers, provision of information (procedures for personal safety, hazardous-materials storage and handling, and

emergency response) to employees who may be exposed to hazardous materials, and acquisition of material safety data sheets from materials manufacturers. Material safety data sheets describe the risks, as well as proper handling and procedures, related to particular hazardous materials. Employee training must include response and remediation procedures for hazardous materials releases and exposures. Construction workers and operational employees at the project site would be subject to these requirements.

Code of Federal Regulations, Titles 29 and 40

Regulations in Code of Federal Regulations Title 29 include requirements to manage and control exposure to lead-based paint and asbestos containing materials. In California, these requirements are implemented by the California Occupational Safety and Health Administration (Cal/OSHA) under California Code of Regulations Title 8 (see further discussion of California Code of Regulations Title 8 below). The removal and handling of asbestos-containing materials is governed primarily by EPA regulations under Code of Federal Regulations Title 40. The regulations require that the appropriate state agency be notified before any demolition, or before any renovations, of buildings that could contain asbestos or asbestos-containing materials above a specified threshold.

Resource Conservation and Recovery Act and Comprehensive Environmental Response, Compensation, and Liability Act

The EPA is responsible for implementing and enforcing federal laws and regulations pertaining to hazardous materials. The primary legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) and the Emergency Planning and Community Right-to-Know Act (known as SARA Title III). RCRA and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes and mandate that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment, including detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. As permitted by RCRA, in 1992, the EPA approved California’s program called the Hazardous Waste Control Law (HWCL), administered by DTSC, to regulate hazardous wastes in California, as discussed further below. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat, and the Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities. SARA relates primarily to emergency management of accidental releases and requires annual reporting of continuous emissions and accidental releases of specified compounds that are compiled into a nationwide Toxics Release Inventory. Finally, SARA Title III requires formation of state and local emergency planning committees that are responsible for collecting material handling and transportation data for use as a basis for planning and provision of chemical inventory data to the community at large under the “right-to-know” provision of the law.

Hazardous Materials Transportation Act

Under the Hazardous Materials Transportation Act of 1975, the United States Department of Transportation (DOT), Office of Hazardous Materials Safety regulates the transportation of hazardous materials on water, rail, highways, through air, or in pipelines, and enforces guidelines created to

protect human health and the environment and reduce potential impacts by creating hazardous-material packaging and transportation requirements. It also includes provisions for material classification, packaging, marking, labeling, placarding, and shipping documentation. The DOT provides hazardous-materials safety training programs and supervises activities involving hazardous materials. In addition, the DOT develops and recommends regulations governing the multimodal transportation of hazardous materials.

Aboveground Petroleum Storage Act, and Spill Prevention, Control, and Countermeasure Rule

The Aboveground Petroleum Storage Act of 1990, and the Spill Prevention, Control, and Countermeasure (SPCC) Rule (amended 2010) of the Oil Pollution Prevention regulation (40 CFR 112) require the owner or operator of a tank facility with an aggregate storage capacity greater than 1,320 gallons to notify the local certified unified program agency (CUPA) and prepare an SPCC plan. The SPCC plan must identify appropriate spill containment measures and equipment for diverting spills from sensitive areas, and must discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and training.

Clean Water Act

The Clean Water Act (CWA) (Title 33 § 1251 et seq. of the United States Code [33 USC 1251, et seq.]) is the major federal legislation governing water quality. The CWA established the basic structure for regulating discharges of pollutants into waters of the United States (not including groundwater). The objective of the act is “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” The CWA establishes the basic structure for regulating the discharge of pollutants into waters of the United States. Responsibility for administering the CWA resides with the State Water Board and nine Regional Water Quality Control Boards (RWQCBs); the San Francisco Bay RWQCB administers the CWA for western Contra Costa County. Section 404 of the CWA regulates temporary and permanent fill and disturbance of waters of the United States, including wetlands. The United States Army Corps of Engineers (USACE) requires that a permit be obtained if a project proposes to place fill in navigable waters and/or to alter waters of the United States below the ordinary high-water mark in non-tidal waters. Section 401 of the CWA requires compliance with State water quality standards for actions within State waters. Compliance with the water quality standards required under Section 401 is a condition for issuance of a Section 404 permit. Under Section 401 of the CWA, every applicant for a permit or license for any activity that may result in a discharge to a water body must obtain a State water quality certification from the RWQCB to demonstrate that the proposed activity would comply with State water quality standards.

