

3.6 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 Project. The analysis presented herein pertaining to hazardous materials is based on a Phase I Environmental Site Assessment (ESA) authored by CY Associates dated June 9, 2020, and included as *Appendix H* to this EIR. The analysis herein pertaining to the wildfire hazard is based on a Fire Protection Plan (FPP), authored by Dudek, dated February 2022, included as *Appendix MI* to this EIR. An NOP for the Project was released for public review on September 1, 2022 and an EIR Scoping Meeting was held on September 20, 2022. Four comment letters related to hazards and hazardous materials were received. Camille Perkins (received October 3, 2022) expressed concern regarding Project impacts on downstream parcels historically used for mining activities. Jerry Block (received September 27, 2022) noted the Project adjacency to power lines and a dump site. Ed Philbrick (received September 27, 2022) stated that the Project site is impacted by the adjacent dump site and environmental concerns. Rebecca Barker (received September 7, 2022) requested the Project use building electrification in order to reduce impacts to public health.

3.6.1 Existing Conditions

3.6.1.1 Hazardous Materials

The ESA encompassed the entire Project site. The primary objective of the ESA was to identify “recognized environmental conditions,” which are defined by the American Society for Testing Materials (ASTM) Standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment, or; 3) under conditions that pose a material threat of a future release to the environment.” The term “recognized environmental condition” includes hazardous substances or petroleum products even under conditions in compliance with laws. In addition, the term also includes historical recognized environmental conditions and controlled recognized environmental conditions.

Specifically, the ESA involved the following components: site reconnaissance, review of the Project site and vicinity physical setting, review of the Project site and vicinity history, and records review. The nature and results of these efforts are outlined below.

3.6.1.2 Site Reconnaissance

The Project site reconnaissance consisted of inspecting the Project site and walking accessible trails and unimproved roads on-site, as well as surrounding roads and pedestrian walkways. Full access to the Project site was provided. However, much of the surface area of the Project site was not visible due to the presence of dense vegetation. This limiting condition is not considered to be significant relative to the Project’s ESA consultant’s ability to render conclusions and recommendations regarding the Project site. Photographs of the Project site were taken to document existing site conditions and several are included and described in Appendix C of the ESA.

The Project site is vacant and undeveloped land consisting of some relatively level areas and also moderate to steep, vegetated hillside terrain. A fenced habitat conservation area is present in the northwestern portion of the Project site.

3.6.1.3 Site and Vicinity Physical Setting

The Project site and its adjacent/nearby properties are situated within the County and near an area of the City of San Marcos consisting primarily of public roadways, open space, and residential properties. A commercial building (former recycling facility) is present on the adjacent property to the east (1601 San Elijo Road) and the closed former San Marcos Landfill is located beyond the recycling facility.

3.6.1.4 Site and Vicinity History

The ESA assessment of historical uses at the Project site and adjacent/nearby properties was based on a review of historic aerial photographs and topographic maps, as well as an interview with a property owner representative, and an evaluation of previous environmental documents. A summary of this information is provided below.

3.6.1.5 Historic Aerial Photo/Topographic Map Review

CYA reviewed several historical sources to develop a history of the previous uses of the Project site, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the Project site.

Historical aerial photographs from the years 1947, 1953, 1964, 1967, 1980, 1981, 1989, 1990, 1994, 1996, 1999, 2002, 2003, 2005, 2009, 2010, 2012, 2014, and 2016 were reviewed and topographic maps from the years 1893, 1897, 1901, 1907, 1913, 1929, 1937, 1946, 1949, 1955, 1961, 1970, 1979, 1983, 2001, 2012, 2015, and 2018 were located online. In all of the aerial photographs reviewed, San Elijo Road is depicted to the north of the Project site. In the aerial photographs from 1947 to the 1989, the Project site appears to be vacant and undeveloped land with several trails traversing the property. In aerial photographs from 1980 to 2005, what appears to be soil disturbance and staging for construction is visible in the northeastern portion of the Project site. The nature of these activities is unknown but is anticipated to be associated with the construction of the current improvements at the adjacent 1601 San Elijo Road property. A few structures and agricultural activity appear on the APN 223-070-08-00 portion of the Project site in the aerial photographs from 1990 to the 2005. In the aerial photographs from 2009 to the 2016, the Project site appears in its current configuration. On the topographic maps from 1893 to 2018, the Project site appears to be vacant and undeveloped land with San Elijo Road depicted to the north of the Project site. No significant environmental concerns in connection with the Project site were noted during CYA's review of the historic aerial photographs and topographic maps.

