

3.10 HAZARDS AND HAZARDOUS MATERIALS

3.10.1 INTRODUCTION

This section describes existing hazards and hazardous materials conditions within and around the project site, including surrounding properties; summarizes relevant regulations and policies; and analyzes anticipated effects associated with hazards and hazardous materials under the Proposed Action and each alternative.

The Applicant has put forth a conceptual compensatory wetland mitigation plan that includes wetland restoration activities at three off-site mitigation properties. Since the mitigation plan is currently conceptual in nature, the specifics of grading activities associated with wetland restoration are not available. Therefore, temporary, short-term effects with respect to hazards and hazardous materials associated with wetland mitigation grading activities cannot be estimated. Furthermore, since no housing/commercial or other development would occur on any of the three mitigation properties, no long-term impacts with respect to hazards and hazardous materials would occur as a result of wetland restoration. Thus, the mitigation sites are not discussed further in this section.

Sources of information used in this analysis include:

- Amoruso Ranch Specific Plan (ARSP) EIR prepared by the City of Roseville (City of Roseville 2016a);
- City of Roseville General Plan 2035 (City of Roseville 2016b); and
- Phase I Environmental Site Assessment (ESA) prepared by ENGEO Incorporated (ENGEO 2006).

3.10.2 AFFECTED ENVIRONMENT

For the purposes of this analysis, the term “hazards” refers to risk associated with exposure to hazardous materials, proximity to high-voltage transmission lines, exposure to electromagnetic fields, or exposure to recycled water. Potential hazards related to toxic air contaminants are discussed in **Section 3.3, Air Quality**.

Hazardous material is defined in different ways, depending on different laws and regulations administered by the U.S. Environmental Protection Agency (USEPA), the Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation (U.S. DOT), and the U.S. Nuclear Regulatory Commission (NRC). Each agency has its own definition of a “hazardous material.”

The USEPA and Emergency Planning and Community Right-to-Know Act (EPCRA) reporting requirements use the terms “hazardous chemicals” and “extremely hazardous substances.” The term “hazardous chemical” refers to any chemical, element, chemical compound(s), or mixture(s) of elements and/or compounds with “hazardous” characteristics. Rather than developing a complete list of hazardous chemicals, the law defines five hazardous characteristics. These are: acute, chronic, fire, reactive, and sudden release of pressure. If a chemical exhibits one or more of these characteristics, it is considered to be a hazardous chemical under this program. Similarly, if a formulation of several chemicals exhibits one or more of these characteristics, the formulation is a hazardous chemical.

The California Health and Safety Code defines hazardous materials as:

- any material that, because of its quantity, concentration, or physical, chemical, or biological characteristics, poses a potential hazard to human health or safety, or to the environment. Hazardous materials include, but are not limited to hazardous substances, hazardous wastes, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, or contaminated, or are being stored prior to proper disposal. In California, hazardous waste is a discarded material that meets any of a list of criteria in the California Code of Regulations (CCR), including:

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

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

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

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

3.10.2.1 Past and Current Conditions on the Project Site

The project site consists primarily of rolling, open annual grasslands used for grazing livestock. University Creek, an intermittent tributary of Pleasant Grove Creek, flows along the site's southern boundary. The only built features on the project site is a small ranch house and associated outbuildings, including above-ground fuel storage tanks, in the northeastern portion of the site. Electrical facilities within the project site consist of standard overhead electricity supply lines with three pole-mounted transformers located on the northern side of Sunset Boulevard West outside of the project site boundaries and four pole-mounted transformers

dispersed throughout the project site. No high voltage lines, such as 115 kilo-Volt (kV) lines, are located within the project site (City of Roseville 2016a).