State

California Hazardous Waste Control Law

The Hazardous Waste Control Law is the primary hazardous waste statute in the State of California, and implements RCRA as a “cradle-to-grave” waste management system for handling hazardous wastes in a manner that protects human health and the environment and would reduce potential resulting impacts. The law specifies that generators have the primary duty to determine whether their waste is hazardous and to ensure proper management. The Hazardous Waste Control Law also establishes criteria for the reuse and recycling of hazardous waste used or reused as raw materials. The law exceeds federal requirements by mandating source reduction planning, and a much broader

requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of waste and waste management activities that are not covered by federal law.

California Health and Safety Code

The California Health and Safety Code (HSC § 25141) defines hazardous waste as a waste or combination of waste that may:

- . . . because of its quantity, concentration, or physical, chemical, or infection characteristics:
- (1) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation-reversible illness.
 - (2) Pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of or otherwise managed.

These regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management practices for hazardous wastes; establish permit requirements for hazardous-waste treatment, storage, disposal, and transportation; and identify hazardous waste that commonly would be disposed of in landfills.

Under both the RCRA and the HWCL, hazardous-waste manifests must be retained by the generator for a minimum of 3 years. The generator must match copies of the manifests with copies of manifest receipts from the treatment, disposal, or recycling facility.

In accordance with Chapter 6.11 of the California Health and Safety Code (HSC § 25404, et seq.), local regulatory agencies enforce many federal and State regulatory programs through the CUPA program, including:

- Hazardous materials business plans (HMBPs) (HSC § 25501, et seq.);
- State Uniform Fire Code (UFC) requirements (UFC § 80.103, as adopted by the State Fire Marshal pursuant to HSC § 13143.9);
- Underground Storage Tanks (USTs) (HSC § 25280, et seq.);
- Aboveground storage tanks (HSC § 25270.5[c]); and
- Hazardous-waste-generator requirements (HSC § 25100, et seq.).

Contra Costa Health Services (CCHS) Hazardous Materials Division is the CUPA for Contra Costa County. As the CUPA, CCHS enforces State statutes and regulations through the Hazardous Materials Unified Program Agency (HMUPA). The HMUPA oversees aboveground petroleum tanks; generation of hazardous materials; storage and treatment; USTs; generation of medical waste; the accidental-release prevention program; and the Local Oversight Program, which interfaces with the SWRCB and the San Francisco RWQCB on LUSTs and UST release sites. An HMBP must be submitted if a facility

ever handles any individual hazardous material in an aggregate amount equal to or greater than 55 gallons (liquids), 500 pounds (solids), or 200 cubic feet (gases). An HMBP must include:

- Details that include facility floor plans and identify the business conducted at the site;
- An inventory of hazardous materials handled or stored on the site;
- An emergency response plan; and
- A training program in safety procedures and emergency response for new employees who may handle hazardous materials, with an annual refresher course in the same topics for those same employees.

California Code of Regulations, Title 8

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations. These regulations concern the use of hazardous materials in the workplace, including requirements for employee safety training; availability of safety equipment; accident and illness prevention programs; hazardous-substance exposure warnings; and preparation of emergency action and fire prevention plans.

Cal/OSHA also enforces hazard communication program regulations, including procedures for identifying and labeling hazardous substances, and requires that safety data sheets (formerly known as material safety data sheets) be available for employee information and training programs. Cal/OSHA standards are generally more stringent than federal regulations. Construction workers and operational employees at the project site would be subject to these requirements.

California Code of Regulations, Title 8, Section 1529 authorizes Cal/OSHA to implement the survey requirements of Code of Federal Regulations Title 29 relating to asbestos. These federal and State regulations require facilities to take all necessary precautions to protect employees and the public from exposure to asbestos. Workers who conduct asbestos abatement must be trained in accordance with federal and State OSHA requirements. The Bay Area Air Quality Management District (BAAQMD) oversees the removal of regulated asbestos-containing materials (see “Asbestos Demolition, Renovation, and Manufacturing Rule” below).

California Code of Regulations, Title 8, Section 1532.1 includes requirements to manage and control exposure to lead-based paint. These regulations cover the demolition, removal, cleanup, transportation, storage, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring, and compliance to ensure the safety of construction workers exposed to lead-based material. Loose and peeling lead-based paint must be disposed of as a State and/or federal hazardous waste if the concentration of lead equals or exceeds applicable hazardous waste thresholds. Federal and State OSHA regulations require a supervisor who is certified with respect to identifying existing and predictable lead hazards to oversee air monitoring and other protective measures during demolition activities in areas where lead-based paint may be present. Special protective measures and notification of Cal/OSHA are required for highly hazardous construction tasks related to lead, such as manual demolition, abrasive blasting, welding, cutting, or torch burning of structures, where lead-based paint is present.