The ESA also included review of several historical sources (as described in the following sections) to develop a history of the previous uses of adjoining properties and the surrounding area, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the Project site.

In the 1947 to 1967 aerial photographs, the surrounding properties appear to be vacant and undeveloped. The closed former San Marcos Landfill is visible to the east in photographs from 1980 to 2016. Improvements at 1601 San Elijo Road are visible in photographs from 1994 to 2016. In the 2009 to 2016 aerial photographs, other adjacent properties are depicted similar to their current configurations. The adjacent and surrounding properties appear to be predominately vacant and undeveloped on the topographic maps from 1893 to 1983. Streams/waterways are mapped in the area. On the 2001 topographic map, the structure at 1601 San Elijo Road and the San Marcos Landfill are depicted to the east. No significant environmental concerns to the Project site relative to adjacent and nearby properties were noted during the historical aerial photograph and topographic map review.

3.6.1.6 Records Review

Federal and State environmental databases provided by Environmental Risk Information Services (ERIS) were reviewed for information pertaining to documented and/or suspected releases of regulated hazardous substances and/or petroleum products within specified search distances. A copy of the ERIS report is included in Appendix D of the ESA.

A review of unmappable sites listed in the environmental database report was conducted by cross-referencing addresses and site names. Unmappable sites are sites that cannot be plotted with confidence but can be located by zip code or city name. In general, a site cannot be mapped because of inaccurate or missing location information in the record provided by the regulatory agency. Any unmappable sites identified within the specified search radii were evaluated as part of the preparation of the ESA.

3.6.1.7 Regulatory Database Listings

The Project site is not listed on Federal and State/local regulatory databases. In addition, no records pertaining to hazardous substances and/or petroleum products in connection with the Project site were found during public records requests completed with various regulatory entities. Several properties in the near and general site vicinity appear on regulatory databases but are not considered to be significant environmental concerns to the Project site. This opinion is based on several factors including the type and nature of the facility listings, regulatory case status, distance of the off-site-listed properties from the Project site, orientation of the listed properties relative to the Project site, and interpreted direction of groundwater flow.

3.6.2 Airport Hazards

The closest airport facilities to the Project site are the McClellan-Palomar Airport, located approximately 4.75 miles to the northwest, and the Oceanside Municipal Airport located approximately 12 miles to the northwest. Based on these distances, the Project site is not located within the Airport Influence Areas of any local airport or airstrip facilities.

3.6.3 Wildland Fire Hazards

The Project lies within an area statutorily designated a State Responsibility Area (SRA) “Very High Fire Hazard Severity Zone (VHFHSZ). Additionally, the Project site is within a Wildland Urban Interface (WUI), as mapped by CALFIRE (2023).

The Project's topography in its current condition is characterized by a large area of steep hills in the southwest that transition into a relatively flat area in the northern and central portions of the Project site, with terrain sloping up and away from the Project. Areas outside this Project site include similar terrain. The Project site is bordered by the Rancho La Costa Reserve to the west and south. Additionally, a portion of Copper Creek crosses the southeast corner of the Project site.

The vicinity of the Project site includes both developed areas, to the north, northeast, east, and west, and open space areas to the north, south and east. The Project site is undeveloped and is composed of a variety of vegetation types that were mapped by Alden Environmental (Alden, 2023). As shown in Table 2 of the FPP, the Project site's vegetative fuels are primarily Diegan coastal sage scrub/chaparral ecotone, non-native grassland, Diegan coastal sage scrub, and chamise chaparral, although smaller pockets of native grassland, riparian scrub, eucalyptus woodland, and southern mixed chaparral vegetation types are present. This vegetation is adapted to periodic wildfire events. Fire history data indicates that the vegetation last burned in 1996, over the entirety of the Project site. Small areas of disturbed habitat and urban/developed land cover types are also present within the Project site.

Based on fire history data for the vicinity, fire return intervals range between 0 and 27 years, indicating the wildfire potential in the region and the potential for the Project area to be subject to occasional wildfire encroachment, most likely from the large expanses of open space to the south and east.

