3.1.1 Hazards and Hazardous Materials

This section addresses hazardous materials, airport hazards, wildland fire, and emergency response and evacuation planning associated with the Otay Ranch Village 14 and Planning Areas 16/19 (Proposed Project) and off-site improvement areas. This analysis provides information on the existing conditions of the Project Area, locations of potentially hazardous materials sites, and potential for the Proposed Project to expose the public or the environment to hazards or hazardous materials. Information provided in this section is based on the following sources: the Phase I Environmental Site Assessment (ESA) and subsequent ESA Addendum prepared by Gaston & Associates (2014, 2017) and included in Appendix 3.1.1-1 of this environmental impact report (EIR); the Proposed Project's Fire Protection Plan (FPP), prepared by Dudek and included in Appendix 3.1.1-2 of this EIR; the Proposed Project's Wildland Fire Evacuation Plan, prepared by Dudek and included in Appendix 3.1.1-3 of this EIR; and other sources as cited throughout this section.

This section tiers from the 1993 Otay Ranch Final Program EIR (Otay Ranch PEIR) (City of Chula Vista and County of San Diego 1993a) because the Proposed Project is within the boundaries of the Otay Ranch General Development Plan/Subregional Plan (GDP/SRP) (City of Chula Vista and County of San Diego 1993b), and development of the Project Area was analyzed in the Otay Ranch PEIR. The Otay Ranch PEIR analyzed risk of upset and determined that implementation of mitigation measures such as soil and groundwater testing, notifications, and evaluation of emergency evacuation and other emergency facilities at the specific plan level, would reduce impacts associated with health risk to below a level of significance. Since certification of the Program EIR, fire hazard conditions and modeling were more specifically analyzed for the Project Area. Further, the development concept for the Proposed Project has been further refined and more precise and site-specific technical analyses, including the preparation of Appendix 3.1.1-1, Phase 1 ESA, 3.1.1-2, Fire Protection Plan and 3.1.1-3, Wildland Fire Evacuation Plan, were performed to determine the potential impacts of the Proposed Project. Accordingly, this analysis for the Proposed Project is different than that contained within the Otay Ranch PEIR because it specifically considers the Project Area, which is a subset of Otay Ranch. As a result, this EIR's determinations regarding potential hazards and hazardous materials impacts is specific to the Proposed Project.

Following the issuance for the Notice of Preparation for the Proposed Project, the lead agency, the County of San Diego (County), received comment letters from public entities related to hazards and hazardous materials. These letters were concerning current or historic land uses that may have resulted in a release of hazardous wastes/substances, investigation for the presence of contaminated of soil and/or groundwater on site, adequate emergency access, wildland fire potential, and request for a Phase I Environmental Site Assessment. The analysis presented in this section addresses each of these topics.

3.1.1.1 Existing Conditions

3.1.1.1.1 Environmental Setting

Hazardous Materials

Hazardous materials typically require special handling, reuse, and disposal because of their potential to harm human health and the environment. The term "hazardous material" is defined in different ways by various regulatory programs.

This EIR uses the definition from the California Health and Safety Code Sections 25501(n)(1)–(3), which defines a hazardous material as including, but not being limited, to any material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment, or a material specified in an ordinance adopted by a Certified Unified Program Agency (CUPA). The definition of hazardous materials also includes, but is not limited to, a substance or product for which a manufacturer is required to prepare a material safety data sheet; a substance listed pursuant to Titles 10 and 49 of the Code of Federal Regulations, and Section 339 of Title 8 of the California Code of Regulations; and a hazardous waste listed pursuant to Sections 25115, 25117, and 25316 of the California Health and Safety Code.

In addition, the governing body of a CUPA may adopt an ordinance that provides that a material not listed in the Health and Safety Code is a hazardous material if a handler has a reasonable basis for believing that the material would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment, and requests the governing body of the CUPA to adopt that ordinance, or if the governing body of the CUPA has a reasonable basis for believing that the material would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Federal agencies that regulate hazardous materials include the U.S. Environmental Protection Agency (EPA) and the U.S. Occupational Safety and Health Administration. At the state level, agencies such as the California Department of Toxic Substances Control, California Occupational Safety and Health Administration, and the Office of Emergency Services regulate the use of hazardous materials. At the local level, the County Department of Environmental

The California Environmental Protection Agency (CalEPA) administers a unified program to ensure consistency throughout the state in regard to administrative requirements, permits, inspections, and enforcement. In 2015, the Director of the DEH was designated by the San Diego County Board of Supervisors (Ordinance No. 10379 (N.S.)) to implement and enforce a CUPA as certified by the California Secretary for Environmental Protection and specified in the California Health and Safety Code, Chapter 6.11 (commencing with Section 25404).

Health (DEH), Hazardous Materials Division, is the agency generally entrusted with monitoring and enforcing various laws and regulations governing the handling, use, transportation, storage, and disposal of hazardous materials, as the designated CUPA pursuant to California Health and Safety Code Sections 25404, et seq. (County of San Diego 2015).

On-Site Conditions

The following discussion provides a summary of the environmental records review, historical records review, and site reconnaissance of the Project Area.

Environmental Records Review

Contamination by hazardous substances can occur through former uses of a site, including any leaks from underground storage tanks (USTs), aboveground storage tanks (ASTs), or unidentified buried debris that contains hazardous substances or hazardous byproducts. To determine whether any existing hazardous materials sites are located in the Project Area or surrounding vicinity, a records search of federal, state, and local government hazardous materials sites databases was conducted by Environmental Data Resources Inc. (EDR). The search radii used for government databases met or exceeded the standard search distance adopted by the American Society for Testing and Materials (ASTM).

