

## 4.9 HAZARDS AND HAZARDOUS MATERIALS

This section describes potential hazards and hazardous materials related to the project. The information in this section is based on the following reports:

- The Environmental Data Review (EDR) and accompanying Radius Map Report compiled by Environmental Data Resources, Inc. (see **Appendix J**)
- Agricultural Assessment prepared by ENGEO in July 2008 (see **Appendix K.1**)
- Agrichemical Impact Assessment prepared by ENGEO in November 2015 (see **Appendix K.2**)
- Underground Storage Tank Remediation Report prepared by ENGEO in October 2009 (see **Appendix L**)
- Phase I Environmental Site Assessment prepared by ENGEO in November 2015 (see **Appendix M**)
- United States Geological Survey topographical maps
- The Contra Costa County General Plan 2005-2020 (General Plan)

These documents are available for review at the Contra Costa County (County), Department of Conservation and Development, Community Development Division, 30 Muir Road, Martinez, California.

In response to the Notice of Preparation submitted for the project, residents within the surrounding neighborhood expressed concern regarding potential hazardous materials exposure related to previous agricultural use of the project site. This issue is addressed below.

### 4.9.1 EXISTING CONDITIONS

The project site contains a residential estate, which was constructed between 1912 and 1914, while the caretaker's quarters, pool house, barn, and office complex were constructed in subsequent years. Topographic maps of the project area (1897, 1959, and 2015) by the United States Geological Survey (USGS) were reviewed to determine historical land uses in the project vicinity. Based on a review of these resources, residential development was present in the project vicinity by 1959. The project site was used for agricultural purposes in the early 1950s, and produced walnuts from the two orchards located on the northern and southeastern borders of the property; however, both orchards have been out of production for at least 20 years.

## Underground Storage Tanks

Records from the State and Tribal Underground Leaking Storage Tanks List indicate that two 500-gallon underground storage tanks (USTs) were removed from the project site southwest of the carport structure (ENGEO, 2009). These USTs were removed in February 2000 under the oversight of the Contra Costa County Health Services Department (CCCHSD) (ENGEO, 2008). A groundwater sample collected during this excavation contained elevated levels of gasoline, methyl tertiary butyl ether (MtBE), and benzene. No remedial action occurred, and the pit was backfilled with imported aggregate.

In 2008, ENGEO performed an assessment of the former UST site, and detected gasoline, diesel, toluene, ethylbenzene, total xylenes, and MtBE in soil. Groundwater was not encountered in this investigation. ENGEO concluded that groundwater reported during the UST removal consisted of a perched zone of water associated with the UST basin, and does not indicate the presence of a larger groundwater basin beneath the project site. Following excavation of the site in November 2008 and the removal of 25 cubic yards of contaminated soil, soils in the UST vicinity were deemed suitable for residential uses (ENGEO, 2009). The Regional Water Quality Control Board (RWQCB) issued a No Further Action Letter for this UST site on November 30, 2010 (RWQCB, 2010). Refer to **Appendix L** for ENGEO's UST Remediation report.

In addition to the USTs at the project site, the EDR search of the Contra Costa County Site List revealed that there was a third UST located at 172 La Sonoma Way, 0.234 mile from the project site (EDR, 2014). The EDR lists this UST as "Inactive," and a residential property currently exists where the tank may be located. Refer to **Appendix J** for the full text of the EDR.

## Wildland Fire Hazards

The entire project area is outside of the Local Response Area "Very High Fire Hazard Severity Zone" (VHFHSZ) designated by the California Department of Forestry and Fire protection (CAL FIRE). The project site falls within the Non-VHFHSZ area, where the probability of naturally caused fires and fire-related hazards are low (Contra Costa County, 2009).

## Pesticide Use

Due to the past agricultural use of the property, an agricultural assessment of the two non-producing walnut orchards was prepared for the project site in July 2008 (see **Appendix K.1**). The assessment involved the sampling and laboratory analysis of 13 soil samples taken from the orchard area within one of the two Assessor's Parcel Numbers (APN) within the project site: APN 198-170-006-3. This analysis detected concentrations of organochlorine pesticides within this APN at concentrations well below the California Health Screening Levels (CHHSLs) for land

residential uses. In addition, arsenic and lead were detected in soils within this APN, but were determined to exist at concentrations consistent with the background soil concentration for the State of California and were therefore deemed safe. These findings were reconfirmed by an Agrichemical Impact Assessment conducted by ENGEO in November, 2015 (see **Appendix K.2**).