Hazardous Materials and Waste

The site has been used primarily for grazing and agriculture, which can involve the use of pesticides, herbicides, or other potentially hazardous materials. A Phase I Environmental Site Assessment (ESA) conducted in 2006 did not indicate the presence of any recognized environmental conditions (RECs) within the project site. However, the following potential hazards were identified during the site reconnaissance (recommendations regarding these potential hazards are addressed in **Subsection 3.10.4**) (ENGE0 2006):

- Stained soil was observed beneath a 5-gallon bucket used to store Tech 2000 Mineral Gear Oil. This soil stain measured approximately 1 foot in diameter and appeared limited to the upper 2 inches of soil.
- Stained soil measuring approximately 1 foot in diameter was observed beneath one of the above-ground fuel storage tanks located next to the steel silo in the northern portion of the property.
- A total of twenty-one 55-gallon steel drums were observed on the property in the vicinity of the farm facility. Most of the drums were empty; two were found to possibly contain motor oil.
- The property has historically been used to cultivate hay, and agricultural chemicals such as fertilizers, pesticides, and herbicides may have been used on the property.
- Debris was observed at various locations throughout the farm facility area.
- A stockpile of burned wood measuring approximately 500 feet in length by 6 feet high by 6 feet wide was observed along the southern portion of the property.
- The ranch-style house, garage, and barn/workshop may have been constructed prior to the promulgation of regulations concerning asbestos-containing materials (ACMs) and lead-based paint.

There are no records of hazardous wastes or materials, including sites listed in accordance with U.S. Government Code Section 65962.5, located within or adjacent to the project site (City of Roseville 2016a).

Hazardous Materials Transportation

Hazardous materials are routinely transported by truck and by rail in the project site vicinity. The California Vehicle Code and DOT regulations generally prohibit transportation of hazardous materials through residential neighborhoods, although local deliveries are allowed. These regulations also require that hazardous materials be transported via routes with the least overall travel time. The City of Roseville Public Works Department has designated truck routes for hazardous materials transport to provide access to light and heavy industrial facilities in the city. These routes include Blue Oaks Boulevard, west from State Route 65 (SR 65), and Westbrook Boulevard, north of Baseline Road. Hazardous materials may also be transported on I-80, SR-65, and by the Union Pacific Railroad line, which is located approximately 6.5 miles southeast of the project site (City of Roseville 2016b).

3.10.2.2 Agency Databases

The USEPA maintains two databases: the National Priorities List (NPL) and the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list. The NPL is the list of sites identified by the USEPA for priority clean-up under the Superfund Program. The CERCLIS list is a list of sites that are or have been investigated by the USEPA for a release or threatened release of hazardous substances. None of the parcels that make up the project site are on the NPL or CERCLIS list.

Under the RCRA, the USEPA maintains a list of facilities that generate, store, transport, treat, or dispose of hazardous wastes. None of the parcels that make up the project site are on the RCRA list.

The State of California maintains several databases of sites having hazardous materials storage, generation, disposal or contamination. As part of the Phase I ESA performed on the project site parcels, available federal, state, and local agency databases were reviewed to identify the presence of any government-regulated properties, either on or adjacent to the project site, that could potentially result in hazardous on-site conditions. The review included the databases of the DTSC, California State Water Resources Control Board (SWRCB), and the California Office of Environmental Protection. The project site parcels are not included in any state databases.

Placer County maintains a database of hazardous waste generators in the county. The project site parcels are not included in this database.

3.10.3 SIGNIFICANCE THRESHOLDS AND ANALYSIS METHODOLOGY

3.10.3.1 Significance Thresholds

The National Environmental Policy Act (NEPA) does not specify significance thresholds that may be used to evaluate the effects of a proposed action on hazards and hazardous materials. However, Council on Environmental Quality (CEQ) regulations require an evaluation of the degree to which the proposed action could affect public health or safety. The Corps has determined that the Proposed Action, or an alternative, would result in significant effects related to hazards and hazardous materials if it would:

- result in exposure of construction workers or the public to contaminated soil or groundwater;
- create a significant hazard to the public, or the environment, through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable public upset or accident conditions involving the release of hazardous materials into the environment; or
- expose people to a public safety hazard.

3.10.3.2 Analysis Methodology

Impacts related to hazards and hazardous materials were evaluated qualitatively, based on the general types of hazardous materials and techniques that are likely to be used during construction and operation of the Proposed Action, and for each alternative. The analysis in this section focuses on the use, generation, disposal, transport, risk of upset, or management of hazardous or potentially hazardous materials on the project site; and the potential risks associated with use of recycled water for landscape irrigation. The

analysis assumes that the construction and operation of development under the Proposed Action, or Alternatives 1, 2, or 3, would comply with all applicable federal, state, and local laws and regulations, including the General Plan policies and implementation measures described in **Subsection 1.11 of Section 1, Introduction**.

