

3.1.4 Hazards and Hazardous Materials

This section describes the existing hazards and hazardous materials conditions within the Project site and vicinity, identifies regulatory requirements associated with hazards and hazardous materials issues, and evaluates potential impacts related to implementation of the Proposed Project. A Phase I Environmental Site Assessment (ESA) was prepared to evaluate potential environmental impacts associated with hazards and hazardous materials at the site (Royal Environmental Services, Inc. [RES] 2020; Appendix M). A Vector Management Plan was prepared to identify BMPs to reduce the health risks and nuisance factors associated with vectors (EnviroMINE 2021c; Appendix U). An Additional Hazards letter was prepared by EnviroMINE (2020b) to describe the types of hazardous materials that are present on the property or that would be included as part of the Proposed Project. Relevant portions of the Phase I ESA, Vector Management Plan, and Additional Hazards letter are summarized below along with other pertinent information.

3.1.4.1 Existing Conditions

On-site Hazardous Materials

Petroleum Hydrocarbons

Petroleum hydrocarbons on the property consist of fuels and lubricants used for the operation of the golf course's landscaping maintenance equipment. Petroleum-based lubricants are also utilized at the maintenance facility in small quantities. All materials of this type are stored in the maintenance and repair facility located on the Ivanhoe Course and southeast of the clubhouse. Two above ground storage tanks (ASTs), one with a 1,000-gallon capacity used for storing diesel and one with a 500-gallon capacity used for storing gasoline, are currently present within the Project site at the existing golf course maintenance facility (see Figure 3.1.4-1, *On-site Above Ground Storage Tanks Location*). The ASTs were installed following the removal of previous USTs in 2004 (see discussion below under *On-site RECs*). The ASTs are permitted (#202521), have secondary containment, and appear to follow applicable regulations (RES 2020). In addition, at the time of the site visit conducted for the Phase I ESA, several drums used for oil storage were present in the maintenance area. There was no indication that the use of the drums for the materials contained has impacted the site (RES 2020).

Pesticides and Fertilizers

Pesticides, fungicides, and fertilizers are used in the overall landscaping maintenance program at the golf course. Pesticides and fungicides are used to control insect infestations, fungi, and molds that can damage or kill turf grasses that provide the golf play surface, while fertilizers are utilized to provide nutrients to the turf grasses. All materials of this type are purchased when needed, applied as soon as possible to keep storage to a minimum and, when stored, are kept in a secured room at the maintenance facility. Application is completed by certified pesticide technicians twice per year in the spring and fall when turf grasses are aerated and re-seeded. Small quantities are maintained on site to treat unexpected outbreaks. Rodents that occur on the property are controlled using physical traps rather than the use of rodenticides. This prevents potential impacts to other animal species and avoids pollution of ground or surface water. The Phase I ESA did not identify the on-site use of pesticides, fungicides, and fertilizers as an environmental concern.

Structures

Several structures associated with the golf course are present on the Project property. These include the clubhouse, metal and wooden buildings at the maintenance facility, and an on-course restroom for each golf course. The clubhouse, buildings at the maintenance facility, and on-course restroom at the Ivanhoe Course were constructed in 1964. The on-course restroom at the Lakes Course was constructed in 1968. There is also a residential building constructed between the 1900s and 1920s located west of Steele Canyon Road. Due to the age of the physical structures on the site, there is the potential that asbestos containing materials (ACMs) and lead were utilized in the construction of the structures.

Recognized Environmental Conditions

A Phase I ESA was conducted for the Project site to determine if recognized environmental conditions (RECs) were present or likely present at or near the site that have the potential to cause public harm due to a past or existing release of hazardous substances (RES 2020). The Phase I ESA included a review of regulatory records, a review of historical site information, an interview with the site manager, and a visual inspection of the Project site.

On-site RECs

According to the Phase I ESA (RES 2020), there are no RECs or historical RECs on the site or directly adjacent to the Project site. The Project site is listed under various regulatory databases due to two USTs having been present at the Project site (State Department of Toxic Substances Control [DTSC] 2020 and SWRCB 2020). One tank was a 5,000-gallon single-walled UST containing leaded gasoline associated with Permit #120208. Its piping failed in 1987 and was subsequently repaired and retested. The associated case was closed in 1987. The tank was later removed on April 13, 1993 under permit. Records show that at the time of removal there was no indication of impact from gasoline noted by the regulatory inspector. In addition, laboratory analysis of two soil samples collected from beneath the UST contained no detectable concentrations of total petroleum hydrocarbons (TPH) at the laboratory detection limit. The second tank was a 5,000-gallon double-walled UST containing unleaded gasoline associated with Permit #202521 and installed in 1993. It was maintained in compliance until its removal on June 4, 2004. Records show that at the time of removal there was no indication of impact from gasoline noted by the regulatory inspector. In addition, laboratory analysis of two soil samples collected from beneath the UST contained no detectable concentrations of TPH at the laboratory detection limit.

Other regulatory listings related to hazardous materials are due to past violations associated with the handling of on-site materials including diesel, gasoline, waste oil, oil filters, batteries, welding tanks, and ammonium sulfate. Based on records, these violations were corrected and the site was returned to compliant status. None of the waste handling violations in the last three inspections is listed as having resulted in a violation for a release of hazardous materials to the ground or improper disposal of wastes on site.

Off-site RECs

The Phase I ESA identified and analyzed listed off-site properties that would have the potential to result in an adverse effect on the Project site. The analysis included consideration of factors

including the nature and extent of a given release, the distance of the reported release from the site, the stratigraphy of soils, the expected soil permeability, and the topographic position of a reported release site with respect to known or expected local and/or regional groundwater flow direction. These sites and their potential to affect the site are summarized below.