## 4.9.2 REGULATORY SETTING

### Federal

The Environmental Protection Agency (EPA) is responsible for enforcing regulations related to hazardous materials and wastes, including evaluation and remediation of contamination. The EPA works collaboratively with other agencies to enforce materials handling and storage regulations and site cleanup requirements. The Department of Transportation (DOT) is authorized to regulate safe transport of hazardous materials.

Primary Federal laws pertaining to hazardous materials and wastes include the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Responsibility, Compensation, and Liability Act of 1980 (CERCLA). 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. CERCLA delineates the liability for contamination between current property owners and others. The Hazardous Materials Transportation Act is administered by the DOT via its performance of inspections and training, and its issuance of transportation guidelines. The Federal government delegates enforcement authority to the states.

#### *Project Consistency Analysis*

Activities associated with construction and operations of the project will be conducted in accordance with applicable Federal laws.

### State

State agencies that regulate hazardous materials and contamination include the Department of Health Services (DHS), the Department of Toxic Substances Control (DTSC) and the RWQCB. The DTSC administers EPA's Office of Environmental Health Hazard Assessment (which establishes the CHHSLs regarding public health effects of soil contamination), while the RWQCB administers State water quality standards for surface and groundwater. Lead responsibility for remediation depends on the proposed use of a parcel, the character of waste contaminants, and the need for site monitoring. Transport of hazardous materials is administered by the

Department of Transportation (Caltrans) and enforced by the California Highway Patrol (CHP).

Relevant State laws that address soil and water pollution, hazardous materials storage, handling, transport and disposal include 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).

#### *Project Consistency Analysis*

Relevant State regulatory requirements will be implemented for the project at the time of preliminary development plans. Due to the fact that the project does not propose land uses likely to utilize hazardous materials and/or petroleum products, the State laws that regulate the storage, handling, transport, and disposal of hazardous materials are not anticipated to be applicable to project operations.

## **Local**

The CCCHSD requires a permit for destruction of any abandoned wells and septic tanks. If the existence of such facilities are known in advance or are discovered during construction or other activities, these should be clearly marked, kept secure, and destroyed or abandoned pursuant to CCCHSD requirements.

## **Contra Costa County General Plan**

The Safety and the Public Facilities/Services elements of the General Plan contain the following relevant policies associated with hazards and hazardous materials.

### *Safety Element*

- 10-61: Hazardous waste releases from both private companies and from public agencies shall be identified and eliminated.
- 10-62: Storage of hazardous materials and wastes shall be strictly regulated.
- 10-63: Secondary containment and periodic examination shall be required for all storage of toxic materials.

### *Public Facilities/Services Element*

- 7-80: Wildland fire prevention activities and programs such as controlled burning, fuel removal, establishment of fire roads, fuel breaks, and water supply shall be encouraged to reduce wildland fire hazards.

#### *Project Consistency Analysis*

The project would be in compliance with the General Plan policies related to hazards and hazardous materials. As discussed in this subsection, the previously existing UST has been removed in accordance with CCCHSD policies and General Plan policy 10-61. In regard to General Plan policies 10-62 and 10-63, it is not anticipated that toxic substances would be stored onsite. The project site is also not

located in an area typically associated with wildfires. Though the project site was previously utilized for agricultural purposes, soil from the project site was tested for agricultural contaminants and did not exceed EPA screening thresholds (see **Appendix K.1** and **Appendix K.2**).

### 4.9.3 IMPACTS AND MITIGATION MEASURES

#### Significance Criteria

Appendix G of the CEQA Guidelines identifies environmental issues a lead agency can consider when determining whether a project could have significant effects on the environment. The project would have a significant impact 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 one-quarter mile of an existing or proposed school.
- 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 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 two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation system.
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urban areas or where residences are intermixed with wildlands.

## Discussion of No Impacts

**For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

The project is located approximately 12 miles southeast of the Buchanan Airport. A review of the Contra Costa County Airport Land Use Compatibility Plan indicates that the project site is not located within the airport sphere of influence (County Airport Land Use Compatibility Plan, 2000). Therefore, implementation of the project would not result in a safety hazard for construction workers or future residents. No impact would occur.

**For a project in the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

The Little Hands private airstrip, the nearest private airstrip, is located approximately 2 miles south of the project site in the San Ramon area. The project does not include any towers or other vertical obstructions that would extend beyond the existing height of surrounding structure or topography, and does not represent a unique hazard to the operations of this airstrip. No impact would occur.