3.6.4 Regulatory Setting

Hazardous Materials Resource Conservation and Recovery Act of 1976

Federal hazardous waste laws are largely promulgated under the Resource Conservation and Recovery Act (RCRA) [40 Code of Federal Regulations (CFR), Part 260], as amended by the Hazardous and Solid Waste Amendments of 1984 (which are primarily intended to prevent releases from leaking underground storage tanks [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 U.S. Environmental Protection Agency (EPA) 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 Standards).

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

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.

Title 22 of the California Code of Regulations & Hazardous Waste Control Law, Chapter 6.5

The Department of Toxic Substances Control (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, California EPA 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 the DEH.

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 Project site. There are separate CHHSLs for residential and commercial/industrial sites.

Waste Discharge Requirements

The Regional Water Quality Control Boards (RWQCBs) issue and/or enforce Waste Discharge Orders for numerous discharge categories pursuant to the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Section 13000, et seq.). For the Project, the on-site wastewater treatment plant is the only such discharge anticipated to be subject to RWQCB regulation (other than

storm water related requirements, as outlined in Section 3.7, *Hydrology and Water Quality*, of this EIR. Depending on the facility design and nature of associated discharge, the proposed treatment plant would likely be regulated under one or more existing orders of the San Diego RWQCB, or through a site-specific Waste Discharge Order. Specific requirements associated with such orders may include effluent testing and surface and/or groundwater monitoring to ensure conformance with applicable water quality standards.

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 grading activities if, for example, previously unknown underground tanks or other potential contaminant sources were uncovered.

County of San Diego General Plan

The County General Plan Safety Element includes a number of policies related to hazards/hazardous materials such as 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 2.4, *Land Use and Planning*, of this EIR.

Wildfire

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the California Code of Regulations (CCR). It was created by the California Building Standards Commission and is based on the International Fire Code created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. Specifically, CBC Chapter 7 (Fire and Smoke Protection Features) includes standards related to building materials, systems and assembly methods to provide fire resistance and prevent the internal and external spreading of fire and smoke (such as the use of non-combustible materials and fire/ember/smoke barriers). CBC Chapter 9 (Fire Protection Systems) provides standards regarding when fire protection systems (such as alarms and automatic sprinklers) are required, as well as their design, installation and operation. Section R327 of the CRC includes measures to identify Fire Hazard

Severity Zones and assign agency responsibility (i.e., Federal, State and Local Responsibility Areas), and provides fire-related standards for building design, materials and treatments. The CFC establishes minimum standards to safeguard public health and safety from hazards including fire in new and existing structures. Specifically, this includes requirements related to fire hazards from building use/occupancy (e.g., access for fire-fighting equipment/personnel and provision of water supplies), the installation or alteration/removal of fire suppression or alarm systems, and the management of vegetative fuels and provision of defensible space. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years.

Division 12 (Fires and Fire Protection) of the California Health and Safety Code provides a number of standards related to fire protection methods, including requirements for management of vegetation comprising a potential fire hazard under Part 5, Chapters 1 through 3.

California Department of Forestry and Fire Protection (CalFire)

State Responsibility Areas System – Legislative mandates passed in 1981 (Senate Bill 81) and 1982 (Senate Bill 1916) required CalFire to develop and implement a system to rank fire hazards in California. Areas are rated as moderate, high or very high based primarily on the assessment of different fuel types. Non-federal lands outside cities that are covered wholly or in part by timber, brush, undergrowth or grass (for which the State has the primary financial responsibility of preventing and suppressing fires, per PRC Section 4125) are referred to as State Responsibility Areas (SRAs).

Rancho Santa Fe Fire Protection District (RSFFPD) Ordinance No. 2015-01, Vegetation Management

This ordinance addresses the accumulation of weeds, rubbish, and other materials on a private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public. Specifically, the presence of such weeds, rubbish, and other materials is identified as a public nuisance, which must be abated in accordance with applicable provisions of the ordinance.