3.10.4 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

Impact HAZ-1 Exposure to Soil or Groundwater Contamination from Past Uses

No Action Alt. As discussed in **Subsection 3.10.2, Affected Environment** above, no known soil or groundwater contamination was identified on the site during site investigation although a few areas of concern, including some relatively small areas of stained soil, were identified. In general, there is a low potential for soil-disturbing activities to expose project occupants and workers to contaminated debris or soil, or for there to be a release of hazardous substances during ground-disturbing activities. The only structures present within the project site are a small ranch house and associated outbuildings, and it is assumed that grassland and dry farmed sites were treated with little or no agricultural chemicals. However, grading and excavation, for example, could generate airborne dust, resulting in aerial distribution of contamination. Soil containing elevated levels of contaminants, if left unmanaged, could create health risks to project occupants and workers; although, the risk appears to be low based on available information. Thus, the No Action alternative could result in **significant direct** and **indirect** effects to project occupants and workers associated with exposure to contaminated soil or groundwater.

Mitigation Measure HAZ-1 would implement the recommendations from the Phase I ESA (ENGEO 2006) to address the known hazards, removing and disposing them as necessary, prior to any grading or excavation activity. This measure is the same as Mitigation Measure 4.10-1 in the ARSP EIR and was adopted by the City of Roseville at the time of project approval; therefore, it is highly likely that the City of Roseville would impose the same mitigation measure on the No Action alternative to address this effect.

The California Education Code requires site-specific information for school site development, including approval from DTSC, that the proposed school sites are free of contaminants that would pose a risk to students and faculty. An elementary school site has been designated in the land use plan for the No Action alternative. Under the California Education Code, the Roseville City School District would be required to complete the necessary assessments to ensure that development of the proposed school site would not expose children and teachers to risks associated with contaminated sites. Thus, **no direct** and **indirect** effects associated with exposure to contaminated soil or groundwater under the No Action alternative were identified

Proposed Action, Alts. 1, 2, 3 The Proposed Action as well as Alternatives 1, 2, and 3 would construct a large-scale, mixed-use development on the project site similar to the No Action alternative. Since soil and groundwater conditions would be similar for the Proposed Action and the alternatives, there is a potential for **significant direct** and **indirect** effects related to these conditions to occur based on the significance criteria listed above and for the same reasons presented above for the No Action alternative.

Mitigation Measure HAZ-1 would address these effects. As noted above, this measure is the same as Mitigation Measure 4.10-1 in the ARSP EIR and was imposed by the City on the Proposed Action at the time of project approval and would be enforced by the City to reduce this effect. It is highly likely that the City of Roseville would impose the same mitigation measure on Alternatives 1 through 3 to address this effect.

The Proposed Action as well as Alternatives 1, 2, and 3 would also include an elementary school site similar to the No Action alternative. The Roseville City School District would also be required to complete the necessary assessments to ensure that development of the proposed school site would not expose children and teachers to risks associated with contaminated sites. Thus, **no direct** and **indirect** effects associated with exposure to contaminated soil or groundwater under the Proposed Action and Alternatives 1, 2, and 3 were identified

Mitigation Measure HAZ-1: Identify and Remediate Soil Contamination and Existing Hazardous Materials within the Project Site
(Applicability – No Action, Proposed Action and Alternatives 1, 2, and 3)

As a condition of approval of the ARSP (i.e., Amoruso Ranch project), the following recommendations from the Phase I ESA for the project site (ENGE0 2006) shall be completed prior to issuance of grading permits:

- a) Stained soil observed beneath one of the 5-gallon buckets used to store Tech 2000 Mineral Gear Oil shall be removed and properly disposed of at an appropriate disposal facility.*
- b) Stained soil measuring approximately 1 foot in diameter beneath one of the aboveground fuel storage tanks next to the steel silo in the northern portion of the property shall be removed and properly disposed of at an appropriate disposal facility.*
- c) The 21 55-gallon steel drums near the farm facility shall be removed and properly disposed of at an appropriate disposal facility.*
- d) A statistically significant number of soil samples shall be collected from the surface soil within the boundaries of the proposed school site and analyzed for agricultural chemicals per USEPA guidelines.*
- e) Should the results indicate the presence of a statistically significant concentration of agricultural chemicals with the potential to cause harm to sensitive receptors (such as school children), a Phase II ESA shall be conducted to determine the extent of the contamination and provide recommendation to remediate the school site. In consultation with DTSC, the proponent of the school development shall develop a workplan based on the recommendations of the Phase II ESA to remediate the project site.*