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

The project would not result in any substantial modification to existing public roadways that would impair emergency access in the vicinity of the project site. As described in **Chapter 3.0, Project Description**, a 20-foot-wide paved emergency vehicle access road (EVA) would be constructed between Lots 5 and 6, connecting the existing Ironwood Place (terminating at the northwest project site boundary) to the proposed extension of Ironwood Place (see **Figure 3-4**). An 8-foot high EVA gate attached to an 8-foot fence would be installed on the common property line between the new project and the existing Ironwood Place. Thus, the project would not impair implementation of, or physically interfere with, an adopted emergency response plan, or emergency evacuation system. No impact would occur.

**Would the project 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 create a significant hazard to the public or the environment?**

A review of regulatory databases found that the project site was included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 as a UST site. These USTs were removed in February 2000, as was more extensively

discussed above and in **Appendices K-M**. Subsequent excavation in November 2008 removed 25 cubic yards of contaminated soil, and this case was closed in November 2010 by the RWQCB. No impact would occur.

## **Discussion of Less-than-Significant Impacts**

### **Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

The closest school in the project vicinity is Rancho Romero Elementary School located 0.3 mile north of the project site. Given the distance of the school from the project site, there are no anticipated impacts associated with the potential emission of, or exposure to, hazardous materials, substances, or wastes. Additionally, with compliance to local, State, and Federal regulations, as they pertain to the handling and disposal of hazardous materials and wastes, impacts to existing or proposed schools in the project vicinity would be reduced to a less-than-significant level.

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

During construction and grading, diesel fuels, solvents, and similar substances would be transported to and used at the project site related to the operation and maintenance of heavy construction equipment. The transport and use of such materials would be for a short-term duration and would be limited to the quantities required for construction and grading. No significant impact would result from the transport or use of such materials over the construction and grading period. The transport of such materials is overseen by Federal and State regulators to ensure public safety.

The proponent proposes a project that would not entail the routine use, transport, or disposal of hazardous materials as part of its day-to-day operations. No substantial quantities of hazardous materials would be stored on-site during operation, save for small amounts of common cleaning and landscaping products that are typically found in most residences, commercial buildings, and institutional facilities. Given the above, potential impacts associated with the use, transport, and storage of hazardous materials would be less than significant.

### **Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urban areas or where residences are intermixed with wildlands?**

The project site is bounded by residential land uses to the north, northeast, southeast, and east. Lands west of the project site are designated as open space.

The General Plan does not identify the project site as a high-risk zone for wildland fires (Contra Costa County, 2009), though the property lies within a State Responsibility Area and is in a Fire Hazard Severity Zone designated as “high.” Responsibility for fire protection has been transferred to the San Ramon Valley Fire Protection District (SRVFPD). The SRVFPD would require increased fire flow, fire hydrants, and adequate access roads designed to accommodate fire engines, which have been incorporated as elements of project design.

As noted in **Section 3.0, Project Description**, 100 feet of defensible space will be maintained between the project and the surrounding natural area consistent with California Public Resources Code 4291. The Homeowners Association will be responsible for reducing the amount of fuel within 100 feet of structures through annual mowing, grazing, pruning lower limbs from trees, and removing dead vegetation. Additionally, the Proposed Vesting Tentative Map includes a buffer zone (Parcel C, described in **Chapter 3.0, Project Description**) which serves as a 3.7-acre fire break located between the residential units and the open space area. This impact would be less than significant.

## Discussion of Significant Impacts

**Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

### Agrichemicals

**Impact HAZ-1: Soils within portions of the project site could contain residual agrichemicals (Less than Significant with Mitigation).**

The Agrichemical Impact Assessment determined that residual soil contamination levels are below applicable EPA screening thresholds for APN 198-170-006, and that this portion of the project site is safe for residential development (ENGEO, 2015a). In addition, ENGEO confirmed that residually-contaminated soil would not pose an impact to nearby residents if mobilized as airborne dust (ENGEO, 2017).

However, due to previous agricultural uses of the project site, this report has conservatively determined that portions of APN 198-170-008 proposed for residential development may contain elevated levels of agrichemicals that may endanger construction workers or future residents. Implementation of **Mitigation Measure HAZ-1** would reduce impacts related to residual agrichemicals.

**Mitigation Measure HAZ-1:** Prior to issuance of any demolition, grading, or building permit, a site evaluation will investigate for agrichemical contamination on portions of APN 198-170-008 proposed for residential development. Soil samples will be collected and tested for organochlorine pesticides, lead, and

arsenic by a qualified professional to assess potential environmental impacts from past agricultural practices. Concentrations of agricultural contaminants will be compared to applicable EPA screening levels for residential development. The project applicant will be required to submit a comprehensive report to the County, signed by a qualified environmental professional, documenting the presence or lack of agrichemicals on APN 198-170-008. If this assessment finds presence of such chemicals, the project applicant will create and implement a remediation plan that ensures workers and future residents are not exposed to concentrations in excess of applicable EPA screening levels and risks associated with these agrichemicals. Potential safety measures could include soil removal and treatment or protective work attire requirements for construction workers.

