

3.1.3 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. Three Hazardous Materials Investigations were prepared for the Project site by Geocon, including a Phase I Environmental Site Assessment (ESA) conducted in 2009; a 2014 records review update of hazardous materials site listings on federal, State and local databases; and a Phase II ESA conducted in 2015 (Geocon 2009, 2014, and 2015a). In addition, a Fire Protection Plan (FPP) was prepared by Dudek (2018) to assess the potential impacts resulting from wildland fire hazards and identify protective measures. Relevant portions of the Hazardous Materials Investigations and FPP are summarized below along with other pertinent information, with the complete technical reports included in Appendices K and L of this EIR.

3.1.3.1 Existing Conditions

Hazardous Materials

The Phase I ESA conducted for the Proposed Project encompassed the entire Project site and applicable off-site areas. The primary objective of the Phase I ESA was to identify “Recognized Environmental Conditions” (RECs) to the extent feasible, based on the following definition of an REC provided in ASTM Standard E 1527-13:

...the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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...de minimis conditions¹ are not recognized environmental conditions.

Specifically, the Phase I ESA involved the following four components: (1) site reconnaissance; (2) review of the Project site and vicinity physical setting; (3) review of the Project site and vicinity history; and (4) records review. The nature and results of these efforts are outlined below.

Site Reconnaissance

The Project site and adjacent properties were reconnoitered on January 16, 2009, with the objective of identifying the potential occurrence of RECs. The site was noted to encompass primarily undeveloped areas supporting native vegetation, with the following specific observations:

- No indicators of potential RECs were observed, including: (1) hazardous substances/petroleum products; (2) hazardous wastes; (3) above-ground storage tanks (ASTs) or underground storage tanks (USTs); (4) unidentified substance containers;

¹ De minimis conditions are defined as circumstances that generally do not present a threat to human health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

(5) polychlorinated biphenyls (PCBs); (6) wastewater systems (drains/clarifiers/sumps); (7) evidence of releases (odors, stained soil or distressed vegetation); (8) pools of liquid, pits, ponds or lagoons; (9) wells; or (10) other site issues.

- Several unpaved roads were present in the central and northern site areas, with scattered trash and debris observed in various locations, primarily in the central portion of the site.
- The remnants of former residential use were observed near the western site boundary along Country Club Drive. While much of the structure is no longer present, portions of the concrete foundation remain, along with a partial chimney structure along the north side of the former residence.
- A concrete structure measuring approximately 20-feet square and extending to a depth of 8 to 12 feet was observed in the central portion of the site. The interior bottom of this structure was filled with trash and debris.

Observed and reported uses in the Phase I ESA for adjacent and surrounding off-site areas include the following:

- Escondido Creek and Harmony Grove Road are located on adjacent properties to the north, and areas farther north included a rock quarry and dairy operation. The rock quarry and dairy have since been removed as part of ongoing development at the HGV project.
- Areas to the south of the Project site encompass predominantly undeveloped open space supporting native vegetation.
- Several estate residential properties are located on adjacent properties to the east, with surrounding areas consisting primarily of undeveloped open space with native habitat.
- A dairy site, now inactive, was previously located on the property adjacent to the northwestern site boundary, with additional adjacent properties to the west along Cordrey Drive encompassing low- to medium-density residential development and associated equestrian facilities (corrals, rings, barns, etc., with a number of these facilities extending into the Project site).

Site and Vicinity Physical Setting

On-site topography is generally characterized by a broad, relatively gentle valley bottom in the northern and central portions of the site, and moderately steep slopes to the south and northeast. Based on information provided in the Phase I ESA and the Project Geotechnical Investigations (Geocon 2015a), the Project site is located within the Peninsular Ranges Geomorphic Province, a region characterized by northwest-trending structural blocks and intervening fault zones. In general, the Province is underlain by Mesozoic-age (between approximately 65 and 250 million years old) igneous and metamorphic rocks to the east, and Cenozoic-age (approximately 65 million years or less in age) sedimentary rocks to the west (with an overlying dissected coastal plain). Geologic and surficial units present within the Project site include Cretaceous-age (between approximately 65 and 135 million years old) granitic rocks; Quaternary-age (less than

approximately two million years old) alluvium, colluvium and topsoil; and historic (recent) fill materials (refer to Figure 3.1.2-1, *Geology Map*).

Local groundwater is generally categorized as sodium chloride in character, with reported total dissolved solid (TDS) levels of 250 to 5,000 milligrams per liter (mg/l). The chemical character of local groundwater aquifers is largely attributed to local domestic waste disposal (septic) systems, with surface flows in nearby Escondido Creek also receiving treated effluent discharge from the City of Escondido Hale Avenue Resource Recovery Facility. Existing beneficial uses identified for local groundwater by the RWQCB include municipal and domestic, agricultural, and industrial service supply (RWQCB 1994, as amended). Shallow groundwater seepage was encountered in alluvial deposits during 2005 subsurface geotechnical exploration in the northern and north-eastern portions of the site. Moderate groundwater seepage was observed at a depth of 16 feet below surface grade in the northern site area, with sediments below this level observed to be saturated (to a depth of 17.5 feet, where the trench was terminated). Minor seepage was also observed at a depth of 4 feet in the northeastern portion of the site, with no saturation at greater depths (and this trench extending to a depth of 13 feet). These occurrences were interpreted as resulting from above average precipitation and associated heavy flow in Escondido Creek, with seasonal variations in groundwater seepage anticipated locally, particularly in areas proximal to Escondido Creek. Groundwater seepage was not observed in other portions of the site during geotechnical investigation, and no shallow permanent groundwater was observed (or anticipated to occur) within or adjacent to the site (Geocon 2015a). The Project Phase I ESA estimates on-site groundwater depths at approximately 10 to 20 feet below the surface in the northern portion of the site (with this area likely encompassing seasonal perched² aquifers as noted above), and more than 100 feet below grade in the remainder of the site.

Site and Vicinity History

The Phase I ESA assessment of historical uses at the Project site and adjacent/nearby properties was based on review of historic aerial photographs and topographic maps, as well as an interview with a property owner representative and review of previous environmental documents. A summary of this information is provided below, with additional description provided in Appendix K-1).

Historic Aerial Photo/Topographic Map Review – The assessment of historic aerial photographs and topographic maps in the Phase I ESA included the following specific sources: (1) historic aerial photographs dated 1946, 1953, 1963, 1974, 1989, 1994, 2002 and 2005; and (2) historic topographic maps dated 1901, 1904, 1947, 1949, 1968, 1975 and 1996. In addition, the following descriptions include the online review of several historic aerial photos dated between 1947 and 2005 (HistoricAerials.com 2014). From this analysis, the following summary is provided of historic uses in the Project site and vicinity:

- The Project site and surrounding areas were predominantly undeveloped between 1901 and 1946, with no observed structures, roadways or other development.