- f) Debris at various locations across the project site shall be removed and properly disposed of.
- g) The burned wood pile, measuring approximately 500 feet long by 6 feet tall by 6 feet wide, along the southern portion of the project site shall be removed prior to construction at the project site.
- h) If evidence of further soil contamination, septic tanks, or other underground storage tanks are encountered in the project site, work shall cease until the area can be tested by a qualified professional meeting USEPA's definition of an Environmental Professional under the "All Appropriate Inquiries Rule" in accordance with CERCLA. The qualified professional shall provide recommendations for further remediation in compliance with federal, state, and local regulations. If necessary, contaminated materials shall be removed and properly disposed or remediated, and regulatory site closure obtained. Remediation activities could include removal of contaminated soil, and/or treatment. The City shall ensure that any necessary investigation and/or remediation activities are coordinated with the RFD, PCDEH, and if needed, other appropriate federal, state and local agencies. Once a site is remediated to the satisfaction of the appropriate regulatory agency, construction can continue.

Impact HAZ-2 Hazards from Accidental Release of Hazardous Materials or Wastes

No Action Alt. Construction

Construction typically involves the use of hazardous materials such as petroleum products, coatings (paint), and cleaning chemicals, and may generate hazardous wastes through use of such materials. Construction workers could be exposed to hazardous materials through improper handling or use of hazardous materials or hazardous wastes during construction or operation of the project, particularly by untrained personnel; transportation accidents; unsound disposal methods; or fire, explosion, or other emergencies. Construction activities on-site under the No Action alternative would be required to comply with federal and state hazardous materials regulations and worker safety regulations, discussed in **Section 1.0, Introduction and Statement of Purpose and Need**, regarding handling of and exposure to hazardous substances. These regulations must be implemented by employers and businesses and are enforced by the state (Cal OSHA for workplace safety and DTSC for hazardous materials and waste). In addition, all construction projects involving 1 acre or more of ground disturbance would be subject to NPDES requirements of developing and implementing a Storm Water Pollution and Prevention Plan to prevent construction pollutants from contacting storm water and entering into storm sewer systems and surface or ground waters. Compliance with federal regulations would reduce the risk to human health and the environment from the routine use of hazardous substances during construction. Thus, **no direct** or **indirect** effects from accidental release of hazardous materials or wastes during construction under the No Action alternative were identified.

Project Operation

Once the project site is developed, residential and commercial uses would involve use and

storage of hazardous materials. These materials would likely include household products such as cleaning agents, solvent, paint, oils, pesticides, etc. These products are commercially available for public use and are typically sold, used, and stored in small quantities. As such, it is expected that the quantities of hazardous materials would not be significant enough to warrant designation of a regulated hazardous waste generator under RCRA.

Building maintenance operations, as well as commercial activities, that may be developed on the project site would also generate hazardous wastes. Commercial use and storage of hazardous materials and disposal of hazardous wastes would be subject to federal, state, and local regulations. As discussed in **Section 1.0**, hazardous materials regulations have been established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine handling, use, and storage of hazardous substances. These regulations must be implemented by employers and businesses and are enforced by the state (Cal OSHA in the workplace or DTSC for hazardous waste) and local jurisdictions (Roseville Fire Department).

The fire department is the local agency responsible for implementation of the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). Compliance with the Unified Program would reduce the potential for accidental release of hazardous materials during occupancy of the project site and would avoid or reduce adverse effects associated with such use. The Unified Program is intended to ensure that regulated activities (businesses) within the project site are managed in accordance with applicable regulations, including the Hazardous Materials Release Response Plans and Inventories (Business Plan), the California Accidental Release Prevention (CalARP) Program, and the California Fire Code. Compliance with these regulations, which is part of the project, would avoid significant effects associated with chemical use and storage. Thus, **no direct** or **indirect** effects from accidental release of hazardous materials or wastes during project operations under the No Action alternative were identified.