California Code of Regulations Title 22, Division 4.5

California Code of Regulations, Title 22, Division 4.5, contains the Environmental Health Standards for the Management of Hazardous Waste, which includes California waste identification and classification regulations. California Code of Regulations, Title 22, Chapter 11, Article 3, “Soluble Threshold Limits Concentrations/Total Threshold Limits Concentration Regulatory Limits,” identifies the concentrations at which soil is determined to be a California hazardous waste. California’s Universal Waste Rule (22 California Code of Regulations [CCR] § 66273) provides an alternative set of management standards in lieu of regulation as hazardous wastes for certain common hazardous wastes, as defined in California Code of Regulations, Title 22, Section 66261.9. Universal wastes include fluorescent lamps, mercury thermostats, and other mercury-containing equipment. Existing structures may contain fluorescent light ballasts that could contain mercury or lead. The Alternative Management Standards for Treated Wood Waste (22 CCR § 67386) were developed by the DTSC to allow for disposal of treated wood as a nonhazardous waste, to simplify and facilitate the safe and economical disposal of such waste. Chemically treated wood can contain elevated levels of hazardous chemicals (e.g., arsenic, chromium, copper, pentachlorophenol, or creosote) that equal or exceed applicable hazardous waste thresholds. The Alternative Management Standards provide for less stringent storage requirements and extended accumulation periods, allow shipments without a hazardous waste manifest and a hazardous waste hauler, and allow disposal at specific nonhazardous waste landfills.

Porter-Cologne Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California’s statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State’s waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs. The RWQCBs are required to formulate and adopt water quality control plans (also known as basin plans) for all areas of the region and establish water quality objectives in the plans. The Porter-Cologne Act sets forth the obligations of State Water Board and RWQCBs to adopt and periodically update water quality control plans that recognize and reflect the differences in existing water quality, the beneficial uses of the region’s groundwater and surface water, and local water quality conditions and problems. It also authorizes the State Water Board and RWQCBs to issue and enforce waste discharge requirements and to implement programs for controlling pollution in State waters. Finally, the Porter-Cologne Act also authorizes the State Water Board and RWQCBs to oversee site investigation and cleanup for unauthorized releases of pollutants to soils and groundwater and in some cases to surface waters or sediments.

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous-materials incidents is one part of this plan. The plan is administered by the California Governor’s Office of Emergency Services, which coordinates the responses of other agencies. The Contra Costa County Office of the Sheriff’s Emergency Services Division coordinates response to emergencies in unincorporated areas of Contra Costa County. Emergency response team members respond and work with local fire and police agencies, emergency medical providers, the California Highway Patrol (CHP), CAL FIRE, California Department of Fish and Wildlife (CDFW), and California Department of Transportation (Caltrans).

California Department of Forestry and Fire Protection

CAL FIRE has mapped fire threat potential throughout California. CAL FIRE maps fire threat based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The threat levels include no fire threat, moderate, high, and very high fire threat. Further, the maps designate Contra Costa County as the Local Responsibility Area (LRA) for the project site. Additionally, CAL FIRE produced a 2010 Strategic Fire Plan for California, which contains goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments. CAL FIRE's Office of the State Fire Marshal provides oversight of enforcement of the California Fire Code as well as overseeing hazardous liquid pipeline safety.

California Building Code

The State of California provided a minimum standard for building design through the 2016 California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2016 CBC is based on the 2015 International Building Code, but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

California Public Resources Code

The California Public Resources Code (PRC) includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors¹⁰ on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas.

These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC § 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431).

¹⁰ A spark arrestor is a device that prohibits exhaust gases from an internal combustion engine from passing through the impeller blades where they could cause a spark. A carbon trap is commonly used to retain carbon particles from the exhaust.

Regional

BAAQMD Asbestos Demolition, Renovation and Manufacturing Rule

The removal of asbestos-containing building materials is subject to the limitations of BAAQMD Regulation 11, Rule 2, “Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing.” This rule prohibits visible emissions to outside air from any operation involving the demolition of any structure containing asbestos, and sets out requirements for demolition of such structures, including a pre-demolition survey conducted by a certified professional. All friable (i.e., crushable by hand) asbestos-containing materials or non-friable asbestos-containing materials that may be damaged must be abated before demolition in accordance with applicable requirements. Friable asbestos-containing materials must be disposed of as asbestos waste at an approved facility. Non-friable asbestos-containing materials may be disposed of as nonhazardous waste at landfills that accept such wastes.