RSFFPD Fire Code – Ordinance No. 2020-01, Fire Code

This ordinance adopts the 2020 CFC with certain amendments. Ordinance 2020-01 addresses fire-related requirements including building ignition resistance, fire apparatus access, water supply and fire flow, and blasting requirements, as well as requirements for building in wildland-urban interface areas. The RSFFPD is responsible for the enforcement of defensible space inspections within the District. Inspectors from RSFFPD are responsible for the initial review of landscape plans and ongoing inspection of properties to ensure an adequate defensible space has been created and maintained around structures. If violations of the program requirements are noted, inspectors provide a list of required corrective measures and provide a time frame to complete the task. If the violations still exist upon re-inspection, the local fire inspector will pursue enforcement through forced abatement procedures.

County of San Diego Consolidated Fire Code

Section 13869.7(a) of the California Health and Safety Code provides that a fire protection district organized pursuant to Division 12 of the Code may adopt building standards relating to fire safety that are more stringent than the building standard adopted by the State Fire Marshal and contained in the California Building Standards Code. The County of San Diego, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001. The County of San Diego 2023 Consolidated Fire Code (CoFC) contains the County and fire protection districts amendments to the CoFC. The purpose of consolidation of the County and local fire districts adoptive ordinances is to promote consistency in the interpretation and enforcement of the fire code for the protection of the public health and safety, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The CoFC provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the CoFC regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases.

County Required Fire Prevention in Project Design Standards

Following the October 2003 wildfires, the County incorporated a number of fire prevention strategies into the discretionary project review process for CEQA projects. One of the key changes was the requirement for most discretionary permits (e.g., subdivision and use permits) in WUI areas to prepare a FPP for review and approval. A FPP is a technical report that considers the topography, geology, combustible vegetation (fuel types), climatic conditions and fire history of a project location. The plan addresses the following items for compliance with applicable codes and regulations: (1) water supply; (2) primary and secondary access; (3) travel time to the nearest fire station; (4) structure setback from property lines; (5) ignition-resistant building features; (6) fire protection systems and equipment; (7) impacts to existing emergency services; (8) defensible space; and (9) vegetation management.

County of San Diego General Plan

The County General Plan Safety element, as well as the Elfin Forest and Harmony Grove Community Plan, include a number of policies related to fire relative to site defensibility (including structure requirements, fuel management, minimization of flammable vegetation, service availability and ensured emergency access, etc. The Project's compliance with these policies is addressed in Section 3.8 of this EIR.

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 of San Diego 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 of these 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 at the Project site. 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 of San Diego, including all cities and the County unincorporated areas. Hazards specifically relevant to the Project that are profiled in the plan include hazardous materials, structure fire and wildfires, each of which is addressed below.

3.6.5 Analysis of Project Effects and Determinations as to Significance

The following significance guidelines are based on the Guidelines for Determining Significance for Hazardous Materials approved by PDS on July 30, 2007. A significant hazards or hazardous materials impact would occur if 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 California Health and 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 the Project will not be able to comply with applicable hazardous substance regulations.
- Is a business, operation, or facility that would handle regulated substances subject to CalARP 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 one-quarter mile of the facility.
- Is located on or within one-quarter 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 the Project, may result in a significant hazard to the public or the environment.
- Proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and, as a result, the Project would create a significant hazard to the public or the environment.

- Is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash) and, as a result, the Project would create a significant hazard to the public or the environment.
- Is proposed on or within 1,000 feet of a Formerly Used Defense site (FUDS) and it has been determined that it is probable that munitions or other hazards are located on-site that could represent a significant hazard to the public or the environment.
- Could result in human or environmental exposure to soils or groundwater that exceed USEPA Region 9 Preliminary Remediation Goals (PRG), CalEPA CHHSL, or Primary State or Federal Maximum Contaminant Levels (MCL) for applicable contaminants, and the exposure would represent a hazard to the public or the environment.
- Will involve the demolition of commercial, industrial, or residential structures that may contain asbestos, lead-based paints, and/or other hazardous materials and, as a result, the Project would represent a significant hazard to the public or the environment.
- Is located within 2 miles of a public or public use airport or within 1 mile of a private airport and proposes residential densities inconsistent with the *California Airport Land Use Planning Handbook's* Safety Compatibility Criteria Guidelines for Maximum Residential Density and, as a result, the Project may result in a significant airport hazard.
- 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, amphitheater, any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure.
- 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 Project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.
- The Project cannot demonstrate compliance with all applicable fire codes.
- A comprehensive FPP has been accepted and the Project is inconsistent with its recommendations.
- The Project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives.
- The Project proposes a BMP for storm water management or construction of a wetland, pond, or other wet basin that could 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.
- 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.