- **Sovereign Health of California – 2815 Steele Canyon Road.** This facility is located adjacent to the mid portion of the Project site on the southeast side of Steele Canyon Road. Based upon the small quantity generators designation, the facility generates between 100 kilograms and 1,000 kilograms of hazardous waste per month including ignitable hazardous wastes and spent non-halogenated solvents. Regulatory records indicate the site has no recorded violations related to waste handling. Based on available records and the current use of the site as a residential treatment facility, the site does not appear to present a REC to the Project site.
- **Doug Howarth – 2478 Wind River Road.** This site is located approximately 940 feet north of the Project site. There are no associated violations or releases from the property according to the database search. The location of this address was confirmed to be a current residential address in a residential development and is most likely a business mailing address. Based on the location and available regulatory records reviewed to date, the site does not appear to present a REC to the Project site.
- **Best Way Cleaners – 2441 Jamacha Road Suite 103.** This facility is located approximately 660 feet northwest of the Project site and is listed as an existing and historical dry cleaners. The listing identifies that the property disposes of liquids and halogenated organic compounds; however, there are no associated releases from the property according to regulatory listings. Based on its available regulatory records reviewed to date, the site does not appear to present a REC to the Project site.
- **Shell/CNG Inc. – 2411 Jamacha Road.** This facility is located approximately 820 feet northwest of the Project site. There are three active 12,000-gallon USTs at the property containing unleaded gasoline. In 2003, a petroleum hydrocarbon gasoline release was detected during product piping removal. Eight groundwater monitoring wells were installed at the property, monitored, and sampled between June 2004 and December 2010. Distribution of soil contamination was limited to the shallow subsurface on site at three to five feet bgs. Liquid phase hydrocarbons have not been present in the monitoring of groundwater sampling since 2004. It was determined in 2011 that the remediation of residual hydrocarbon concentrations in soil and groundwater were expected to achieve the targeted cleanup goals through natural attenuation process. A vapor risk assessment at the property concluded no risk of vapor intrusion to station workers or indoor air. The site was identified as posing no significant risk to human health and the environment, and a no further action was issued by the County on December 16, 2011. Based on the regulatory status of the past release and distance to the Project site, the site does not appear to present a REC to the Project site.
- **Advantage Cleaners – 2522 Jamacha Road.** This facility is located approximately 1,420 feet west-northwest of the Project site. It is listed due to a release of perchloroethylene (PCE) and trichloroethylene (TCE) to subsurface soil due to dry

cleaning operations. The contaminated soil was previously excavated. Subsequent soil and vapor samples indicated acceptable levels of residual PCE vapors, and groundwater samples collected down-gradient indicated no evidence of PCE-impacted groundwater. The excavated hole was backfilled with concrete slurry and a steel liquid containment pan was placed beneath the dry-cleaning unit along with the application of a chemical resistant coating on the floor to minimize future subsurface releases. The case was closed in 1998. Based on the available records reviewed, the site does not appear to present a REC to the Project site.

Sensitive Receptors and Areas

The nearest schools to the Project site are Jamacha Elementary School located at 2962 Jamul Drive, approximately 0.25 mile south of the site, and Hillsdale Middle School located at 1301 Brabham Street, approximately 0.8 mile northwest of the site. There are no day care centers located within 0.25 mile of the Project site. The nearest day care centers are Hope's WeeCare and Bernal Family Child Care, residential daycare facilities located 0.5 mile northwest and 0.8 mile north of the Project site, respectively. The Adeona Healthcare facility is located along Steele Canyon Road immediately south of the Project site.

Potential Airport Hazards

The closest airport to the Project site is Gillespie Field, a publicly owned airport located at 1960 Joe Crosson Drive, approximately six miles northwest of the Project site. The Project site is not located within the Airport Influence Area (AIA) identified in the Airport Land Use Compatibility Plan (ALUCP) for Gillespie Field (San Diego County Regional Airport Authority 2010). Additionally, the Project site is not located within the Federal Aviation Administration (FAA) Height Notification Boundary for Gillespie Field. The nearest private airstrip to the Project site is the helipad associated with the Sharp Grossmont Hospital, located approximately 5.3 miles to the northwest.

Dam Inundation

The Project site is located within a dam inundation area, so it is subject to inundation in the case of a dam failure (County 2011b). The Loveland Dam and Reservoir are located upstream and approximately 6.5 miles east of the Project site. The Loveland Reservoir has a capacity of 25,400 acre-feet, and the 203-foot-tall dam was completed in 1945 (Sweetwater Authority 2020b). Loveland Reservoir serves as a holding area for water that is released to the Sweetwater Reservoir, located approximately 4.5 miles southwest of the Project site.

Vectors

A vector is any insect, arthropod, rodent, or other animal of public health significance that can cause human discomfort or injury or is capable of harboring or transmitting the causative agents of human diseases. The most significant vectors in the County include mosquitoes, rodents, flies, and fleas. Vectors occur where site conditions provide suitable breeding habitats, such as standing water, wetlands, irrigation ponds, detention basins, and infiltration basins.

Regulatory Setting

Hazardous Materials

Federal

Resource Conservation and Recovery Act of 1976 – Federal hazardous waste laws are largely promulgated under the Resource Conservation and Recovery Act of 1976 (RCRA) (40 CFR, Part 260), as amended by the Hazardous and Solid Waste Amendments of 1984 (which are primarily intended to prevent releases from LUSTs). These laws provide for the “cradle to grave” regulation of hazardous wastes. Specifically, under RCRA any business, institution or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of. The USEPA has the primary responsibility for implementing RCRA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions (with California an authorized RCRA state as outlined below under *State*).

Hazardous Material Transportation Act – The U.S. Department of Transportation (USDOT) regulates hazardous materials transportation pursuant to the Hazardous Materials Transportation Act of 1975 (HMTA), as amended and codified under Title 49 of the CFR. The HMTA requires the USDOT Office of Hazardous Materials Safety to generate regulations for the safe transportation of hazardous materials. The HMTA includes procedures and policies, material designations, packaging requirements, and operational rules related to the transport of hazardous materials. The HMTA is enforced by use of compliance orders, civil penalties, and injunctive relief, and preempts state and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. The California Highway Patrol (CHP) and Caltrans are the State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. These agencies also govern permitting for hazardous materials transportation within the State.