² Perched aquifers are defined generally as unconfined (i.e., not under pressure) groundwater contained by impermeable or semi-permeable strata, and are typically limited in extent and associated with seasonal precipitation and local landscape and/or agricultural irrigation.

- Residential and other structures apparently related to agricultural use were present on site as early as 1946, with nearby portions of Country Club Drive and Harmony Grove Road visible beginning in 1947. Additional surrounding development present in 1946-1947 included cultivated crops/orchards to the north and west, as well as the previously described rock quarry to the north.
- Agricultural cultivation within the site appears to have been expanded to the south by 1953, but was mostly removed by 1963. Surrounding development in the 1950s and 1960s is generally similar to that described for 1946-1947, with a few additional structures present to the north.
- Land use and development at the Project site in 1974-1975 are generally similar to those described above for the period of 1946-1963, although a number of additional unpaved roads are present and native vegetation was recovering in previously disturbed areas. Most surrounding uses are also generally similar to those noted during 1946-1963, although by 1975 additional unpaved roads are present, as well as several additional agricultural uses including the previously described dairy operation at the HGV project site, the Harmony Egg Ranch (as described below under Records Review), and the noted (currently inactive) dairy operation adjacent to the northwestern Project site boundary.
- On-site land use and development during the period of 1989 to 2005 are generally similar to those described above in 1974-1975, with more extensive native vegetation observed in the western half of the site by 2002. Most surrounding land uses are also similar to those described for 1974-1975, although the rock quarry and agricultural uses to the north had expanded by 1989, and additional residential/roadway development was present in several off-site areas between 1989 and 2005.

Site Representative Interview – A representative of the (then) property owner was interviewed in 2004 regarding current and historical on-site uses, as part of a previous Phase I ESA conducted at the Project site for HGV studies (Geocon 2004, as outlined below). This individual indicated that, to his knowledge: (1) the site was developed for business use and did not encompass any ASTs or USTs; (2) no environmental cleanup liens had been recorded for the site; and (3) no institutional/engineering controls or other land use restrictions had been associated with the site.

Previous Environmental Document Review – As noted above, a Phase I ESA was conducted for the Project site in 2004, with this report prepared as part of a due diligence process. The 2004 Phase I ESA concluded that the site was vacant and undeveloped at that time, with no RECs observed on site and additional environmental assessment considered unwarranted (Geocon 2004).

Records Review

The 2009 Phase I ESA incorporates a review of applicable regulatory records related to hazardous material listings and other potential contaminant sources at the Project site and vicinity, including the following efforts: (1) a search of federal, State, local and other databases for hazardous material/waste listings; and (2) contacts with local government agencies and utility districts, as outlined below.

Regulatory Database Listings – A search of applicable database listings was conducted for the site and vicinity as part of the Project Phase I ESA. This search included numerous databases maintained by federal, State and local agencies, as well as tribal sources and proprietary records (with a complete list of database sources provided in Appendix K-2). The search radii in this process varied between 0.25 and 1 mile for most databases, with certain efforts (e.g., liens, mines, and air emissions) limited to the Project site. Based on this review, no listed sites were recorded within the Project site or the associated search radii in 2009 (Geocon 2009).

As previously noted, an updated records review of hazardous materials databases was conducted for the Project site and surrounding areas in 2014. This effort was based on a similar methodology as described above for the 2009 search, with no hazardous material or other listings recorded within the Project site. Several off-site listings were observed within the associated search radii during the 2014 review, however, including the following three listings located at distances that could potentially result in associated on-site effects (i.e., within 0.25 mile for USTs and 0.125 mile for other listings). All other listings identified in the 2014 records review update are located at greater distances and/or are down-gradient from the Project site, and are not included in the following analysis (with these listings outlined in Appendix K-2).

- Harmony Egg Ranch. This site is located on the previously described HGV project, and is approximately 340 feet north of the Project site northern boundary. As noted for other former activities at HGV, the egg ranch has been completely removed as part of the ongoing site development. The egg ranch is listed on the State Solid Waste Facility/Landfill (SWF/LF) and San Diego County Hazardous Materials Division (HMD) databases, and is described as a closed landfill/burn site and animal material composting facility. The last HMD inspection of the site is listed as October 12, 2011, with no additional information provided regarding the potential contaminate(s) involved or affected media (i.e., soil or groundwater). Based on the listing status and location of this facility, the potential for any associated contaminants to affect the Project site is identified as low (Geocon 2014).
- Harmony Grove Village. This site (listed as “Harmony Village Grove” in the updated records review) is located on the portion of the HGV project north of Harmony Grove Road, and is approximately 375 feet northwest of the Project site at its closest point. HGV is listed on two State databases, including the Spills, Leaks, Investigation and Cleanup Program (SLIC); and SWRCB GeoTracker site. HGV is identified on the GeoTracker list as a Voluntary Assistance Program (VAP) Open Site Assessment through the San Diego County Department of Environmental Health (DEH) as of June 2014, and requests oversight of environmental investigation and monitoring activities by the DEH prior to site development. Based on the nature and location of the site, the potential for any associated contaminants to affect the Project is identified as low (Geocon 2014).
- Continental Hydraulics, Inc. The Continental Hydraulics site is located along Harmony Grove Road, approximately 405 feet north of the Project site. This site is listed on the federal Resource Conservation and Recovery Act (RCRA) Small Quantity Generators (SQG) database, and is described as a facility that generates between 100 and 1,000 kilograms (220 to 2,200 pounds) of hazardous waste during any calendar month.

No specific waste categories or types are identified, and no violations have been reported for the Continental Hydraulics facility. Based on the listing status and location of this site, the potential for any associated contaminants to affect the Project site is considered low (Geocon 2014).

In addition to the sites described above, six listings were included in the records review update “Orphan Summary” which identifies listings that are not mapped due to “incomplete address information” and therefore could not be accurately plotted. Two of these listings are associated with the previously described Harmony Egg Ranch which was located north of Harmony Grove Road, with the remaining four “orphan sites” described as follows:

- Caltrans UST Facility. A Caltrans facility UST is identified near the I-5 and SR-76 interchange, approximately 16.25 miles northwest of the Project site. Based on the City (Escondido) and zip code (92029) identified for this site, however, it is assumed that that the noted facility is actually located near the I-15 and SR-78 interchange, approximately 2.3 miles northeast of the Project site.
- Dixon Dam Landfill. The Dixon Dam Landfill facility listing is located at the Lake Dixon Dam Spillway, approximately 6.2 miles northeast of the Project site.
- Mayhew Landfill. The Mayhew Landfill site listing is located near Greenwood Place in the City of Escondido, approximately 1.5 miles east of the Project site.
- Benton Landfill. The Benton Landfill site listing is located near Stillwater Glen in the City of Escondido, approximately 4.5 miles north of the Project site.