Association of Bay Area Governments Hazard Mitigation Plan

The Association of Bay Area Governments’ multijurisdictional Local Hazard Mitigation Plan for the San Francisco Bay area was updated in 2010 in partnership with the Bay Conservation and Development Commission (BCDCs). Adapting to Rising Tides Program to support local governments in the regional plan for existing and future hazards of climate change. This detailed 5-year plan identifies potential natural and human-made hazards, assesses their potential risks, and includes mitigation methods to reduce risks. The potential hazards identified in the Plan include earthquakes and liquefaction, wildfires, floods, drought, solar storms, dam or levee failure, disease outbreak, freezes, wind, heat, thunder and lightning storms, siltation, tornadoes, hazardous materials, slope failure and mudflows, and other hazards. Similarly, mitigation measures include hazard event planning, emergency preparedness coordination, education, facility upgrades, and monitoring actions.

Local

Contra Costa County Hazard Mitigation Plan

Contra Costa County and a partnership of local governments within the County have developed a Hazard Mitigation Plan (HMP) to reduce future losses resulting from disasters. Hazard mitigation is the use of long- and short-term strategies to reduce the loss of life, personal injury, and property damage that can result from a disaster. It involves planning efforts, policy changes, programs, capital projects, and other activities that can mitigate the impacts of hazards. The HMP contains the following Goals aimed at reducing the vulnerability from natural hazards within the County in a cost-effective manner:

- **Goal 1:** Save, or protect lives and reduce injury.
- **Goal 2:** Increase resilience of infrastructure and critical facilities.
- **Goal 3:** Avoid, minimize, or reduce damage to property.
- **Goal 4:** Encourage the development and implementation of long-term, cost-effective, and environmentally sound mitigation projects.
- **Goal 5:** Build and support capacity to enable local government and the public to prepare, respond, and recover from the impact of natural hazards.

Contra Costa County Emergency Operations Plan

The Contra Costa County Operational Area Emergency Operations Plan (EOP) addresses the response to emergency incidents associated with emergencies affecting Contra Costa County. The Contra Costa OA consists of the cities/towns, special districts, reclamation districts, municipal improvement districts and the unincorporated areas within the County. This plan is based on the functions and principles of the California Standardized Emergency Management System, the National Incident Management System, and the Incident Command System. It identifies how the Contra Costa County emergency operational system fits into the overall California and national risk-based, all-hazard emergency response and recovery operations plans.

Contra Costa County General Plan

The Contra Costa County General Plan establishes the following goals and policies related to hazards and hazardous materials that are related to this analysis:

Hazardous Materials Uses

- **Goal 10-I:** To provide public protection from hazards associated with the use, transport, treatment, and disposal of hazardous substances.
- **Policy 10-62:** Storage of hazardous materials and wastes shall be strictly regulated.
- **Policy 10-68:** When an emergency occurs in the transportation of hazardous materials, the County Office of Emergency Services shall be notified as soon as possible.
- **Goal 10-N:** To provide for a continuing high level of public protection services and coordination of services in a disaster.
- **Policy 10-86:** In order to ensure prompt public protection services, dwelling unit numbers shall be required to be easily seen from the street or road.

Fire Protection

- **Goal 7-AA:** To incorporate requirements for fire-safe construction into the land use planning and approval process.
- **Goal 7-AD:** To provide special fire protection for high-risk land uses and structures.
- **Policy 7-64:** New development shall pay its fair share of costs for new fire protection facilities and services.
- **Policy 7-66:** Sprinkler systems may be required in new residential structures, where necessary to protect health, safety and welfare.
- **Policy 7-81:** All structures located in Hazardous Fire Areas, as defined in the Uniform Fire Code, shall be constructed with fire-resistant exterior materials, such as fire safe roofing, and their surroundings are to be irrigated and landscaped with fire-resistant plants, consistent with drought resistance and water conservation policies.
- **Implementation Measure 7-at:** The Conservation and Development Department shall include fire agency code requirements requested by the districts as advisory notes to the applicant within proposed conditions of project approval when the Planning Agency is considering subdivisions, development plans, use permits and other entitlement requests.
- **Implementation Measure 7-au:** Fire protection agencies shall be afforded the opportunity to review projects and submit conditions of approval for consideration to determine whether:
 - There is an adequate water supply for fire fighting

- Road widths, road grades and turnaround radii are adequate for emergency equipment; and
- Structures are built to the standards of the Uniform Building Code, the Uniform Fire Code, other State regulations, and local ordinances regarding the use of fire-retardant materials and detection, warning and extinguishment devices.
- **Policy 10-89:** Every high-rise building shall be designed and constructed to provide for the evacuation of occupants and/or for the creation of a safe environment in case of a substantial disaster, such as a severe earthquake or fire.