Comprehensive Environmental Response, Compensation, and Liability Act – The 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Federal actions related to CERCLA are limited to sites on the National Priority List (NPL) for cleanup activities, with NPL listings based on the USEPA Hazard Ranking System (HRS). The HRS is a numerical ranking system used to screen potential sites based on criteria such as the likelihood and nature of hazardous material release, and the potential to affect people or environmental resources. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 as outlined below.

Superfund Amendments and Reauthorization Act – SARA is intended primarily to address the emergency management of accidental releases, and to establish State and local emergency planning committees responsible for collecting hazardous material inventory, handling, and transportation data. Specifically, under Title III of SARA, a nationwide emergency planning and response program established reporting requirements for businesses that store, handle or produce

significant quantities of hazardous or acutely toxic substances as defined under federal laws. Title III of SARA also requires each state to implement a comprehensive system to inform federal authorities, local agencies and the public when significant quantities of hazardous or acutely toxic substances are stored or handled at a facility. These data are made available to the community at large under the “right-to-know” provision, with SARA also requiring annual reporting of continuous emissions and accidental releases of specified compounds.

Chemical Accident Prevention Provisions – The federal CAA Amendments of 1990 required the USEPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. These rules, which built upon existing industry codes and standards, require companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program.

Occupational Safety and Health Administration – The Occupational Safety and Health Administration’s (OSHA’s) mission is to ensure the safety and health of America’s workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. The OSHA staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs.

State

Title 22 of the California Code of Regulations & Hazardous Waste Control Law, Chapter 6.5 – The DTSC is responsible for implementing the RCRA program as well as California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, CalEPA has in turn delegated enforcement authority of State law to the County for regulating hazardous waste producers or generators. The DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Like RCRA, Title 22 imposes “cradle to grave” regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other CUPAs, including County Department of Environmental Health and Quality (DEHQ).

California Health and Safety Code – The CalEPA/DTSC has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Section 25531, et seq., incorporate the requirements of SARA and the federal CAA as they pertain to hazardous materials. Under the California Accidental Release Prevention Program (CalARP, California Health and Safety Code Section 25531 to 25545.3), certain businesses that store or handle more than 500 pounds, 55 gallons or 200 cubic feet (for gases) of acutely hazardous materials at their facilities are required to develop and submit a Risk Management Plan (RMP) to the appropriate local authorities, the designated local administering agency and the USEPA for review and approval. The RMP is intended to satisfy federal “right-to-know” requirements and provide basic information to regulators and first responders, including identification/quantification of regulated substances used or stored on site, operational and safety mechanisms in place (including employee training), potential on- and off-site consequences of a release and emergency response provisions.

Under California Health and Safety Code Section 25500-25532, businesses handling or storing certain amounts of hazardous materials are required to prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory and map of hazardous materials (and related facilities) stored on site above specified quantities, an emergency response plan, and an employee training program. An HMBP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material. An HMBP must be prepared prior to facility operation, with updates and amendments required for appropriate circumstances (e.g., changes in business location, ownership, or pertinent operations).

Pursuant to California Health and Safety Code Chapter 6.11, CalEPA established the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), which consolidated a number of existing State programs related to hazards and hazardous materials. The Unified Program also allows the designation of CUPAs to implement associated State regulations within their jurisdiction. For businesses within the County, HMBPs are submitted to and approved by the DEHQ Hazardous Materials Division (HMD), which is the local CUPA as outlined below under County requirements.

California Human Health Screening Levels – The California Human Health Screening Levels (CHHSLs) are concentration thresholds established by CalEPA for 54 hazardous chemicals in soil or soil gas of concern for risks to human health. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

Screening Levels for Hazardous Materials in Soil or Groundwater – The Regional Water Quality Control Board (RWQCB) uses Environmental Screening Levels (ESLs) to evaluate the potential risk associated with chemicals found in soil or groundwater where a release of hazardous materials has occurred (San Francisco Bay Regional Water Quality Control Board 2019). ESLs have been established for both residential and commercial/industrial land uses, and also for construction workers. Residential screening levels are the most restrictive, so soil with chemical concentrations below these levels generally would not require remediation and would be suitable for unrestricted uses if disposed of offsite. Commercial/industrial screening levels are generally higher than residential screening levels because they are based on potential worker exposure to hazardous materials in the soil (and these are generally less than residential exposures). Screening levels for construction workers are also higher than for commercial/industrial workers because construction workers are only exposed to the chemical of concern during the duration of construction, while industrial workers are assumed to be exposed over a working lifetime.

The CalEPA California Human Health Screening Levels are concentrations of 60 hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health (CalEPA 2010). These concentrations can be used to screen sites for potential human health concerns where releases of hazardous chemicals have occurred. The presence of a chemical at concentrations in excess of screening level does not indicate that adverse impacts are occurring

or will occur but suggests that further evaluation is warranted. These screening levels are guidance, and not regulatory cleanup standards.

Waste Classification Criteria – In accordance with Title 22 of the CCR Section 66261.20 et seq., excavated soil is classified as a hazardous waste if it exhibits the characteristics of ignitability, corrosivity, reactivity, and/or toxicity. A waste is considered toxic in accordance with 22 CCR 66261.24 if it contains:

- Total concentrations of certain substances at concentrations greater than the total threshold limit concentrations (TTLC);
- Soluble concentrations greater than the soluble threshold limit concentrations (STLC);
- Soluble concentrations of certain substances greater than federal toxicity regulatory levels using the Toxic Characteristic Leaching Procedure (TCLP); or
- Specified carcinogenic substances at a single or combined concentration of 0.001 percent.

State and federal regulations consider waste to be hazardous if the soluble concentration exceeds the federal regulatory level as determined by the TCLP. The TCLP involves a 20-to-1 dilution of the sample; therefore, the total concentration of a substance in the soil would need to exceed 20 times the regulatory level for the soluble concentration to exceed the regulatory level in the extract.