Groundwater Well

There are two existing groundwater wells on the site, which would be decommissioned in accordance with applicable regulations. A new groundwater well would be constructed and would include wellhead chlorination and fluoridation. Operation of the groundwater well could include 25 gallons a day or 200 gallons a week of commercial strength bleach. Deliveries would be weekly and well tanks would be sized to hold up to 400 gallons. All chemicals would be stored inside buildings with appropriate containment. Well operation and chemical storage would be subject to the RWQCB regulations. Adherence to such laws would avoid significant effects associated with chemical use and storage at the on-site well. Thus, **no direct** or **indirect** effects from the accidental release of hazardous materials or wastes from groundwater well operation under the No Action alternative

were identified.

Hazardous Materials Transportation

Construction and operation of development under the No Action alternative would involve transport of hazardous materials, potentially including large quantities of construction and maintenance supplies containing hazardous materials. All transport would be required to comply with federal and state regulations, as administered by Caltrans, and enforced by the CHP. Implementation of the transportation regulations in Title 49 CFR would reduce the potential for accidental release during construction or occupancy by transporters delivering hazardous materials to the project site or picking up hazardous waste. Compliance with applicable regulations would reduce or avoid the risk of significant effects related to transport of hazardous materials. Thus, **no direct or indirect** effects from the accidental release of hazardous materials or wastes during hazardous materials transportation under the No Action alternative were identified.

Proposed Action, Alts. 1, 2, 3

The Proposed Action as well as Alternatives 1, 2, and 3 would construct large-scale mixed-use development on the project site similar to the No Action alternative. The risk of significant effects from use, storage, and transport of hazardous materials and generation of hazardous wastes would be similar to those described above for the No Action alternative and would be minimized by compliance with applicable regulations. Based on the significance criteria listed above, and as discussed under the No Action alternative, **no direct or indirect** effects from accidental release of hazardous materials or wastes associated with the use, storage, and transport of hazardous materials and generation of hazardous wastes under the Proposed Action, or Alternatives 1, 2, or 3, were identified.

Impact HAZ-3 Risk related to Use of Recycled Water

No Action Alt., Proposed Action, Alts. 1, 2, 3

The use of recycled water on the project site would not result in any conditions that would unduly expose future occupants to human health risks. As described in **Chapter 2.0**, recycled water would be conveyed to the project site from the Pleasant Grove Wastewater Treatment Plant (PGWWTP) and used for irrigation of parks and landscaping in roadway medians, commercial areas, and common areas in high-density residential neighborhoods. Individuals using or maintaining the parks and landscaped facilities would have skin contact with the water when these features are actively irrigated, for example by touching irrigated grass or runoff. The rates and frequency of application would be controlled to minimize ponding, as required under Municipal Code Chapter 14.17 and the City's "Rules and Regulations for the Use of Recycled Water" (see **Section 3.16, Utilities and Service Systems**). The PGWWTP is designed and operated to produce effluent that meets or exceeds standards consistent with "Disinfected Tertiary Recycled Water" as defined by Title 22 of the California Code of Regulations (CCR). As part of the Proposed Action, including the alternatives, any recycled water to be used on the site would meet state

regulatory standards, as outlined in **Section 1.0**. Water meeting these standards may be used for unrestricted use, including recreation involving body contact, irrigation of food crops, and irrigation of parks, playgrounds, and schoolyards. The City of Roseville would be responsible for ensuring that the irrigation sites comply with the use requirements established in Section 60310 of the CCR. Cross-connection controls would ensure that recycled water does not enter the potable water distribution system. For these reasons, the use of recycled water would not result in any conditions that would unduly expose future occupants to human health risks, and no significant effect related to the use of recycled water on the project site is anticipated. Based on the significance criteria listed above; **no direct** or **indirect** effects from exposure to hazards associated with the use of recycled water under the Proposed Action, including the No Action and all of the alternatives, were identified.

3.10.5 REFERENCES

City of Roseville. 2016a. *Amoruso Ranch Specific Plan Final Environmental Impact Report*.

City of Roseville. 2016b. City of Roseville General Plan 2035. Adopted June 15, 2016.

ENGEO. 2006. *Phase I Environmental Site Assessment*, Brookfield Sunset, Roseville, California. Prepared for Brookfield Land Company, Roseville, CA.