Based on the listing status and locations of the noted “orphan sites,” the potential for any associated contaminants to affect the Project site is identified as low (Geocon 2014).

Agency/District Contacts – A number of State and local agency contacts were conducted as part of the Project Phase I ESA and records review update. Specifically, all of the following agencies were contacted in both 2009 and 2014, except the San Diego County Department of Agriculture, Weights and Measures (DAWM), which was only contacted in 2014.

- California Department of Conservation, Division of Oil, Gas and Geothermal Resources. Based on review of DOGGR records, no existing or former oil, gas or geothermal wells are located within 1 mile of the Project site.
- County of San Diego Building Department. Based on review of online records, no County Building Department permits were identified for the Project site.
- County of San Diego Department of Agriculture, Weights and Measures. A request was submitted to the DAWM in 2014 to identify any record of restricted pesticide/herbicide use at the Project site. This department maintains such records for approximately four years. No such use was recorded for the parcels associated with the Project during the period of 2011 to 2014.

- County of San Diego DEH. Requests were submitted to the DEH to identify any records associated with the Project site, with no such records identified.
- San Diego Air Pollution Control District. Requests were submitted to the SDAPCD to identify any records associated with the Project site, with no such records identified.
- Rincon MWD. District staff were contacted to obtain information regarding local municipal water sources, sewage disposal methods, the location and depth of municipal water wells, and any potential drinking water contamination issues. The associated responses indicated that: (1) municipal water for local uses is purchased by Rincon MWD from the SDCWA; (2) current residents in the Project area primarily utilize local septic systems for wastewater disposal; (3) no known municipal water wells are located within the Project site or immediate vicinity; and (4) there are no recorded issues related to drinking water contamination in the Project site vicinity.

Airport Hazards

The closest airport facilities to the Project site are the McClellan-Palomar Airport, located approximately 8.4 miles to the west, and the Lake Wohlford Resort Airstrip approximately 9 miles to the northeast. Based on these distances, the Project site is not located within the Airport Influence Areas of any local airport or airstrip facilities.

Wildland Fire Hazards

The FPP prepared for the Project was based on a field assessment of the Project site (including on-site and off-site adjacent areas) on September 30, 2014, and a subsequent assessment of fire risk resulting from the site's topography, natural vegetation and fuel loading, fire history, and general susceptibility to wildfire. The FPP also presents the results of fire behavior modeling that was conducted to document the type and intensity of fire that would be expected on this site given characteristic site features such as topography, vegetation, and weather. A summary of this information is provided below, with additional description provided in Appendix L).

The Rancho Santa Fe Fire Protection District (RSFFPD) is the Fire Authority Having Jurisdiction (FAHJ). Areas of significant fire hazards in the County have been mapped by the California Department of Forestry and Fire Protection (CAL FIRE) through their Fire and Resource Assessment Program. These maps place areas of the County into different Fire Hazard Severity Zones (FHSZ) based upon fuels, terrain, weather, and relevant factors. The FHSZs are divided into three levels of fire hazard severity: moderate, high, and very high. The Project lies within an area statutorily designated a State Responsibility Area (SRA) "Very High Fire Hazard Severity Zone (VHFHSZ)," by CAL FIRE and recognized by the County and RSFFPD.

A Wildland Urban Interface (WUI) is an area where development is located in proximity to open space or lands with native vegetation and habitat that are prone to brush fires. The WUI creates an environment that if not properly designed and maintained, can facilitate movement of fire between structural and vegetation fuels.

The Project site is within a WUI area, as mapped by CAL FIRE (2007).

A FPP was prepared to assess the potential impacts resulting from wildland fire hazards and identify the measures necessary to adequately mitigate those impacts. As part of the assessment, this plan considered the fire risk presented by the site including: property location and topography, geology (soils and slopes), combustible vegetation (fuel types), climatic conditions, fire history and the proposed land use and configuration.

The HGV South site is an irregularly shaped parcel that includes a relatively flat valley “floor” flanked by more rugged terrain to the south, east and west. The “valley floor” is uniquely surrounded by a series of ridgetops (ranging in size from just under 1,000 feet to just under 2,000 feet) that encircle the site and valley floor on the east, west and south. The majority of the site is relatively flat with approximately 66.7 acres ranging between zero and 25 percent slope. An estimated 39.7 acres are between 25 and 50 percent slope and there is approximately 4.6 acres of extremely steep hillside that exceeds 50 percent. All of the slopes drain to the northwest towards Escondido Creek, which meanders through San Elijo Canyon to the southwest of the Project site. Elevations on the site range from roughly 580 amsl in the northwestern portion of the property to just over 840 feet amsl in the southeastern portion of the Project site.

Based on the Project’s Vegetation Map (Figure 2.3-1), there are nine vegetation communities and land covers within the Project site boundaries: coast live oak woodland, coastal sage-chaparral transition, Diegan coastal sage scrub (including disturbed), disturbed habitat, eucalyptus woodland, granitic southern mixed chaparral, non-native grassland, non-native vegetation, and urban/developed. Vegetation communities of concern are those that are (1) more likely to facilitate fire spread, and (2) occur adjacent to the proposed development. Three off-site vegetation communities (coast live oak woodland, Diegan coastal sage scrub, and southern mixed chaparral) were identified as potentially facilitating fire spread toward Project residences. It is noted that existing structures can provide varying levels of protection for other structures/open space when they are located between the wild fire and other uses.

The wind factor is a key to the spread of wildfires in southern California. The most critical wind pattern for the Project area would be an off-shore wind coming out of the north/northeast, typically referred to as a Santa Ana wind. Such wind conditions are usually associated with strong, hot winds with very low relative humidity. Santa Ana winds are caused by high-pressure weather systems and can occur any time of the year. However, they generally occur in the late fall (September through November). This is also when non-irrigated vegetation is at its lowest moisture content.

Based on fire history data obtained from CAL FIRE’s Fire and Resource Assessment Program (FRAP) database, numerous fires have been recorded by fire agencies in the direct vicinity of the Project site, primarily associated with the open space preserves (DDHP and Park and EFRR) to the south of the Project area (see Appendix L). One recorded fire has burned on the Project site, occurring in 1997 (Del Dios Fire), and the Cocos Fire (2014) burned up to (although not on) the northwest edge of the property. The average fire return interval for fires burning within 3 miles of the Project site is seven years.