A waste is also considered hazardous under state regulations if the soluble contaminant concentration exceeds the STLC as determined by the waste extraction test method. The waste extraction test analysis is performed using a 10-to-1 dilution of the sample; therefore, the total concentration of a substance would need to exceed 10 times the STLC for the soluble concentration to possibly exceed the STLC in the extract. A waste may also be classified as toxic if testing indicates toxicity greater than the specified criteria. Soil that is not classified as a hazardous waste can be accepted at a Class II or Class III designated landfill, depending on the waste acceptance criteria for the specific landfill.

Investigation and Cleanup of Contaminated Sites – The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary state agencies responsible for issues pertaining to hazardous material release sites. Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. These regulations would be applied during mining activities if, for example, previously unknown underground tanks or other potential contaminant sources were uncovered.

Hazardous Materials Transportation – As noted above under federal guidelines, the CHP and Caltrans are the state enforcement agencies for hazardous materials transportation regulations.

Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping regulations.

California Office of Emergency Services (OES) – In order to protect the public health and safety and the environment, the OES is responsible for establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and the health risks) needs to be available to firefighters, public safety officers, and regulatory agencies in business plans in order to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code Article 1, Hazardous Materials Release Response and Inventory Program (Sections 25500 to 25520), and Article 2, Hazardous Materials Management (Sections 25531 to 25543.3).

The Division of Occupational Safety and Health – Cal/OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

Local

County Significance Guidelines – The County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination, provide direction for evaluating environmental effects related to hazardous materials and contamination. Specifically, these guidelines address potential adverse effects to people or the environment (pursuant to applicable California Environmental Quality Act standards) from hazards including: (1) the transport, use, or disposal of hazardous materials; (2) upset and accident conditions involving the release of hazardous materials; (3) emission of hazardous materials within 0.25 mile of an existing or proposed school; and (4) location within a site listed on the Government Code Section 65962.5 database (Cortese List). Significance guidelines are identified for the noted issues, as well as related regulatory standards, impact analysis methodologies, attenuative design strategies, and reporting requirements.

County DEHQ/HMD – As noted above under State guidelines, the HMD is the local CUPA, and has jurisdiction over HMBPs in the County. The HMD provides detailed guidelines for the preparation and implementation of HMBPs, including direction on covered businesses/materials, inventory/site mapping, employee training, storage/safety criteria, spill prevention requirements, emergency/contingency response requirements and exemptions.

County of San Diego General Plan – The County General Plan Land Use and Safety elements identify safety considerations and policies related to hazards and hazardous materials that may pose a threat to public safety. Policies address emergency services availability and access, storage and transfer of the hazardous materials, and assessment of potentially contaminated lands. These

policies and the Project's compliance with them are addressed in Section 3.1.7 of this EIR and Appendix B, *Planning Analysis*.

Airport Hazards

Airport Land Use Compatibility Plans (ALUCPs) – The San Diego County Regional Airport Authority is responsible for developing ALUCPs for public airports in San Diego County to promote land use compatibility and ensure operations are not restricted by encroachment of incompatible land uses. An ALUCP describes the airport, its projected uses, and the noise, safety, airspace protection and overflight contours (generated through airport use) over adjoining land. An important part of the ALUCP is the establishment of an AIA. An AIA is the area in which existing or future airport-related noise, overflight, safety and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. Safety concerns target minimizing the risks of aircraft accidents beyond the current and future runway environment. Air space protection is accomplished by placing limits on height of structures and other objects in the airport vicinity and restrictions on other uses that potentially pose hazards to flights now and in the future. Safety compatibility zones have been established to identify areas where distinct levels of risk exist and differentiate allowed and prohibited land uses.

County of San Diego General Plan – The County General Plan Safety Element addresses issues related to development of flight hazards, as addressed in Section 3.1.6 of this EIR and Appendix B, *Planning Analysis*.

Overall Emergency Response and Evacuation

Emergency response plans are maintained at the federal, state, and local level for all types of disasters, including human-made and natural disasters. Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization, and application of resources, mutual aid, and public information. The Unified San Diego County Emergency Services Organization has the primary responsibility for preparedness and response activities and addresses disasters and emergency situations within the unincorporated area of San Diego County. The County Office of Emergency Services (OES) serves as staff to the Unified Disaster Council (UDC), the governing body of the Unified San Diego County Emergency Services Organization.

Emergency response and preparedness plans include the Operational Area Emergency Response Plan and the San Diego County Multi-Jurisdictional Hazard Mitigation Plan. Both plans develop goals and objectives for OES in regard to large-scale natural or man-made disasters.

The Operational Area Emergency Plan provides guidance for emergency planning and requires subsequent plans to be established by each jurisdiction that has responsibilities in a disaster situation. The Multi-Jurisdictional Hazard Mitigation Plan provides the framework for emergency response throughout the County, including the Project site. The plan is intended to serve many purposes, including to: enhance public awareness and understanding, create a decision tool for management, promote compliance with state and federal program requirements, enhance local policies for hazard mitigation capability, provide inter-jurisdictional coordination of mitigation-related programming, and achieve regulatory compliance. It includes an overview of the risk

assessment process, identifies hazards present in the jurisdiction, hazard profiles, and vulnerability assessments. The plan also identifies goals, objectives, and actions for each jurisdiction in the County, including all cities and unincorporated areas. Hazards specifically relevant to the Project that are profiled in the plan include erosion, earthquakes/liquefaction, dam failure, and hazardous materials incidents. Erosion and earthquakes/liquefaction are addressed in Section 3.2.2, *Geology and Soils*; the remaining issues are addressed in Section 3.1.4.2, below.

Vectors

County Vector Control Program – The County Vector Control Program (VCP) is an existing public health program that was implemented to monitor and control mosquitoes and other disease-carrying insects and rodents in the County. The DEHQ is responsible for implementing the Integrated Vector Management Program (IVMP), which provides vector and vector-borne disease surveillance and control services throughout all 18 incorporated cities and unincorporated areas of the County. The VCP is authorized by Government Code Section 25842.5 to directly control and abate mosquitoes and other vectors in order to protect the public health, safety, and welfare of the entire County population from vector-borne diseases and vector-related public nuisances. The VCP serves to reduce the potential for the spread of diseases and the impact that vectors have on property through ongoing educational outreach, surveillance activities, source reduction (i.e., physical control), and source treatment (i.e., biological and chemical control).