Contra Costa County Ordinance Code

Division 450, Hazardous Materials and Wastes, of the Contra Costa County Ordinance Code provides regulations regarding hazardous material response plans, inventories, underground storage, and risk management. In part, this County Ordinance Code requires that any business that handles a specific quantity of hazardous materials establish a business plan for emergency response to a release or threatened release of a hazardous material.

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous-materials incidents is one part of this plan. The plan is administered by the California Governor’s Office of Emergency Services, which coordinates the responses of other agencies. The Contra Costa County Office of the Sheriff: Emergency Services Division coordinates response to emergencies in the County. Emergency response team members respond and work with local fire and police agencies, emergency medical providers, the California Highway Patrol, CAL FIRE, CDFW, and Caltrans.

3.8.4 - Impacts and Mitigation Measures

Significance Criteria

According to 2019 CEQA Guidelines Appendix G, to determine whether impacts related to hazards and hazardous materials have significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, create a significant hazard to the public or the environment?

- e) Be 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 and result in a safety hazard or excessive noise for people residing or working the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

Approach to Analysis

This evaluation focuses on whether the project would result in changes to the physical environment that would cause or exacerbate adverse effects related to the use, transportation, disposal, accidental release, or emission of hazardous materials. The evaluation also includes a determination of whether the changes to the physical environment caused by the project or variant would impair or interfere with emergency response plans, or expose people or structures to increased wildfire hazards or dangers from overhead power lines. For the evaluation of potential construction-related and operational impacts from existing hazardous materials in project site soils, sediments, groundwater, surface water, and structures, the results of environmental sampling are compared to identified screening levels. The following analysis is based, in part, on information provided by the Contra Costa General Plan, the project-site-specific Phase I ESA, and State of California websites.

Additional analyses regarding hazards and health risk related to emissions of toxic air contaminants (TACs) are addressed in Section 3.2, Air Quality. Flooding and inundation hazards, including those related to erosion and mudflow, are addressed in Section 3.9, Hydrology and Water Quality. Traffic-related safety hazards are addressed in Section 3.15, Transportation. Other geotechnical-related safety hazards, such as earthquakes, are addressed in Section 3.6, Geology and Soils. Finally, excessive noise exposure with respect to airport use or air traffic is addressed in Section 3.11, Noise.

Specific Thresholds of Significance

For purposes of this analysis, the following thresholds are used to evaluate the significance of hazards and hazardous materials impacts resulting from implementation of the project.

- Routine transport, use, and/or disposal of hazardous materials.
- Regular transport of hazardous materials to/from the project site on an unsuitable road or use of highly volatile hazardous materials.
- Location within 0.25-mile of an existing or proposed school in conjunction with hazardous emissions or handle hazardous materials, waste, or substances.
- Listing on hazardous materials site list and distance of project site to listed hazardous material sites. These lists include the following:
 - The California Environmental Protection Agency (Cal/EPA)
 - California Facility Inventory Database (CA FID) UST and State Water Efficiency and Enhancement Program (SWEEP)

- Hazardous Waste Tracking System (HAZNET)
 - California Department of Toxic Substance Control (DTSC EnviroStor and BAAQMD)
 - State Water Board GeoTracker regulated facilities databases for files related to possible Recognized Environmental Conditions (RECs)
- Location proximate to an airport and reduction of safety of people working or residing in the area.
 - Impairing implementation of or interference with an adopted emergency response plan or emergency evacuation plan via blockage of an evacuation route or provision of only one access point for emergency vehicles.
 - Placement of housing or offices in a designated wildland fire urban interface zone or proximate to unmanaged open space area that is susceptible to wildfires.

Impact Evaluation

Routine Transport, Use, or Disposal of Hazardous Materials

Impact HAZ-1: The project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction

During construction, the project would be expected to involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints. However, the duration of these actions would only be temporary and limited to the period of construction. Furthermore, the project would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local regulations that would reduce and limit the associated risks. Any handling, transporting, use, or disposal would comply with applicable laws, policies, and programs set forth by various federal, State, and local agencies and regulations, including the EPA, RCRA, Caltrans, and Contra Costa Hazardous Materials Program. Required compliance with applicable hazardous material laws and regulations would ensure that construction-related hazardous material use would not result in significant impacts.