- The Project would result in a substantial increase in the number of residents located within one-quarter mile of a significant off-site vector breeding source, including, but not limited to, standing water (e.g., agricultural ponds, reservoirs) and sources of manure generation or management activities.

3.6.5.1 Hazardous Substances Handling

Guidelines for the Determination of Significance

A significant hazards or hazardous materials impact would occur due if 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 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 the Project will not be able to comply with applicable hazardous substance regulations.
- Is a business, operation, or facility that would handle regulated substances subject to CalARP 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 one-quarter mile of the facility.

Analysis

The Project does not propose any business, operation, or facility that would handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC or generate hazardous waste regulated under Chapter 6.5 of the H&SC. Both thresholds are therefore not applicable to the Project. Any household hazardous materials that may result from residential development would be subject to federal, state, and local regulations. Furthermore, there are not any schools or day cares located within one quarter mile of the Project site. Thus, implementation of the Project would not create a significant hazard to the public or the environment from on-site hazardous substance handling and impacts of the Project are less than significant.

3.6.5.2 Projects with On-site Contamination

Guidelines for the Determination of Significance

A significant hazards or hazardous materials impact would occur if the Project:

- Is located on or within one-quarter 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 the Project, may result in a significant hazard to the public or the environment.
- Proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and, as a result, the Project would create a significant hazard to the public or the environment.

- Is proposed on or within 250 feet of the boundary of a parcel identified as containing burn ash (from the historic burning of trash) and, as a result, the Project would create a significant hazard to the public or the environment.
- Is proposed on or within 1,000 feet of a FUDS and it has been determined that it is probable that munitions or other hazards are located on-site that could represent a significant hazard to the public or the environment.
- Could result in human or environmental exposure to soils or groundwater that exceed USEPA Region 9 PRG, CalEPA CHHSL, or Primary State or Federal MCL for applicable contaminants, and the exposure would represent a hazard to the public or the environment.
- Will involve the demolition of commercial, industrial, or residential structures that may contain asbestos, lead-based paints, and/or other hazardous materials and, as a result, the Project would represent a significant hazard to the public or the environment.

Analysis

As described under Section 3.6.1, an ESA was prepared for the Project site that included records and database searches as well as an on-site investigation for evidence of hazardous materials and waste. The Project's ESA did not identify any RECs on the Project site or adjacent properties during the Project site reconnaissance of the area. The environmental database records reviewed included those sites on the list of hazardous materials sites compiled pursuant to Government Code section 65962.5. Implementation of the Project would not cause a significant hazard to the public or the environment because it is not on the list of hazardous materials sites.

The majority of the database listings in the area surrounding the Project site pertain to the property located at 1601 San Elijo Road and the ~~former~~ closed San Marcos Landfill located further to the east. The former recycling plan located at 1601 San Elijo Road is located approximately 217 feet from the nearest proposed residential lot of the Project site. The ~~former~~ closed San Marcos Landfill is located approximately 700 feet from the nearest proposed residential lot on the Project site. The Project site is located within 1,000 feet of a former landfill, nevertheless, the ESA concluded that no apparent impacts to the Project site occur from the ~~former~~ closed San Marcos Landfill property.

Grading associated with the Project would not reach the groundwater table. Furthermore, the Project would receive water from domestic water lines and would not draw water from the groundwater table.

Based on the above findings, the proposed development of residential uses on the Project site would not create a significant hazard to the public or the environment. Impacts would be less than significant.

3.6.5.3 Airport Hazards

Guidelines for the Determination of Significance

A significant airport hazards impact would occur if the Project:

- Is located within 2 miles of a public or public private use airport or within 1 mile of a private airport and proposes residential densities inconsistent with the *California Airport Land Use Planning Handbook's* Safety Compatibility Criteria Guidelines for Maximum Residential Density and, as a result, the Project may result in a significant airport hazard.

Analysis

The Project site is not located within the Airport Influence Areas of any local airport or airstrip facilities, and Project implementation would not generate any associated safety hazards. Accordingly, no impacts related to airport hazards would result from implementation of the Project.