To determine fire risk in developed Project conditions, the FPP developed several scenarios modeling the potential fire behavior of a wildland fire that might occur in the vicinity of the Project. Fire Behavior calculations were used to determine clearance requirements, allowable

distances of vegetation treatment and maintenance requirements. The distances and requirements are delineated as FMZs.

Based on the results of fire behavior modeling, a typical fire in the Project vicinity would be a sage scrub-chaparral fueled fire that moves quickly, burning with moderate to high intensity. The fire is anticipated to be a wind-driven fire from the east or north during the fall. Flame lengths in the fuels could reach 84 feet with spread rates reaching approximately 17 mph during an extreme weather event at the *worst-case* condition area modeled. A typical cause may be related to structure fires in the neighborhoods to the north and east or roadways (tossed cigarette, car fire, or electrical power line arching). These conclusions for the Project site are consistent with results throughout large portions of southern California, where Santa Ana wind driven fires present the highest risk of non-containment by initial or extended attack and the occurrence of a major incident.

The FPP concluded that given the climatic, vegetative, WUI, and topographic characteristics and fire history of the area, the Project site, once developed, would be subject to occasional off-site wildfires that would be expected to be potentially fast moving and of primarily low- to moderate intensity. The Santa Ana threat was considered minimal post-development, however, because there is a lack of wildland fuels to the north, where HGV is under development.

Regulatory Setting

Hazardous Materials

Resource Conservation and Recovery Act of 1976 – Federal hazardous waste laws are largely promulgated under RCRA (40 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 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 Standards).

Hazardous Material Transportation Act – The U.S. Department of Transportation (USDOT) regulates hazardous materials transportation under 49 CFR, which requires the USDOT Office of Hazardous Materials Safety to generate regulations for the safe transportation of hazardous materials. 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.

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

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 Certified Unified Program Agencies (CUPAs) to implement associated State regulations within their jurisdiction. For businesses within the County, HMBPs are submitted to and approved by the 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.

Waste Discharge Requirements – The 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 proposed 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 3.1.4 of this EIR, *Hydrology/Water Quality*). 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.

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.

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 CEQA 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 DEH/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 include 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 3.1.5 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 (CAL FIRE) - State Responsibility Areas System – Legislative mandates passed in 1981 (Senate Bill 81) and 1982 (Senate Bill 1916) required CAL FIRE 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 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.

Rancho Santa Fe Fire Protection District Fire Code – Ordinance No. 2014-01A. This ordinance adopts the 2013 California Fire Code and 2012 International Fire Code with certain amendments. Ordinance 2014-01A 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 Consolidated Fire Code contains the County and fire protection districts amendments to the CFC. 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 Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the Code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases. The 2014 CFC is based upon the County's 2014 Fire Code as currently amended and adopted in Title 9, Division 6, Chapter 1 of the County Code, subject to the modifications of each fire protection district to the Building Standards Code based upon their respective determinations as to what modifications are reasonably necessary because of local climatic, geological and topographical conditions within the respective districts.

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 an FPP for review and approval. An FPP is a technical report that considers the topography, geology, combustible vegetation (fuel types), climatic conditions and fire history of the Proposed Project location (see Appendix L). 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 Land Use and Safety elements, 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 3.1.5 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 regards 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 in Section 3.1.3.2, below.

Airports Hazards

County of San Diego General Plan – The County General Plan Safety Element addresses issues related to development of flight hazards, as addressed in Section 3.1.5 of this EIR.

3.1.3.2 Analysis of Project Effects and Determination as to Significance

Release of Existing Hazardous Substances

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

1. The proposed 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 the project may result in a significant hazard to the public or the environment.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (2007f).

Analysis

As mentioned previously, a search of federal, State, and local databases for the Project site and surrounding areas was performed. The search distance for the review extended 0.25 to 1 mile from the Project site. Copies of the reports summarizing the results of these searches are included in the appendices of the respective ESAs and Records Review Update (Appendix K-2 of this EIR). No sites identified in the searched databases are located within the bounds of the Project site. The three listings located at distances that could potentially result in associated on-site

effects (i.e., within 0.25 mile for USTs and 0.125 mile for other listings) were determined to have a low potential to affect the Project site. One site has been completely removed (Harmony Egg Ranch), one site is being monitored as it is being constructed (HGV north of Harmony Grove Road), and one site has had no violations (Continental Hydraulics, Inc.). Based on information provided for the listed properties, their locations, and the databases on which the properties were listed, **impacts associated with existing hazardous substances would be less than significant.**

Airport Hazards

Guidelines for the Determination of Significance

A significant impact to public safety or the environment would occur if:

2. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the project result in a safety hazard for people residing or working in the project area.
3. For a project within the vicinity of a private airstrip, the project result in a safety hazard for people residing or working in the project area.

Guidelines Source

These guidelines are based on County Guidelines for Determining Significance – Airport Hazards (2007b).

Analysis

As mentioned above, the Proposed Project is not located within the Airport Influence Area for any public or private airport/airstrip sites. The nearest airport facilities include Palomar McClellan-Palomar Airport approximately 8.4 miles to the west, and the Lake Wohlford Resort Airstrip approximately 9 miles to the northeast. Based on these distances, 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 Proposed Project.**

Human or Environmental Exposure to Hazardous Materials

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

4. The proposed project could result in human or environmental exposure to soils or groundwater that exceed the U.S. Environmental Protection Agency Region 9 Preliminary Remediation Goals, California Environmental Protection Agency California Human Health Screening Levels, or Primary State or Federal Maximum Contaminant Levels for applicable contaminants and the exposure would represent a hazard to the public or the environment.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (2007f).

Analysis

The ESA and the Records Review Update prepared for the Project site did not identify any RECs on the site or adjacent properties during the site reconnaissance of the area, with the exception of the three listings noted above which have a low potential to affect the Project site.

The review of historical aerial photographs conducted for the ESA indicated that the central portion of the site was used for agricultural purposes from as early as 1946, with no mention of agriculture in the central portion thereafter, and the southern portion was used for agriculture from as early as 1953 until as late as 1963.

According to the Rincon MWD, there are no reported drinking water contamination problems or municipal drinking water wells on site or in the general vicinity (Appendix K-2).