Additionally, site reconnaissance identified the presence of potentially hazardous materials or conditions that would need to be addressed on the project site prior to the commencement of project construction. The project would demolish the existing single-family residence and attached garage located at 3018 Del Hombre Lane and the existing single-family residence located at 112 Roble Road. Given the age of the existing structures on the property, it is conceivable that asbestos-containing materials and lead-based paint may exist within the structure. Removal of these existing buildings could potentially create a significant hazard to the construction workers on the project site. This represents a potentially significant impact.

However, implementation of Mitigation Measure HAZ-1 that requires the applicant to conduct asbestos and lead paint surveys prior to demolition activities and safely remove and dispose of any such materials in accordance with State standards would ensure impacts are reduced to a less-than-significant level.

The Phase I ESA found that the project site was used as an orchard from at least the 1930s until the 1950s. Pesticides or other agricultural chemicals might have been applied to the project site at that time, and could be present in near-surface soils on the project site. These chemicals are persistent in the environment and toxic concentrations may remain many years after application. A Phase II ESA was conducted to determine if pesticides are present in the near-surface soil at the property. The initial field sampling activities indicated detectable concentrations of metallic analytes and organochlorine pesticides in excess of respective residential screening levels in the upper 1-foot of the property. Additional subsurface soil sampling was performed to further delineate the vertical extent of impact to soils on the property. Review of the laboratory test results found detectable concentrations of several metallic analytes, including arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. The reported metal concentrations were either below the applicable residential screening levels and/or background concentrations observed in the San Francisco Bay Area. Detectable concentrations of the pesticide dieldrin, were reported for samples S5 and S8. Additionally, sample S8 exhibited detectable concentrations of the pesticides DDE and DDT. However, reported concentrations of target analytes were below the applicable residential screening levels.¹¹ Thus, exposure risk related to target analytes is considered less than significant.

Therefore, overall construction impacts related to public hazard risk as a result of the hazardous materials transport, use, or disposal would be less than significant with mitigation.

Operation

During project operations, hazardous materials may be handled on the project site. Because of the nature of the project, hazardous materials used on-site may vary but would likely be limited to small quantities of fertilizers, herbicides, pesticides, solvents, cleaning agents, and similar materials used for daily residential operations and maintenance activities. These types of materials are common for residential developments such as the project and represent a low risk to people and the environment when used as intended. Further, compliance with applicable plans and regulations, including the Contra Costa County General Plan policies, would provide public protection from hazards associated with the use, transport, treatment, and disposal of hazardous substances. Therefore, operational impacts related to public hazard risk as a result of hazardous materials transport, use, or disposal would be less than significant.

Level of Significance Before Mitigation

Potentially Significant

Mitigation Measures

MM HAZ-1 Conduct Asbestos and Lead Surveys Prior to Demolition

Prior to the issuance of demolition permits for the two existing residences and associated structures, the applicant shall retain a licensed professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials and lead-based paint, and these materials shall be characterized for asbestos and lead by a reliable

¹¹ ENGEO. Phase II Environmental Site Assessment, page 2. May 24, 2018.

method. All activities involving asbestos-containing materials and lead-based paint shall be conducted in accordance with governmental regulations, and all removal shall be conducted by properly licensed abatement contractors.

Level of Significance After Mitigation

Less Than Significant with Mitigation

Hazardous Materials Upset Risk

Impact HAZ-2: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Construction

Construction activity would be expected to involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints. However, the duration of these actions would only be temporary and limited to the period of construction. In addition, the use of these materials would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local regulations that would limit the use of hazardous materials and reduce the associated risks of exposure. Therefore, construction impacts related to hazardous materials upset risk would be less than significant.

Operation

The project proposes an apartment building consisting of 284 residential units. As such, the project would not be expected to include industrial or retail development that involves hazardous materials such as gas stations, paint stores, or auto parts stores. Unlike industrial or retail facilities, residential development does not involve the type or quantity of hazardous materials that could pose a significant environmental accident.

Small quantities of hazardous materials would be used on site during operation of the project, but not in sufficient quantities to create significant hazard in the unlikely event of upset or accident. These types of materials are common in such residential projects and represent a low risk to people and the environment when used as intended, and would not be expected to result in the release of hazardous materials into the environment. As such, operational impacts related to hazardous materials upset risk would be less than significant.