San Diego County Code of Regulatory Ordinances – Vector Control – These chapters of the County Code address general nuisances, vector control, and the prevention and control of fly breeding on commercial poultry ranches. Chapter 1 addresses how to handle public nuisances including violations and abatement. Chapter 2 grants authority to the DEHQ to exercise the powers of a vector control district as set forth in the California Health and Safety Code, and states that the Director “may correct or abate any public nuisance relating to vectors...”. Chapter 3 provides for the investigation, continuing regulation, prevention, and abatement of fly breeding sources with the goal of securing public health, safety, and welfare.

San Diego County Code of Regulatory Ordinances – Stormwater and Discharge Control – This chapter of the County Code establishes the County Watershed Protection, Stormwater Management, and Discharge Control Ordinance, which sets forth stormwater management requirements for categories of existing sources and activities, and new land disturbance and land development activities. The ordinance prohibits polluted non-stormwater discharges to the stormwater conveyance system and establishes minimum requirements for stormwater management for development projects to reduce stormwater pollution and erosion. The ordinance requires the use of structural BMPs to detain or infiltrate stormwater for some land development projects and specifies that these BMPs must be designed to drain within 72 hours to preclude mosquito breeding.

3.1.4.2 *Analysis of Project Effects and Determination as to Significance*

Handling and Storage of Hazardous Materials

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if:

1. The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the Health & Safety Code (H&SC); generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC; and/or not be able to comply with applicable hazardous substance regulations.

Guideline Source

This guideline for significant hazards and hazardous materials is based on criteria provided in the County Guidelines for Determining Significance for Addressing Hazardous Materials and Existing Contamination (County 2007d).

Analysis

Removal of Existing Hazardous Substances

The Project would terminate golf course uses upon approval of the proposed MUP. All petroleum hydrocarbons (e.g., fuels and lubricants) currently utilized within the Project site for golf course maintenance would be removed from the property and disposed of in accordance with State and County regulations. The two ASTs currently used to store diesel and gasoline would be removed under permit through the DEHQ HMD acting as the CUPA for the County. All removal permits would be obtained prior to demolition activities. Materials removal is expected to be completed prior to initiation of mineral extraction in Phase 2 and would be completed under inspection by the County and/or the local Fire Department.

All existing on-site structures are proposed to be demolished, as follows:

- Phase 1: existing residential structure, Lakes Course restroom
- Phase 2: maintenance facility, clubhouse
- Phase 3: Ivanhoe Course restroom

Prior to demolition, each structure would be surveyed for ACMs and lead by certified individuals. After the results of the surveys are provided, demolition permits would be obtained through the County PDS Building Division. If ACMs or lead are present in the structure scheduled for demolition, a licensed abatement contractor would remove hazardous materials from the structure prior to the demolition contractor dismantling the structure. ACMs and lead-based materials would be disposed of as required by regulation. After ACMs and lead are removed, demolition of the

structure, including the removal of existing septic tanks, as applicable, would be completed in accordance with the requirements of the permit. All construction debris would be recycled or disposed of offsite as required by the permit. Therefore, impacts associated with removal of existing on-site hazardous materials would be **less than significant**.

Hazardous Substance Handling

The Proposed Project would require the handling, storage, and use of hazardous materials to support mining operations. Hazardous materials that would be used during Project implementation include but are not limited to diesel and gasoline fuels, other petroleum hydrocarbons such as lubricating oils and grease, solvents, anti-freeze, degreasers, and polymers (AggreBind) for dust suppression. Small quantities of diesel and gasoline fuels would be stored on site for emergency use, including two five-gallon cans of diesel fuel and one five-gallon can of gasoline. Fuel cans would be stored in a fire-proof locker contained within a metal cargo container located in the processing area. Other petroleum hydrocarbons, such as lubricating oils and grease, would be stored on site within the same cargo container, and are proposed to include one 25-gallon drum of each product. AggreBind, which is a styrene acrylic polymer soil stabilizer for unpaved roadways, would also be stored on site in up to one 25-gallon drum. For application on unpaved roadways, the AggreBind product is first blended/diluted with water. The road is ripped, sprayed with the mixture, and mixed into the soil, graded, and compacted. The road surface is then sealed with the mixture. Following the initial treatment, the roadways do not require continual or recurring application of the product. According to its Material Safety Data Sheet (AggreBind, Inc. 2015), AggreBind is not identified as a significant hazard. As further detailed in the environmental test reports summarized on the product website, the polymeric content of the material has a molecular weight of much greater than 1,000 and is therefore deemed to not be “bioavailable” or absorbed by living organisms such as plants, animals, or microorganisms. This characteristic makes AggreBind safe for use in soil stabilization, as it reduces the risk of contamination or harm to living organisms in the surrounding environment. Moreover, use of a mobile conveyor is proposed to minimize the use of on-site roads to transport excavated material between the plant and excavation areas. Wash fines would be returned to backfill areas by an off-road, low profile haul truck or tractor-trailer using on-site unpaved roads. Hauling is expected to require approximately four to six round trips per day.

Mobile equipment utilized for Project operations would be maintained by private vendors. Maintenance and repairs on the site’s mobile mining equipment would be completed on a level area near the active excavation and away from drainage features. Ground protection and spill containment, which would include plastic sheeting to line a bermed sump and absorbent pads, would be placed in the work area prior to work being conducted on the equipment to contain leaks or accidental spills from reaching the ground. Available clean up materials would include absorbent pads, pillows, dry absorbent, flat nosed shovel, a broom, and a waste container for any clean up materials used. All materials used to clean up a spill would be transported from the site and disposed of at a licensed facility in accordance with state and federal requirements. No other hazardous substances are proposed to be stored on site.