The Phase II ESA (Appendix K-3) detected arsenic in 18 of the 21 shallow soil samples at concentrations up to 2.6 milligrams per kilogram (mg/kg). The regulatory health risk-based soil screening levels developed by the State of California (the California Human Health Screening Levels [CHHSLs]) for residential land uses is 0.070 mg/kg. Although the detected arsenic concentrations exceed the CHHSLs, the maximum level detected is below the California's DTSC regional background for arsenic in southern California soils of 12 mg/kg. As a result of the well-documented background levels of arsenic in California soils, the CalEPA (2005) published the following statement regarding CHHLs: "Naturally occurring background concentrations of arsenic, beryllium, cadmium, chromium, and other metals in soils may exceed their respective soil CHHSLs. Cal/EPA generally does not require cleanup of soil to below background levels. This issue is frequently encountered with arsenic. Natural background concentrations of arsenic in California are often well above the health-based, direct-exposure goals in soil of 0.07 mg/kg for residential land use..." The Phase II ESA, as well as various database searches and site reconnaissance, found no sources of hazardous materials that would have contaminated Project site soils. Therefore, **impacts associated with soil contamination would be less than significant.**

No issues with drinking water or water well contamination have been indicated by Rincon MWD, and no sources of hazardous materials that could have contaminated groundwater underlying the Project site have been identified during the various database searches and site reconnaissance. Therefore, **impacts associated with groundwater contamination would be less than significant.**

Handling and Storage of Hazardous Materials

Guidelines for the Determination of Significance

A significant impact to public safety or the environment would occur if:

5. The proposed 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.
6. The proposed project is a business, operation, or facility that would handle regulated substances subject to California Accidental Release Prevention (CalARP) RMP 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.

Guidelines Source

These guidelines are based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (2007f).

Analysis

The Proposed Project includes a WTWRF that would be located in the northern-most portion of the Proposed Project. The on-site WRF would be located a minimum of 315 feet from the closest on-site planned residence, approximately 930 feet from the closest HGV residence north of Harmony Grove Road, and approximately 1,250 feet from the nearest existing off-site residence to the east. Each of these existing or planned residences is or would be at higher elevations than the WTWRF. Schools are located at even greater distances. The closest identified school is Del Dios Middle School off West 9th Avenue, approximately 1.75 miles as the bird flies. This type of land use could require the handling and storage of hazardous materials for operations.

Prior to building permit approval, the proposed WTWRF would be conditioned to prepare a HMBP and an RMP to document the type of materials proposed for plant operations, as well as, proposed storage and handling procedures, procedures for transport of materials, an emergency response plan, and an employee training program. The RMP and HMBP would be prepared and submitted for approval by the County DEH HMD, which is responsible for regulating HMBPs, chemical inventories, hazardous wastes, permitting, and RMPs. The preparation of a Risk Management Plan is a regulatory requirement that would be implemented for any aspect of the Project that would include the use or storage of hazardous materials as described, prior to issuance of a building permit. The MUP for the WRF would also not be issued by the County PDS until the RMP is approved. This would assure safety measures, as discussed in the RMP, are in place. The DEH HMD is also required to conduct ongoing routine inspections to ensure compliance with existing laws and regulations; to identify safety hazards that could cause or contribute to an accidental spill or release; and to suggest preventative measures to minimize the risk of a spill or release of hazardous substances. Implementation of the RMP and HMBP would

minimize the potential for accidental release of hazardous materials and the associated potential risk to public safety. Additionally, as noted above, the WTWRF would not be located within 0.25 mile of an existing or proposed school site. Therefore, **impacts related to the handling and storage of hazardous waste associated with the proposed on-site WTWRF would be less than significant.**

Demolition of Structures that May Contain ACM, LBP, and/or Other Hazardous Materials

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

7. The proposed project would involve the demolition of commercial, industrial or residential structures that may contain asbestos containing materials (ACM), lead based paint (LBP) and/or other hazardous materials and as a result, the project would represent a significant hazard to the public or the environment.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (2007f).

Analysis

Asbestos was used extensively in the United States, especially from the 1940s until the late 1970s. The material was used in buildings for fireproofing, acoustical insulation, condensation control, and decoration. It can be found in products such as asphalt roofing products, insulation inside fuse boxes and old wire insulation, shingles and siding, and floor tile. Its use was largely discontinued after 1980. Lead based paint was used up until 1978 in paint and other products, and is found on the walls, woodwork, windows and doors of many older structures. Stained soils, pitted concrete, and leaking containers/drums on sites can indicate the presence of other sources of contamination. Structures appear to have been on site prior to 1948. The remains of them, however, are currently restricted to cement pads, some partial cement walls and a chimney remnant. As such, materials associated with roofing, insulation, etc. are not expected. Therefore, **a less than significant impact related to the demolition of these structures could occur.**

Wildland Fire Hazards

Guidelines for the Determination of Significance

A significant impact to public safety or the environment would occur if:

8. The project cannot demonstrate compliance with all applicable fire codes.
9. A comprehensive FPP has been accepted, and the project is inconsistent with its recommendations.

10. The project does not meet the emergency response objectives identified in the Public Facilities Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives.

Guidelines Source

These guidelines are based on County Guidelines for Determining Significance – Wildland Fire and Fire Protection (2011e).

Analysis

A comprehensive FPP was prepared for the Proposed Project (Appendix L), consistent with the County Consolidated Fire Code (2014 CCFC Ordinance #10357), and the CCR, Title 14, Fire Safe Regulations. Title 14 SRA also allows provision of “same practical effect” potential for any non-conforming Project features. The FPP addresses compliance with fire regulations, analyzes fire risks, and evaluates anticipated emergency response conditions of the developed Project. Using reconnaissance data and modeling, the FPP also evaluates potential impacts resulting from wildland fire hazards based on surrounding land uses/open space and known wind patterns/wildfire patterns, and identifies the measures necessary to adequately mitigate those impacts. The recommended measures, as set forth in the FPP, have been incorporated into the Project as project design features, or PDFs. In addition, the reader is referred to Section 3.1.8, *Public Services*, of this document for a more detailed discussion of wildfire impacts as they relate to fire protection services (e.g., station locations, capacities, travel times, etc.).

The FPP found that the Proposed Project complies with all applicable fire regulations, including but not limited to the California Fire Code, CCR, County Fire Code, or the CCFC, except in one regard. A request for a modification from Section 503.1.3 requirements, with respect to dead end road lengths, is being requested for the Project because of the topographical, geological, and environmental conditions of the site that make compliance with this standard infeasible. Also, provision for a secondary access route (the typical mitigation for exceeding the dead end road length) is infeasible. Therefore, the Project proposes meeting the intent of the Fire Code through a combination of measures that provide a system of fire safety above and beyond the code requirements. One of the most significant measures is construction of roads on site that include an additional travel lane that is within 800 feet of all Project structures. The additional travel lane provides additional capacity for evacuation and would occur throughout the Project, would include Country Club Road from the southernmost Project entrance northward to Harmony Grove Road, including the bridge over Escondido Creek. This enhanced road capability would be supplemented by a complete system of fire protection that includes a redundant layering of measures designed to keep roadways open and passable, and reduce the possibility that wildfire threatens the Project.