Level of Significance

Less Than Significant

Hazardous Emissions Proximate to a School

Impact HAZ-3: **The 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.**

Construction

The project site is not located within 0.25-mile of an existing or proposed school. The closest school, Bancroft Elementary, is located approximately 0.82 mile to the east. Construction activity would be expected to involve the transport, use, and disposal of hazardous materials, such as diesel fuels, aerosols, and paints. However, the duration of these actions would only be temporary and limited to the period of construction. In addition, the use of these materials would be subject to the Hazardous Materials Transportation Act, California Public Resources Code, and other State and local regulations that would limit the use of hazardous materials and reduce the associated risks of exposure. As such, the project would not emit hazardous emissions or handle hazardous materials within 0.25-mile of a school. Therefore, construction impacts related to hazardous emissions proximate to a school would be less than significant.

Operation

The project site is not located within 0.25-mile of a school. In addition, the project would not be expected to include industrial or retail development that involves hazardous materials such as gas stations, paint stores, or auto parts stores. Unlike industrial or retail facilities, residential development does not involve the type or quantity of hazardous materials that could pose a significant environmental accident. Therefore, operational impacts related to hazardous emissions proximate to a school would be less than significant.

Level of Significance

Less Than Significant

Government Code Section 65962.5 Sites

Impact HAZ-4: **The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.**

Construction

Impacts related to locating a project on a hazardous materials site per Government Code Section 65962.5 are limited to operational impacts. No respective construction impacts would occur.

Operation

A regulatory records review of the Cal/EPA, State Water Board, CA FID UST and SWEEPS, HAZNET, DTSC EnviroStor, BAAQMD, and GeoTracker regulated facilities databases for files related to possible RECs was conducted for the project site. The results are compiled in the Phase I ESA included as Appendix F. Based on the findings of this assessment, no RECs, no historical RECs, and no controlled RECs were identified for the project site. Therefore, impacts related to potential location on a hazardous materials site and, thus, creating a hazard to the public or environment would be less than significant.

Level of Significance

Less Than Significant

Proximity to Airport Safety Hazard

Impact HAZ-5: The project would not be 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, and result in a safety hazard or excessive noise for people residing or working in the project area.

Construction

Impacts related to exposure of people to safety hazards or excessive noise in proximity to an airport are limited to operational impacts. No respective construction impacts would occur.

Operation

As part of operation, the project would not be located within an airport land use plan or within 2 miles of a public airport. The closest public airport, Buchanan Field, is located approximately 3.5 miles to the north of the project site. At this distance, the project is not located within an airport land use plan or within 2 miles of a public airport. Therefore, no impact related to exposure of people to safety hazards or excessive noise in proximity to an airport would occur.

Level of Significance

No Impact

Emergency Response and Evacuation

Impact HAZ-6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Construction

During construction, it is expected that construction equipment and vehicles would be accessing and leaving the project site, which in turn could potentially impede evacuation or emergency vehicle access. However, as discussed under Impact TRANS-5 in Section 3.15, Transportation, the project would result in less than significant impacts related to emergency vehicle access. In addition, the project would comply with the Contra Costa County Emergency Plan, ensuring efficient response to emergency incidents associated with emergencies affecting Contra Costa County. Therefore, construction impacts related to emergency response and evacuation would be less than significant.

Operation

The Contra Costa County Operational Area EOP outlines general procedures in response to emergency crises, such as evacuations. Included in this Plan is information regarding evacuations and shelter-in-place orders as well as who has the authority to issue these orders. The main arterial roads into and out of the project vicinity would be Treat Boulevard in the east-west direction and Ygnacio Valley Road and Interstate 680 (I-680) in the north-south direction. These roads would act as the main evacuation routes into and out of the project vicinity. With adherence to the

procedures of the Contra Costa County Operational Area EOP, the project would not conflict with the Contra Costa County Operational Area EOP or General Plan safety policies.

As indicated in Section 3.13, Public Services, the project would be adequately served by police and fire services. The project would not create a permanent increase in population unaccounted for in the Contra Costa County General Plan that could lead to overwhelming call for services. In addition, the project site would be designed in accordance with the County's standards to accommodate emergency vehicle access by providing two points of access that would be available to emergency vehicles. Therefore, operational impacts related to emergency response and evacuation would be less than significant.

Level of Significance

Less Than Significant

Wildland Fires

Impact HAZ-7: **The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

Construction

Impacts related to wildland fire hazard risks are limited to operational impacts. No respective construction impacts would occur.

Operation

As indicated by the Contra Costa County General Plan, fire hazards present a considerable problem throughout the County. The project site is located in a County island and is surrounded to the east, west, and south by the City of Walnut Creek, to the northeast by the City of Concord, and to the northwest by the City of Pleasant Hill. Although the project site currently contains trees, some of which are proposed for removal, the project site is located in an urbanized area and is not surrounded by woodlands or vegetation that could provide fuel load for wildfire.