The cargo container, fire locker, and hazardous materials containers would be properly labeled. Containment around the fire locker would be installed to contain leaks and prevent accidental spills from reaching the ground. Quantities of stored hydrocarbons would be maintained below

reportable quantities as required by the County CUPA. The Project would comply with all applicable federal, state, and local regulations regarding hazardous substances. As required by Sections 25500-25532 of the H&SC, an HMBP would be prepared for the Project to implement a plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503. Additionally, the Project would not transport, emit, or dispose of hazardous materials in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC. Impacts related to the handling of hazardous substances would be **less than significant**.

Hazardous Substance Handling Related to Schools or Day Care Facilities

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if:

2. The Project is a business, operation or facility that would handle regulated substances subject to CalARP (California Accidental Release Prevention Program) RMP (risk management plan) requirements that, in the event of a release, could adversely affect children's health due to the presence of a school or day care within 0.25 mile of the facility.

Guideline Source

This guideline for significant hazards and hazardous materials is based on criteria provided in the County Guidelines for Determining Significance for Addressing Hazardous Materials and Existing Contamination (County 2007d).

Analysis

The nearest school to the Project site is Jamacha Elementary School, located approximately 0.25 mile south of the site (see Figure 3.1.4-1, *Jamacha Elementary School with 0.25-mile Radius*). The Project's use of standard equipment materials during construction, operation, and reclamation (e.g., fuels, lubricants, and solvents), would be handled in accordance with DTSC regulations, in addition to all applicable federal, state, and local regulations associated with hazardous materials. The Project would not involve the use of hazardous materials in amounts that exceed the significance thresholds outlined in the CalARP RMP requirements. Furthermore, the majority of equipment maintenance and associated hazardous materials use would occur within the area where the processing equipment is located in the northern portion of the Project site along Willow Glen Drive, greater than 0.25 mile from Jamacha Elementary School. Therefore, impacts related to the use of hazardous substances within 0.25 mile of a school or day care facility would be **less than significant**.

Existing On-site Contamination

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if:

3. The Project is located on or within 0.25 mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5 or is otherwise known to have been the subject of a release of hazardous substances and, as a result, would create a significant hazard to the public or the environment.

Guideline Source

This guideline for significant hazards and hazardous materials is based on criteria provided in the County Guidelines for Determining Significance for Addressing Hazardous Materials and Existing Contamination (County 2007d).

Analysis

As stated above in Section 3.1.4.1, no open (unresolved) hazardous waste sites or RECs are recorded on the Project site. Two USTs previously present at the Project site have been removed under permit, and soil samples from beneath the USTs contained no detectable concentrations of TPH. Other listing at the Project related to hazardous materials include violations that have been corrected and returned to complaint status.

The Phase I ESA identified five listed off-site properties that would have the potential to adversely affect the Project site based on the nature and extent of a given release, the distance of the reported release from the site, the stratigraphy of soils, the expected soil permeability, and the topographic position of a reported release site with respect to known or expected local and/or regional groundwater flow direction. As discussed in detail in Section 3.1.4.1, none of the five identified sites was determined to present a REC to the Project site because there either have been no violations associated with the site or past violations have been sufficiently addressed and no longer pose a risk. Therefore, the Project would not be located on or near a hazardous materials site that could cause a significant hazard to the public or the environment, and impacts would be **less than significant**.

Airport Hazards

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if:

4. The Project is located within an established AIA for a public or public use airport and proposes a development intensity, flight obstruction, or other land use that conflicts with the ALUCP or Compatibility Land Use Plan (CLUP) (if no ALUCP is adopted) and as a result, the project may result in a significant airport hazard. In addition, a significant impact would occur if the proposed project is determined by the FAA to constitute a hazard to aviation based on FAA review of Form 7460-1, is inconsistent with current FAA Heliport Design Criteria for Heliports not subject to an ALUCP or CLUP, or conflicts with FAA rules or regulations related to airport hazards and as a result, the project may result in a significant airport hazard.

Guideline Source

This guideline for significant hazards and hazardous materials is based on criteria provided in the County Guidelines for Determining Significance for Airport Hazards (County 2007g).

Analysis

The nearest airport to the Project site is Gillespie Field, located approximately 6 miles northwest of the Project site. The nearest private airstrip to the Project site is the helipad associated with the Sharp Grossmont Hospital, located approximately 5.3 miles to the northwest. The Project site is not located within either the AIA or Airport Noise Contours for present or projected future conditions (San Diego County Regional Airport Authority 2010). Additionally, the Project site is not located within the FAA Height Notification Zone. The Project is not located within an airport land use plan and does not propose an intensified development, flight obstruction, or other land use that would conflict with an ALUCP or CLUP, or cause a hazard related to airports as determined by the FAA. The Project would not construct a facility that is of a height that would interfere with low-flying aircraft and would not cause a change to air traffic patterns. Therefore, the Project would not interfere with an ALUCP or CLUP and would not cause an aviation hazard as determined by the FAA. **No impacts related to airport hazards would occur.**

Dam Inundation and Oversized Structures

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if:

5. The Project proposes one of the following unique institutions in a dam inundation zone as identified on the inundation map prepared by the dam owner: hospital; school; skilled nursing facility; retirement home; mental health care facility; care facility with patients that have disabilities; adult and childcare facility; jails/detention facility; stadium, arena, or amphitheater; or any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure. In addition, a significant impact would occur if the project proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and as a result, the proposed project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.

Guideline Source

This guideline for significant hazards and hazardous materials is based on criteria provided in the County Guidelines for Determining Significance for Emergency Response Plans (County 2007e).

Analysis

According to the Safety Element of the County General Plan, the Project site is located within a dam inundation area (County 2011b). On the Inundation Depth Map for the Sunny Day Hypothetical Failure of Loveland Dam, the Project site is identified as occurring within the Loveland Dam inundation zone (Sweetwater Authority 2019). The Loveland Dam and Reservoir

are located upstream and approximately 6.5 miles east of the Project site. Although the Proposed Project is within an inundation zone, the Project does not involve or propose to construct a unique facility such as those listed above that would place a high concentration of people within the inundation zone who could be exposed to death in the event of a dam failure. The proposed mining facility would require approximately nine employees, with up to four service vendors and 18 haul trucks on site at any given time. Moreover, due to the Project's distance from the Loveland Dam, the proposed mining activities would not exacerbate dam hazards. The Project does not propose structures or towers 100 feet or greater in height. Therefore, impacts related to dam inundation and oversized structures would be **less than significant**.