The FPP provides a detailed discussion regarding secondary access and how the Project would meet the intent of the code through a layered and redundant fire protection and evacuation system. The primary Project access for HGV South would be via a widened Country Club Drive that provides three travel lanes. This includes a three-lane-wide bridge constructed over Escondido Creek that also includes separated horse and pedestrian pathways. Various alternatives for secondary access to the north, south, east and west of the Project site were also

analyzed with both County staff and RSFFPD input, as described in Appendix C of EIR Appendix L. FPP Alternative 4, which would require improving sections of a privately owned off-site road that connects east of the Project with Johnston Road (a public road beyond its gates where it crosses into the City of Escondido, becomes a two-lane road and eventually intersects with Citracado Parkway to the east) was determined to be the option with the fewest physical challenges. That route would involve improving the private off-site roadway to County roadway standards where necessary to allow emergency access in specific areas (e.g., where turn radius is limited and would not allow emergency vehicles). All such improvements would occur between the Project and Johnston Road in areas already disturbed by existing residential construction and residential access patterns, and dirt portions of the road would remain dirt (as it currently exists for most of its length). At the northeast extent, it would join a paved but still private portion of Johnston Road, west of the gate across the road just west of the Jasper Glen and Tecate Glen intersections with Johnston Road. As indicated, the existing roadway is in a disturbed condition relative to vegetation. Any improvement areas that might contain native vegetation at the time of construction and therefore result in small areas of potentially significant impacts would be mitigated for using the same thresholds and standards as the Proposed Project; as identified in Subchapter 2.3 of this EIR. No known archaeological or historical sites were noted for this area in the Project records search; potential location of currently unknown sites that may be located beneath the surface would be addressed as identified in Subchapter 2.4 of this EIR. Visual effects would remain similar to the existing scarring across the hills east of the Project; any minimal widening in focused areas would not be expected to meaningfully differentiate from the existing condition. Noise effects would be limited to construction in focused areas, which would be localized and short-term in nature, and therefore less than significant. Many of the other routes include a combination of steep terrain and environmental and notable biological habitat issues, including those associated with building a road with a creek crossing. Also, the configuration of the emergency secondary access routes would necessitate a modification to the County's roadway standards. However, it was determined that ultimately, all of the alternatives are infeasible due to difficulties in obtaining legal access rights from private property owners.

Since secondary access is not feasible given the constraints described above, the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors was evaluated. The Project has developed an alternative approach for secondary access that meets the intent of the code through the implementation of a list of specifically developed measures and features described in the Findings and Mitigation section of the FPP. These measures and features provide the ability for the FAHJ to make findings that the intent of the code has been met for this Project in this particular setting. The FPP concludes that the Project meets the intent of the code through a layered and redundant fire protection and evacuation system.

Additional project design features (see Table 1-2) that would implement the intent of the FPP include clustering of the residential footprint to minimize placement of homes adjacent to wildland fuels (all structures would be a minimum of 100 feet distant from wildland fuels) and shorten emergency response time. Central to the latter issue is enhancement of Country Club Drive, currently the only north-south circulation element providing ingress and egress to existing Harmony Grove residents south of Harmony Grove Road, as well as the HGV South and HGV properties. The anticipated improvements to Country Club Drive include replacement of the existing Arizona crossing with a three-lane bridge.

As discussed in Section 3.1.8, fire protection at a public services level would be provided from the new fire station being built in the HGV project. The station location would be within 1.3 miles north from the most distant portion of HGV South. The Proposed Project would provide funding for fire and emergency medical response through participation in a Community Facilities District or other similar financing mechanism, as agreed between RSFFPD and the Applicant. The new station would be staffed by career personnel provided by the RSFFPD. The planned fire station 1.3 miles to the north of HGV South would provide response to all Project lots (including the most distant) within 2 minutes and 50 seconds, which is well below the General Plan's 5-minute travel time standard.

Based on fire behavior modeling, the FPP determined that wildfires may occur in wildland areas to the west, east, south, and southwest of the Project site, but would not be significantly increased in frequency, duration, or size with the construction of the Project. One reason is that the developing HGV project has created a large lower risk area in alignment with north/northeast wind directions, reducing the fire threat at the Project site. In addition, various Project features would result in a site that is less susceptible to wildfire than surrounding landscapes and that would facilitate firefighter and medical aid response as well as Project resident evacuation in a wildfire emergency. The Project is providing code-exceeding measures (as described below) through a layered and redundant fire protection and evacuation system that would result in a highly defensible community, offer a means of equivalent egress, and provide contingency planning if evacuation from the site is considered unsafe. The following section provides details for the measures that have been developed for this Project. Fire protective features of the Project provided in the FPP are illustrated in Figure 3.1.3-1, *Fire Protection Features*, of this EIR and include the following:

- The parts of the Project area proposed for development would convert the existing vegetation to a lower flammability, ignition resistant landscape than under current conditions. This conversion would include removal of primarily non-native grasses and construction of roads, structures, and irrigated, managed landscape vegetation.
- A third travel lane would be provided for the entirety of Country Club Drive from its intersection with Harmony Grove Road to the southernmost Project entrance and would extend within the Project so that no structure exceeds 800 feet from that extra lane as an equivalent form of egress. A new bridge that includes the "three-lane capacity," along with a barrier-separated multi-use (including equine) trail, and from this intersection, has been evaluated by the County. The Project conservatively assumes construction of this bridge over Escondido Creek with separated equestrian and pedestrian pathways. This would represent an improvement over the existing condition for the estimated 75 residential units that currently rely on Country Club Drive as their only ingress/egress. The improvements to the existing Arizona crossing at Escondido Creek would provide year-round access where historically, the roadway can be flooded.
- The Project would incorporate the same fire protection philosophies and physical attributes as Rancho Santa Fe's shelter in place communities; including ignition resistant structures built to the latest codes, pre-approved and inspected landscapes to retain defensible space function, water supply and availability throughout the Project, fire apparatus access, meeting the emergency responder response times, and a focus on early

evacuation, amongst others, and providing a last resort for potential temporary refuge if early, safe, evacuation is not possible.