According to CAL FIRE, the project site is not located in a Severe or Very High Hazard Severity Zone. The BAAQMD monitors the Bay Area's air quality at a number of stations, and the closest station to the project site is located in Concord, approximately 2.24 miles to the east. According to the BAAQMD, the average wind speed for the City of Concord varies month to month and ranges from 2 to 5 miles per hour.¹² Given that the project site is not located on or near steep terrain surrounded by natural vegetation or consistently experiences high winds, the project site would not be prone to wildfires.

The proposed removal of several trees from the project site would reduce the site's existing fuel load. Furthermore, compliance with applicable State and local plans and regulations would decrease the risk of impacts related to wildland fire hazards. Specifically, Contra Costa General Plan policies incorporate requirements for fire-safe construction into the land use planning and approval process and ensure special fire protection for high-risk land uses and structures. Contra Costa County also

¹² Bay Area Air Quality Management District (BAAQMD). Air Monitoring Data. Accessed September 28, 2018. <http://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data?DataViewFormat=yearly&DataView=met&StartDate=12/11/2017&ParameterId=203&StationId=4902>

implements the Contra Costa County Operational Area EOP, which addresses the response to emergency incidents associated with emergencies affecting Contra Costa County. Furthermore, as indicated in Section 3.13, Public Services, the project would be adequately served in terms of fire protection services by the CCCFPD. Finally, project structures would be required to comply with the California Fire Code with regard to emergency access and types of building materials. Therefore, impacts related to wildland fire risk would be less than significant.

Level of Significance

Less Than Significant

3.8.5 - Cumulative Impacts

The geographic scope of the cumulative hazards and hazardous materials cumulative analysis is the project vicinity or roughly the central portion of Contra Costa County. The cumulative projects included in this analysis are those listed in Table 3-1 as well as the project.

Hazardous Materials Exposure Risk

In general, exposure to hazardous materials may cause localized adverse effects. A combination of federal, State, and local regulations limit or minimize the potential for exposure to hazardous materials. Development listed in Table 3-1 (See, Chapter 3.0: Environmental Setting) consists predominantly of residential development with some childcare facilities, library components, commercial retail, hotel uses, and road improvements. The types and sizes of development anticipated in the project area would not involve large quantities of hazardous materials or activities that transport or handle hazardous materials. In addition, there are no land uses in the vicinity of the project site that are known to utilize large quantities of hazardous materials or involve hazardous activities or are located on a Government Code Section 65962.5 site.

However, cumulative projects listed in Table 3-1 may include demolition of existing structures that have the potential to contain hazardous building materials. Building materials may contain asbestos and lead-based paint. To address potential release of hazardous materials, the County would assess structures and impose standard mitigation (required testing, removal, and proper disposal) to minimize release prior to any demolition. Therefore, there would be a less than significant cumulative impact related to exposure to hazardous materials.

Hazards and Emergency Response

The central portion of Contra Costa County contains main arterial streets that would act as the most likely evacuation routes out of the County and provide access to I-680 and State Highway 4. The central portion of Contra Costa County is not proximate to an airport but is an urbanized area that is adjacent to wildlands. The cumulative projects, listed in Table 3-1, would result in predominantly in-fill development in the City of Walnut Creek, City of Pleasant Hill, and Contra Costa County and would not significantly increase need for emergency services, including related to wildfires. Cumulative construction in unincorporated Contra Costa County would be required to demonstrate consistency with the Contra Costa County applicable codes, ordinances, and policies related to hazards and emergency response. Cumulative construction in the City of Walnut Creek would be

required to demonstrate consistency with the City of Walnut Creek applicable codes, ordinances, and policies related to hazards and emergency response. Cumulative construction in the City of Pleasant Hill would be required to demonstrate consistency with the City of Pleasant Hill applicable codes, ordinances, and policies related to hazards and emergency response. Furthermore, all construction would adhere to the California Building Codes that are designed to minimize the potential for uncontrolled fires. Once development is proposed, the County assesses the needs for fire protection services and informs efforts to improve or expand needed facilities.

As listed in Table 3-1, development in the central portion of the County would result in predominantly residential development. The types of development would increase the population. However, all development would comply with emergency access requirements as a project condition. Furthermore, the development in Contra Costa County would not result in permanent road closures, not impede an established emergency access route, or interfere with emergency response requirements. As such, there would be a less than significant cumulative impact associated with hazards and emergency response.

Level of Cumulative Significance

Less Than Significant

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