Vectors

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if:

6. The Project proposes a BMP for storm water management or construction of a wetland, pond or other wet basin that would create sources of standing water for more than 72 hours, and as a result, could substantially increase human exposure to vectors, such as mosquitoes, that are capable of transmitting significant public health diseases or creating nuisances; if the Project proposes a use that involves the production, use, and/or storage of manure, or proposes a composting operation or facility and as a result, could substantially increase human exposure to vectors that are capable of transmitting significant public health diseases or creating nuisances; or if the Proposed Project would result in a substantial increase in the number of residents located within 0.25 mile of a significant offsite vector breeding source including, but not limited to, standing water (e.g., agricultural ponds, reservoirs) and sources of manure generation or management activities (e.g., confined animal facilities, horse keeping operations, composting operations).

Guideline Source

This guideline for significant hazards and hazardous materials is based on criteria provided in the County Guidelines for Determining Significance and Report Format and Content Requirement for Vectors (County 2007f).

Analysis

A project-specific Vector Management Plan was prepared for the Proposed Project in consultation with DEHQ to evaluate potential on-site vector sources (EnviroMINE 2021c). The Project would not involve the production, use, and/or storage of manure, and does not propose a composting operation or facility. While equestrian use associated with future on-site trails could potentially be a source of manure on the Project site, quantities would be minimal and are not expected to result in substantial vector control issues associated with those types of uses. Other potential on-site sources of vectors resulting from Project implementation are discussed below.

Mosquitos

Mosquito breeding at the Project site could result from the collection of water within the proposed mining areas, process settling ponds, and/or the Sweetwater River. Each of these potential vector sources is evaluated below.

Mining Areas – Groundwater would likely be encountered during mining activities; therefore, excavation areas would be limited to five acres in size at any time. This would be accomplished by backfilling mined out areas with wash fines and overburden prior to expanding the excavation area size. Mined out areas would be backfilled to an elevation above groundwater level as the mining phases advance. Mining areas would be monitored and managed to achieve proper vector control for mosquito breeding. Additional corrective measures may include pumping of standing water and removal of vegetation to avoid creating habitat for mosquito larvae.

During mining, the Project site would establish temporary de-siltation basins that would be utilized to capture runoff from existing culverts within Willow Glen Drive and to prevent sediment from leaving the site while allowing water to pass through to existing drainage features. Mining and reclamation grading would direct runoff from the disturbed areas towards temporary basins, as necessary, to allow for desiltation and infiltration. The temporary basins would be designed to support stormwater infiltration and would not hold standing water that would provide habitat for mosquito vectors.

Process Settling Ponds – Mining operations associated with the Project would involve the use of three on-site settling ponds, one of which is referred to as the “muck pond,” at the processing plant where recycled water would be used in the screening and washing process. These basins would be used to protect surface water quality and to recycle the process water through the settling of silts and clays (wash fines). The ponds also would be used to collect local runoff that may be transporting earthen solids. The ponds would accommodate a constant input of mined material and would be cleaned occasionally by removing the collected sediment. The “muck pond” is where most of the sediment from the wash slurry would settle and would be cleaned more frequently than the other two ponds. The ponds would be cleaned occasionally by removing the sediment collected and maintained by the routine removal of vegetation, sediment, trash, and debris. When ponds are cleaned, the wash fines (silt, clay, and organic material) would be sold as a soil amendment or returned to excavation areas that have been completed to be used as backfill or incorporated into the surface of excavated areas as rough backfilling. Given that the ponds would have a continual influx of sediment and water to screen and wash excavated materials, as well as a continual removal of settled materials, the ponds would not provide suitable habitat for mosquito vectors (e.g., standing water).

Sweetwater River – Water is generally absent from the Sweetwater River streambed within the Project site throughout most of the year; surface water is ephemeral and only present during precipitation events or water releases from the Loveland Reservoir. On-site, the streambed is generally unvegetated and subject to maintenance activities, such as mowing. Water in the Sweetwater River may occur during periods of high intensity rain and local runoff events; however, ponding during these events would be short term due to high infiltration rates of the native streambed material.

The mining operator would control mosquito breeding using BMPs in accordance with requirements of the San Diego County DEHQ, as described in the Project Vector Management Plan (EnviroMINE 2021c). An active management plan would be implemented as part of the Project BMPs to ensure that water collected in the mining areas, process settling ponds, and Sweetwater River does not propagate the breeding of vectors (refer to Chapter 7.0, *List of Mitigation Measures and Environmental Design Considerations*). The plan would include both monitoring requirements and corrective measures, including visual inspection monthly during the wet season (October through March) and weekly during the dry season (July through September) for the presence of vectors. Corrective measures such as clearing of emergent vegetation (e.g., cattails, sedges, etc.) when recommended by the County DEHQ Vector Control Program, or when emergent vegetation is in excess of 50 percent of the surface area, would be implemented. Vegetation clearing is intended to prevent habitat for mosquito larvae and refuge from predation by predatory fish, if present.

Rodents

The proposed plant area would include a processing plant, a mobile modular unit used for the scale booth and a site office, and metal cargo containers to store tools or small equipment. The existing golf course building structures, including the clubhouse and maintenance facility, would be demolished at the end of Phase 2 mining. These buildings and structures may attract rodents to the Project site. The Vector Management Plan identifies good housekeeping practices to avoid attracting rodents to the buildings and structures at the Project site. BMPs for rodents include placing all trash and debris in sealed bins, timely removal of refuse by a licensed disposal company, and the use of electric or snap traps to control rodents if observed. Furthermore, the Vector Management Plan recommends the training of all on-site staff on how to avoid and control potential vectors through ongoing monitoring and maintenance activities.