- Existing access for several residences east of the Project crosses the HGV South site (Figure 3.1.3-1). Such access would continue to be provided through the HGV South site after development, but via improved, code conforming on-site roadways, thereby improving the evacuation situation to the west for those off-site residences. Additionally, a route to the east is accessible by typical passenger vehicles, does connect with Johnston Road to the east, and would be available in an emergency situation where people needed to be moved to the east and the primary access route (Country Club Drive) was not available.
- The Project would provide three separate access ways off of Country Club Drive (Figure 3.1.3-1). The first would be a paved service road 450 feet south of Harmony Grove Road adjacent to the HGV South wastewater land use area. The second would be an access into the community approximately 800 feet south of the first access. The third would be approximately 400 feet south of the second. These three access ways are part of a looped interior road system so if one or both of the southern roads are blocked, the northern roadway would still be accessible by all residents. These three ingress/egress points are in addition to the existing evacuation route to the east noted above, and would enable resident evacuation without compromising emergency respondent access to the community.
- New road and driveway grades would comply with the Fire Code, not exceeding 20 percent. Any sections exceeding 15 percent would be constructed with Portland Concrete surface and provided heavy broom finish or equivalent surfacing and subject to FAHJ approval.
- Project structures would be a minimum of 100 feet from wildland fuels. Fuel Modification Zone setbacks would exceed the County standard of 100 feet that is typically 50 feet irrigated and 50 feet thinned zones. HGV South would provide 75 feet of irrigated Zone 1 and a minimum of 25 feet of thinned Zone 2. To ensure long-term identification and maintenance, permanent markers would be installed to identify the fuel modification zones on the perimeter of the developed areas. In some locations, particularly the southwestern and eastern sides of the Project, the setbacks would vary between 110 feet and nearly 200 feet wide to focus FMZs where fire behavior is anticipated to be the most aggressive.
- Structure setbacks from the top of the slope would be a minimum of 15 horizontal feet from top of slope to the farthest projection from a roof for single-story structures and 30 horizontal feet from top of slope to the farthest projection from a roof for two-story structures where applicable (southwestern portion of the Project). Structures taller than two stories and where the slope is greater than 2:1 may require a setback greater than 30 feet. For lots where a full 30-foot setback would not be possible, installation of a 6-foot tall, non-combustible, heat deflecting, wall would be provided as part of Project Design for additional heat and flame deflection. This wall may be a combination of masonry and dual pane (one pane tempered glazing) materials. During the site plan

review process required for this Project, the FAHJ would review setbacks relative to appropriate fire standards and if the appropriate setback is unavailable, the walls would be implemented along one or more of these lots.

- Fuel modification in environmentally sensitive areas, if any are encountered, would require approval from the County and the appropriate resource agencies (CDFW and USFWS) prior to any vegetation management activities occurring within those areas. Riparian habitat enhancement maintenance/fuel modification at the Escondido Creek bridge crossing would be provided within the roadway easement; including removal of dead/dying plants, exotic/invasive species, and highly flammable species.
- Crowns of trees located within defensible space would maintain a minimum horizontal clearance of 10 feet for fire resistant trees and mature trees would be pruned to remove limbs one-third the height or 6 feet, whichever is less, above ground surface. Ornamental trees would be limited to groupings of two- to three trees with canopy separation as described in Table 7 of the FPP for trees located on slopes.
- The internal Project development area between residential structures and building clusters (see green portions of Figure 3.1.3-1) would be cleared of vegetation and re-planted with permanently irrigated fire-resistant plants, thereby excluding native fuels within the development area and minimizing the likelihood of ignitions internal to the Project.
- Plants used in the fuel modification areas or landscapes would include drought-tolerant, fire resistive trees, shrubs, and groundcovers. The plantings would be consistent with County of San Diego's Suggested Plant List for Defensible Space. The FPP also provides a list of prohibited plant species to avoid planting within the first 50 feet adjacent to a structure in Appendix J to the FPP, unless the potential for spreading fire has been otherwise reduced or eliminated. (The Final Landscape Plan for the Project will not contain any of the plants in Appendix J.) Landscaping would be inspected annually and on an ongoing basis by the FAHJ.
- The HGV South HOA would be required to ensure long-term funding and ongoing compliance with all provisions of the FPP, including vegetation planting, fuel modification, vegetation management, and maintenance requirements throughout the common areas of the Project site. Individual property owners would be enforced through HOA Codes, Covenants & Restrictions.
- RSFFPD's Fire Marshal may require a property owner to modify combustible vegetation in the area within 20 feet from each side of the driveway or a public or private road adjacent to their property to establish a fuel modification zone.
- Fire hydrants would be placed every 300 feet along Project streets (Figure 3.1.3-1), exceeding the Fire Code requirement of 350 feet to the structure. The additional fire hydrants would assist fire operations by reducing operational time to extinguish any fires.
- The minimum fire flow requirements for the Project would be dual 2,500 gallons per minute (gpm) at 20 pounds per square inch (psi), compliant with the requirements of the

Rincon MWD. Thus, the water system would be designed to deliver 5,000 gpm during fire demands, exceeding code requirements by 100 percent.

- Each of the Project's three entrances would be provided a lighted map directory, and internal signage would be customized to provide clear, intuitive navigation within the Project. Street signs would be customized for the Project and would meet or exceed lettering size to provide clear, easy-to-follow signage to aid emergency response.
- All site access roads would have fire department turnarounds (cul-de-sacs). Roadway cul-de-sacs would comply with the County's minimum 36-foot radius (72-foot diameter) cul-de-sac bulb standard. Where parking is provided within cul-de-sacs, the additional space would be provided outside the 72-foot diameter bulb.
- All proposed private streets would have a minimum paved width of 24 feet. Where vehicles would be allowed to park on one side of the street, the road width would be 30 feet. Head-in parking areas would include an additional 18 feet of paved area outside travel lanes.
- Minimum unobstructed vertical clearance of 13.5 feet would be maintained for the entire required width for all streets, including driveways that require emergency vehicle access.
- No gates or speed bumps or humps would be allowed within the Project, so that traffic flow (ingress and/or egress) would be able to move more rapidly in the case of emergency. No gates are anticipated at the Project's entrances. If gates are proposed elsewhere, all access gates would comply with CFC Section 503.6. Gates on private roads and driveways would comply with County and FAHJ standards for electric gates, including an emergency key-operated switch overriding all command functions and opening the gate.
- Through provision of seven times more parking spaces than are required under the County's Zoning Code (434 guest spaces provided, 52 guest spaces required), and implementing the Parking Management Plan, the Project would eliminate the potential for roadway obstructions. The Project has been planned to far exceed the available resident and guest parking standards in order to maintain the Project roads as unobstructed travel lanes so that emergency response vehicles are not hindered during responses. A parking management plan would designate Center House parking area as valet/shuttle staging area for all homeowners' events exceeding 10 guests. Homeowners would obtain parking permits for use of guest parking overnight. "No Parking" signs would be installed on designated streets. A contract with a towing company would be maintained so that illegally parked vehicles would be towed within a short period of time.
- Based on its location and ember potential, the Project is required to include the latest ignition and ember resistant construction materials and methods for roof assemblies, walls, vents, windows, and appendages, as mandated by San Diego County Consolidated Fire and Building Codes (Chapter 7A and 2014 CCFC). Exterior walls would have a noncombustible covering. Ember resistant vents (BrandGuard, O'Hagin, or similar approved vent of 1/8-inch screening) would be utilized in all structures. Multi-pane

glazing would be required with a minimum of one tempered pane, fire-resistance rating of not less than 20 minutes. All habitable structures and garages would be provided interior residential fire sprinklers per County Consolidated Fire Code requirements.