**Significance after Mitigation:** With implementation of **Mitigation Measure HAZ-1**, potential agricultural contaminants on the project site would be investigated and, if necessary, remediated. This impact would be less than significant.

## Hazardous Building Materials

### **Impact HAZ-2: Demolition of existing structures on the site could result in the release of lead, asbestos, and other contaminants (Less than Significant with Mitigation).**

Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable Federal regulations regarding hazardous air pollutants, including asbestos. The Bay Area Air Quality Management District is vested with authority to regulate airborne pollutants through both inspection and law enforcement, and must be notified 10 days in advance of any proposed demolition or abatement work. The U.S. Occupational Safety and Health Administration require that asbestos be handled by properly certified professionals.

Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers to provide strength and fire resistance. Because of the age of the existing structures on the estate, hazardous materials such as lead based paint (LBP) and asbestos could be present, and demolition of these structures therefore has the potential to release lead particles, asbestos fibers, and/or other hazardous materials that could be inhaled by construction workers and the public. In addition, other common items such as electrical transformers, fluorescent lighting, electrical switches, heating/cooling equipment, and thermostats can contain hazardous materials.

The presence of hazardous building materials within existing structures on the project site represents a potentially significant impact. Implementation of **Mitigation Measure HAZ-2** would reduce impacts related to these materials.

***Mitigation Measure HAZ-2:*** Prior to issuance of any demolition, grading, or building permit, the project applicant shall submit a comprehensive report to the County, signed by a qualified environmental professional, documenting the presence or lack of asbestos, lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or Federal law. If this assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to ensure workers are not exposed to contaminants in excess of OSHA and other applicable State and Federal standards and associated risks associated with hazardous materials during demolition, renovation of affected structures, transport, and disposal.

**Significance after Mitigation:** With implementation of **Mitigation Measure HAZ-2**, potentially hazardous building materials within structures on the project site would be investigated and, if necessary, remediated. This impact would be less than significant.

#### 4.9.4 CUMULATIVE IMPACTS

The cumulative setting for Hazards and Hazardous Materials includes the project and the three proposed developments within a 1-mile radius of the project site (see **Chapter 4.0, Setting, Impacts and Mitigation Measures**). These developments include residential subdivisions and a church expansion, and their implementation, when considered cumulatively, would not have a significant cumulative impact to hazards and hazardous materials.

According to the General Plan Impacts and Mitigation Summary, new developments generate potential significant impacts related to risk of accidental release of hazardous materials associated with heavy industry and other land uses requiring the use, transport, and storage of hazardous materials. Additionally, any new residential developments would increase the number of people in proximity to these uses thereby increasing their risk of exposure. Although not specifically assumed in the General Plan, the three cumulative projects are residential developments, and the last is a church expansion. These project types do not routinely involve the use of hazardous or acutely hazardous materials, and would not represent a new significant hazard to the public or the environment that was not considered in the General Plan.

Additionally, hazardous materials are strictly regulated by local, State, and Federal laws specifically to ensure that they do not result in a gradual increase to toxins in the environment. The County general plan includes policies that reinforce these regulations by requiring construction and operation pursuant to applicable

standards and regulations, submittal of hazardous materials business plans, risk management and prevention program information, secondary containment, and creation of buffer zones for adjacent development. Any past, present, or future developments would have to adhere to these policies as part of the development review and construction permitting process.

All of the projects listed in **Table 4-1** of **Chapter 4.0, Setting, Impacts, and Mitigation Measures**, of this draft environmental impact report are consistent with the land use designations identified in the General Plan and were therefore assumed as part of the analysis contained in the General Plan. Additionally, the project includes **Mitigation Measures HAZ-1** and **HAZ-2** which would reduce impacts related to hazards and hazardous materials are at a less-than-significant level. Given this, no cumulative impact would occur.

## 4.9.5 REFERENCES

- Contra Costa County, 2005. *General Plan EIR Impacts and Mitigation Summary*. Available: [http://www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/eis\\_eir\\_content/eis\\_eir/Appendix\\_D.pdf](http://www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/eis_eir_content/eis_eir/Appendix_D.pdf). Accessed December 29, 2015.
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