3.6.5.4 Emergency Response Plans

Guidelines for the Determination of Significance

A significant impact to emergency response plans would occur if 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, amphitheater, any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure.
- 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 Project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.

Analysis

As described above, hazards specifically relevant to the Project that are profiled in the Operational Area Emergency Plan include wildfire, structure fire and hazardous materials. The wildfire behavior assessment completed as part of the FPP addressed the worst-case scenario for wildland fire. As a result of the fire modeling, Project design features (PDFs) were incorporated into the Project as described in the FPP and in section 3.13, *Wildfire*, of this EIR. The PDFs include fuel modification zones, use of ignition-resistant building materials, fire protection system requirements, and road requirements for access and driveways. These considerations reduce the risk of fire hazard by complying with and exceeding fire code-required measures. The Project would meet fire and building code requirements, including spacing of hydrants adjacent to Project structures.

The Project would not impair implementation of either the Operational Area Emergency Plan or the Multi-Jurisdictional Hazard Mitigation Plan or interfere with evacuation activities conducted in accordance with these documents. Similarly, the Project would not cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response due to structure location and height as the Project has been designed to avoid peak-top development and keep maximum structure heights below 55 feet. Impacts would be less than significant.

3.6.5.5 Exposure to Wildland Fires

Guidelines for the Determination of Significance

A significant impact from exposure to wildland fires would occur due to the following:

- A comprehensive FPP has been accepted and the Project is inconsistent with its recommendations.
- The Project cannot demonstrate compliance with all applicable fire codes.
- The Project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives.

Analysis

Preparation of a FPP

The primary focus of a FPP is to provide an implementable framework for suitable protection of the planned structures and the people living there. The Project's FPP provides measures for fire protection that meet the San Diego County 2023 CoFC. However, it should be noted that the Project would be required to meet the adopted San Diego County CoFC at the time of construction; therefore, this analysis provides a "worst-case" analysis by evaluating the 2023 CoFC because any future fire code would be more stringent and would build upon the requirements of the current 2023 CoFC. The FPP identifies the fire risk associated with the Project's planned land uses, and identifies requirements for fuel modification, building design and construction, and other pertinent development infrastructure criteria for fire protection. These requirements are listed in the FPP and incorporated into the Project as PDFs. Therefore, the Project would be consistent with the recommendations of the FPP and impacts due to being inconsistent with the FPP's recommendations would be less than significant.

Compliance with Applicable Fire Code

The FPP demonstrates that the Project would comply with applicable portions of the 2023 CoFC, and 2019 CBC, Chapter 7A; the 2019 CFC, Chapter 49; and the 2019 California Residential Code, Section 237 as adopted by San Diego County. Chapter 7A of the CBC addresses reducing ember penetration into structures, a leading cause of structure loss from wildfires (California Building Standards Commission 2019). However, the Project shall be required to meet all applicable codes at the time of

building permit submittal, which would be confirmed during the building permit plan check by County staff.

Code compliance is an important component of the requirements of the FPP, given the Project's WUI location that is within an area statutorily designated as a VHFHSZ by CalFire. Fire hazard designations are based on topography, vegetation, and weather, among other factors with more hazardous sites, including steep terrain, unmaintained fuels/vegetation, and WUI locations. Projects situated in a VHFHSZ require fire hazard analysis and application of fire protection measures to create defensible communities within these WUI locations. As described in the FPP, the Project would meet applicable code requirements for building in these higher fire hazard areas. These codes have been developed through decades of wildfire structure save and loss evaluations to determine the causes of structure loss during wildfires. The resulting fire codes now focus on mitigating former structural vulnerabilities through construction techniques and materials so that the buildings are resistant to ignitions from direct flames, heat, and embers, as indicated in the 2023 CBC (Chapter 7A, Section 701A Scope, Purpose, and Application). Therefore, the Project would comply with all applicable fire codes and impacts due to not complying with all applicable fire codes would be less than significant.

Fire Department Response Capabilities

The Project is located within the RSFFPD responsibility area; however, the closest fire station RSFFPD Station 6 is 2.46 miles from the Project site. The City of Carlsbad provides fire service to areas west of the Project site and has a fire station located approximately 1.55 miles west of the Project site. Given its proximity and ability to meet the County's 5-minute travel time requirement, Carlsbad Fire Department Station 6 would serve the Project site, per the North County Boundary Drop Program.