- Prior to bringing combustible materials onto the site, utilities shall be in place, fire hydrants operational, an approved all-weather roadway in place, and fuel modification zones established and approved. Other pre-construction requirements include implementation of perimeter fuel modification areas, reduction by 60 percent of existing flammable vegetation on vacant lots, and proper pruning of trees/shrubs.
- FMZs, including rear yard areas, would be limited building zones (LBZs), which exceeds code.
- The individual lot owners would be subject to strict limitations, with any sheds, gazebos, play equipment, or other structures being constructed to standards in Chapter 7A of the California Building Code (ignition resistant construction).

As previously stated, the Project is requesting a modification to the 2014 CCFC regarding maximum dead end road lengths. CCFC Section 96.1.104.8 allows for such modifications based on topographical, geological, and environmental conditions that would make compliance with such regulations unattainable, provided a finding can be made that the intent of the Fire Code is met through the implementation of other measures and features that would not lessen health, life, and fire safety requirements. Pursuant to the FPP, the Project provides a layered and redundant fire protection and evacuation system that provide a system of fire safety above and beyond the code requirements. More particularly, the Project has developed an alternative approach that meets the intent of the code through the implementation of a list of specifically developed measures and features (detailed in Section 5.2.1.2 of the FPP). These measures and features supported a finding by the RSFFPD that the intent of the code has been met and does not lessen health, life, and fire safety requirements (RSFFPD FPP acceptance letter prepared by Chief Tony Michel – August 2016). The requirements described in the FPP, including the measures that result in conformance with the intent of the building and fire codes, such as improvement of Country Club Drive and provision of ignition-resistive construction, additional fire protection systems, and fuel modification/ vegetation management will be included as design features of the Project. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death from wildland fires. The Project would comply with the FPP that has been prepared in conformance with the CCFC, and would be in compliance with the fire codes by including as design features of the Project, the specifically developed measures and features (detailed in Section 5.2.1.2 of the FPP). Also, with implementation of the planned fire station 1.3 miles to the north of HGV South, travel time to all Project lots (including the most distant) would be within 2 minutes and 50 seconds, which is well below the General Plan's 5-minute travel time standard. Consequently, the Project would more than comply with the emergency response objectives identified in the Public Facilities Element of the County General Plan, has demonstrated compliance with all applicable fire codes and a comprehensive FPP has been accepted and the Project design features would be consistent with its recommendations. Therefore, **impacts associated with wildland fire hazards would be less than significant.**

Emergency Response and Evacuation Plans

Guidelines for the Determination of Significance

A significant impact would occur if a project:

11. would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
12. or propose 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.

Guidelines Source

The guideline related to adopted emergency response/evacuation plans is based on Appendix G of the CEQA Guidelines. The guideline related to structure height and aircraft response is based on the County's Guidelines for Determining Significance – Emergency Response Plans (2007l).

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, each of which is addressed above. In summary and relative to wildfire, the wildfire behavior assessment addressed the worst-case scenario for wildland fire. As a result of the fire modeling, Project design features were incorporated into the Project, including fuel modification zones, use of ignition-resistant building materials, wide turning radii and additional parking potential, etc. These considerations reduce the risk of fire hazard. The Project would meet fire and building code requirements, including spacing of hydrants adjacent to Project structures. The Project FPP also addresses improvements to the two-lane road abutting the Project that would benefit all residents south of Harmony Grove Road, and not only the Project, in the case of any kind of evacuation due to fire or hazardous materials spills in the area.

The Project would not include any structural elements located on peaks. The tallest structures on the Project, associated with the granaries, would be a maximum of 54 feet in height (this includes potential non-inhabitable architectural projections); a full 46 feet below the 100-foot threshold.

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**.

3.1.3.3 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 proposed Project would not result in significant impacts related to airport hazards or regional emergency/evacuation plans. Cumulative projects in the 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.

The FPP concluded that under existing conditions, the Project site includes numerous potential fire issues including unmaintained, non-native vegetation and limited access/egress for approximately 70 residences to the west of HGV South. The Project would convert fuels into developed land with designated landscaping and fuel modification areas and highly ignition resistant structures. As such, the site would be largely converted from readily ignited fuels to ignition resistant landscape. In addition, the Project would enhance access (both ingress and egress) in the area. The proposed Project also would provide developer impacts fees and assessments along with state fire fees, to combine with similar contributions from other area projects. Fire and emergency medical response from the new fire station being built in HGV within 1.3 miles from the most distant portion of HGV South (see also Section 3.1.8, *Public Services*), ultimately would result in an increase in service availability and a reduction in the travel times for fire service calls in the cumulative project area.

A development like HGV South would typically include a demographic that results in fewer calls, per capita. Using San Diego County fire agencies' calculated 82 annual calls per 1,000 population, the Project's estimated 1,410 residents (calculated based on 3.12 persons per dwelling; SANDAG 2013), would generate up to 115 calls per year (0.3 call per day), most of which would be expected to be medical-related calls, consistent with typical emergency call statistics. These estimates are likely overly conservative due to the per capita call factors, which are based on an average of all demographics and sociological populations, including dense, urban areas which, on average, result in higher call volumes, resulting in an overly conservative estimate for the Project. Populations associated with HGV and other surrounding neighborhoods would be expected to generate similar per capita call volumes. The station would not be considered a busy station until it averaged a call load of up to 7 to 10 calls per day. Therefore, the Project's contribution of 0.3 call per day with respect to the new fire station in the cumulative project area is considered insignificant.

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 Project features, including conformance with building and fire codes, provisions for alternative ingress/egress, ongoing maintenance of roads, infrastructure, vegetation management and defensible space, however, the Project would not contribute to a cumulative wildland fire risk. Further, as with the Project, the cumulative projects in the study area, 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.**

3.1.3.4 Significance of Impacts

Based on the analysis, mandatory regulatory compliance and Project design features provided above, the Proposed Project would have less than significant impacts related to hazards and hazardous materials.

3.1.3.5 Conclusion

Based on the analysis, mandatory regulatory compliance and Project design features provided above, the Proposed Project would have less than significant Project-specific or cumulative impacts related to hazards and hazardous materials.

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Source: Dudek 2016

Fire Protection Features

HARMONY GROVE VILLAGE SOUTH

Figure 3.1.3-1