Implementation of the Project Vector Control Plan would reduce or eliminate on-site conditions that could provide a suitable environment for vectors. Therefore, the Project would not result in a substantial increase in the number of residents exposed to a significant vector breeding source. The Project would not substantially increase human exposure to vectors that are capable of transmitting significant public health diseases or creating nuisances. Therefore, impacts would be **less than significant**.

3.1.4.3 Cumulative Impact Analysis

Handling and Storage of Hazardous Materials

The cumulative impact study area for the issue of hazardous substance handling consists of a five-mile radius from the Project site, with specific projects listed in Table 1-11 in Chapter 1.0 of this EIR. The cumulative projects in the vicinity of the Proposed Project include residential developments, a church, updates to an existing school, a new school, commercial development, and a retail/self-storage development. Proposed development projects could create hazards to the public and environment during the routine transport, use, and disposal of hazardous materials associated with construction activities; however, impacts related to the handling of hazardous materials would be site specific. Substantial handling of hazardous substances is not typical for the operation of the types of developments proposed in the cumulative study area. Furthermore,

the Proposed Project and cumulative projects would be required to comply with all applicable federal, state, and local regulations associated with handling and storage of hazardous materials, including preparation of an H_{MSBP} for all projects meeting the threshold identified in H&SC Section 22507(a)(1)(A). The projects and the Proposed Project are not anticipated to store hazardous materials above threshold quantities, and if they do, they would prepare a hazardous materials management plan in accordance with County requirements. Therefore, cumulative impacts related to use, handling, and storage of hazardous materials would be **less than significant**.

Hazardous Substance Handling Related to Schools or Day Care Facilities

Two of the cumulative projects listed in Table 1-11 in the Project Description of this EIR are projects related to schools. The Cuyamaca College Master Plan Revisions Project involves updates to the school's master plan. Cuyamaca College is an existing school located approximately 1.2 miles west of the Project site. The cumulative project would not introduce a new school within 0.25 mile of the Proposed Project. The College Preparatory Middle School Project involves the construction of a new school, located approximately 3 miles west of the Project site. The new school would not be located within 0.25 mile of the Proposed Project. The remaining projects listed in Table 1-11 do not involve the construction of a school or day care facility that could potentially be affected by hazardous materials handling associated with the Proposed Project. The Proposed Project, along with the other cumulative projects, would be required to comply with applicable federal, state, and local regulations associated with handling of hazardous substances. Therefore, cumulative impacts to schools or day care facilities related to the handling of hazardous substances would be **less than significant**.

Existing On-site Contamination

No open hazardous waste sites cases are located within 0.25 mile of the Proposed Project site. In general, impacts related to existing hazardous materials sites are site specific and not cumulative in nature, because potential risks identified for an individual project are not likely to affect potential risks elsewhere in the community (i.e., they would not combine to increase effects). Furthermore, the Proposed Project, along with the other cumulative projects, would be required to comply with applicable federal, state, and local regulations governing hazardous materials contamination. Therefore, cumulative impacts related to existing contamination of hazardous substances would be **less than significant**.

Airport Hazards

Cumulative development may be located within an area that could create safety hazards related to airport operations depending on the size of the cumulative project and proximity of the project to public airport safety zones and private airstrips. However, impacts related to airport hazards are site specific and not cumulative in nature. Neither the Proposed Project nor the cumulative projects would introduce a new airport or private airstrip into the region or exacerbate risks associated with existing airports or private airstrips. Each of the cumulative projects would be required to comply with applicable ALUCPs, CLUPs, and FAA regulations governing air space protection and the development of potential flight hazards. Therefore, cumulative impacts related to airport hazards would be **less than significant**.

Dam Inundation and Oversized Structures

The Project site and portions of the cumulative study area are located within the dam inundation area of the Loveland Reservoir. The Proposed Project would not exacerbate potential dam hazards or increase exposure of persons to flood hazards. Only one of the cumulative projects, the Ivanhoe Ranch residential project, is located within the Loveland Reservoir dam inundation area. Although this project has the potential to introduce new residents who could be exposed hazards associated with dam failure, the residential project does not propose a unique institution that would involve large concentrations of people with increased exposure to death in the event of a dam failure. Therefore, the Proposed Project would not contribute to a cumulatively significant impact involving dam inundation.

The Project does not propose structures or towers 100 feet or greater in height. Although detailed building height information is not available for all of the cumulative projects, it is assumed that construction of structures or towers 100 feet or greater in height that would interfere with emergency response would need FAA and local agency approvals. Therefore, the Proposed Project would not contribute to a cumulatively significant impact involving oversized structures or interference with implementation of an emergency response plan. Cumulative impacts related to dam inundation and oversize structures would be **less than significant**.

Vectors

The cumulative projects within the study area may include design features, such as bioretention basins or other BMPs, which could result in areas of standing water and ultimately attract vectors. As noted above, implementation of the Project would not provide a suitable environment for vectors and would not result in a substantial increase in the number of residents exposed to a significant vector breeding source due to the implementation of the Project-specific Vector Management Plan and associated BMPs. Although there is potential for vectors to occur within the cumulative project area, the County requires projects to demonstrate that design features that could result in areas of standing water are avoided or minimized through development and implementation of a Vector Management Plan if necessary. Therefore, cumulative impacts related to vectors would be **less than significant**.

3.1.4.4 *Significance of Impacts*

As discussed above, no significant impacts related to hazards and hazardous materials would result from the Proposed Project and no mitigation is required.

3.1.4.5 *Conclusion*

Implementation of the Proposed Project would not cause significant adverse effects related to hazards and hazardous materials. The Proposed Project would not handle, generate, store, or use hazardous substances in a manner that would cause significant impacts to health and safety. The Project would implement measures to minimize potential impacts to nearby schools and day care facilities. The site does not have known existing on-site contamination of hazardous substances and would not cause or experience hazards related to airports. Although the Project site is located in a dam inundation zone, the Project would not involve the introduction of new residents into the area that would experience impacts as a result of dam failure. The Project does not propose

structures 100 feet or greater in height and would not substantially increase human exposure to vectors as a result of Project operations.