The Project is projected by call volume analysis (using a San Diego County per-capita call generation factor of 82 calls per 1,000 persons) to add approximately 18 calls per year to the Carlsbad Fire Department's existing call load. This call volume (0.05 calls per day) is not considered enough of an increase to require additional resources.

Carlsbad Fire Department Station 6 would be able to provide first engine response to all Project lots in under five minutes, consistent with the San Diego County General Plan Safety Element requirement for village and limited semi-rural residential areas. It would be able to reach the furthest lots within 3.71 minutes. The next closest fire station is San Marcos Fire Department Station 4, located at 204 San Elijo Road, San Marcos, CA, approximately 2.29 miles from the Project site along San Elijo Road. Carlsbad Fire Department Station 6 averages roughly 87 calls per month within its response area. Further, City of San Marcos Fire Station 4 is located approximately 2.29 miles east of the Project site, and could provide additional resources, if necessary. Therefore, the Project would meet the emergency response objectives identified in the Safety Element of the County General Plan and impacts would be less than significant.

Evacuation Plan

A Conceptual Wildfire Evacuation Plan (CWEP) (*Appendix M2*) has been prepared for the Project site based on the County and RSFFPD Emergency Operations Procedures, which closely follow the Unified San Diego County Emergency Services Organization and County Operational Area Emergency Operations Plan (EOP), including its Evacuation Annex. The CWEP also provides Project specific evacuation planning, operations restrictions, and monitoring requirements. Therefore, the Project would meet the emergency response objectives identified in the Safety Element of the County General Plan and impacts would be less than significant.

3.6.6 Cumulative Impact Analysis

Impacts associated with hazardous materials are generally site-specific. The Project site does not contain known contaminated groundwater or soils, or asbestos- or lead-containing structures. In addition, the Project would not result in significant impacts related to airport hazards or regional emergency/evacuation plans. Cumulative projects in the Project site vicinity would be required to implement, as appropriate, similar site-specific measures to address potential impacts from hazardous materials and airport hazards. These kinds of impacts do not combine together to increase effects. Therefore, there would be less than significant cumulative impacts from hazardous materials and airport hazards.

Development of the Project would introduce potential ignition sources, particularly more people in the area. However, as mitigating factors for this increase in potential ignition sources, the Project would develop the site which would reduce the amount of ignitable fuels on-site and would lower flammability landscape. Furthermore, development of the Project site would allow for better access throughout on-site areas, managed and maintained landscapes, and consistent human presence in the area, which would reduce the likelihood of arson, off-road vehicles, or shooting-related fires.

The Project is projected by call volume analysis (using San Diego County per-capita call generation factor of 82 calls per 1,000 persons) to add approximately 18 calls per year to the Carlsbad Fire Department's existing call load. This call volume (0.05 calls per day) is not considered enough of an increase to require additional resources. Therefore, the Project's cumulative contribution of 0.05 call per day would be less than significant.

Based on the type of wildfire anticipated/modeled for this area, wildland fire hazards exist for this and other projects in the vicinity. With implementation of the corresponding fire protection PDFs summarized above and discussed in further detail in Section 3.14, *Wildfire*, including conformance with building and fire codes, provisions for ongoing maintenance of roads, infrastructure, vegetation management, and defensible space, the Project would not contribute to a cumulative wildland fire risk. Cumulative projects in the study area, as shown on Table 1-3, *Cumulative Developments*, along with any future projects, would be required to implement site-specific measures to address potential impacts from wildfires. Based on the conclusion that the Project would not contribute to a cumulative wildland fire risk, and on the requirement that future projects in the vicinity would also implement preventative wildfire measures, cumulative impacts from wildland fire hazards would be less than significant.

3.6.7 Significance of Impacts Prior to Mitigation

Based on the analysis, mandatory regulatory compliance and PDFs, the Project would have less than significant impacts related to hazards and hazardous materials.

3.6.8 Mitigation

Based on the above analysis, all hazards and hazardous materials-related impacts would be less than significant, and no mitigation would be required.

3.6.9 Conclusion

Based on the analysis, mandatory regulatory compliance and PDFs, the Project would have less than significant impacts related to hazards and hazardous materials.