No on-site facilities were identified during the database search in December 2013. Two off-site facilities within a 0.5-mile radius of the Project Area were identified on the Spills, Leaks, Investigations, and Cleanup (SLIC) list. One site is located about 0.44 miles from the southwesternmost corner of the Project Area, near Upper Otay Reservoir. It is a closed former cleanup site. There was no further specific information provided in the EDR listing. The second site is located about 0.7 miles northeast of the northeasternmost corner of the Project Area, across Campo Road. It is shown to be an open assessment County site. There is no further significant information. Both of these SLIC sites are located at lower elevations. There was nothing provided in the EDR database listing to suggest or indicate that either of the two SLIC sites are or could be an environmental concern for the Proposed Project. Therefore, given their distance and orientation relative to the Project Area, they are not considered to be of environmental concern to the Proposed Project.

One off-site facility was identified on the Regional Water Quality Control Board (RWQCB) leaking underground storage tanks (LUSTs) list. The site is located at 13330 Proctor Valley Road (Assessor's Parcel Number 597-020-06-00; Case No. 203714). An underground diesel tank was removed from the property in 2004, and a subsequent site assessment identified low concentrations of diesel in the shallow soil. A "no further action" letter was issued by the DEH in 2006; therefore, this site is not considered to be of concern to the Project Area (Appendix 3.1.1-1).

Historical Records Review

Historical use records of the Project Area, including aerial photographs and topographic maps, were reviewed. Aerial photographs show that the Project Area has historically been undeveloped land used to raise cattle. A few small structures are present in aerial photographs dating back to 1953, including a cattle corral and other evidence of cattle ranching activities. Some agricultural activities were present on the northern part of the Project Area in the early 1970s (Appendix 3.1.1-1).

Areas with Potential Hazardous Materials Contamination

Based on the on-site reconnaissance conducted as part of the Phase I Environmental Site Assessment conducted on February 14, 2014, no potential hazardous material sites are believed to exist in the Project Area. The Project Area is undeveloped raw land. During the site reconnaissance, the Project Area was physically accessed and viewed primarily from along Proctor Valley Road. The Project Area is also crossed by numerous unpaved roads (Appendix 3.1.1-1).

A single-story metal barn is located in the northern part of the Project Area. The barn was empty and unused at the time of the inspection. A small concrete-block building is located north of the barn, and it appears to have been previously used as a restroom. A concrete-covered septic tank or pit is located adjacent to and south of the small block building. Along the western portion of the Project Area, some old concrete foundation remnants were also observed. Their former use is unknown, but they were likely associated with earlier agricultural or cattle-raising activities. A small accumulation of miscellaneous trash was observed in this area. A cattle corral area was observed in the southwest portion of the Project Area. The corral includes aboveground fencing and an inclined ramp to load cattle onto trucks. San Diego Gas & Electric overhead electrical power lines traverse the central portion of the Project Area in an approximately east/west direction (Appendix 3.1.1-1).

None of the observations during the on-site reconnaissance (conducted in February 2014) present an environmental concern. Radon gas is not considered an environmental concern for this site. No information was found indicating the use, storage, or disposal of lead-based paints (LBPs) on the site, and none of the materials observed on the site appeared to be suspected of containing LBP. There are no structures currently on the subject property that might contain asbestos; therefore, the potential presence of asbestos in building materials is not a concern. No information was obtained to suggest the actual or probable presence of ASTs or USTs in the Project Area. No damaged containers, stressed vegetation, odorous soils, surface waters, dumps, or lagoons were observed during the site inspection (Appendix 3.1.1-1).

Wildland Fire Hazards

Site Characteristics and Fire Environment

Dudek conducted a field assessment of the Project Area on April 27, 2015, to assess the area's topography, natural vegetation and fuel loading, surrounding land use, and general susceptibility to wildfire. The following sections discuss the characteristics of the Project Area at a regional scale. The intent of evaluating conditions at the regional level is to provide a better understanding of the regional fire environment, which is not constrained by property boundary delineations or individual developments.

Topography

The Project Area's topography in its current condition is diverse and characterized by a relatively flat valley along Proctor Valley Road within Village 14, and broad and gentle hillsides with steeper terrain along development edges within Planning Areas 16/19. The Project Area is bordered by increasingly rugged terrain of San Miguel Mountain and the Jamul Mountains immediately to the northwest and southeast, respectively, with the foothills of these mountains extending into the Project Area. These slopes are predominantly up and away from the Project Area. Several small, narrow drainages are present along the eastern edge of development area. A low east/west-trending ridgeline effectively divides Proctor Valley near the upper end of Village 14.

Elevations range from approximately 550 feet above mean sea level at the southern end of the Project Area to approximately 1,345 feet above mean sea level in the northeastern portion of the Project Area (Appendix 3.1.1-1). Although slopes range from 5% up to 40% within the Project Area, the Proposed Project's average slope² is approximately 19.5% (within 300 feet outside the perimeter of the Development Footprint). Slope is important relative to wildfire because steeper slopes typically facilitate more rapid fire spread upslope. For the Project Area, the steeper slopes are primarily within the areas designated as Otay Ranch RMP/MSCP Preserve and would not be developed. The Project Area's steeper slopes ascend away from the Development Footprint of the Proposed Project (instead of the Project Area being at the top of such steep slopes). The site topography is also generally in alignment with the extreme Santa Ana wind events, which can influence fire spread by creating wind-driven fires, especially when moving upslope.

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The average slope within the 300-foot perimeter buffer was calculated by Hunsaker & Associates San Diego Inc. using a formula from San Diego County's S-1 Policy (County of San Diego 1985).

Climate

Southwestern San Diego County and the Project Area are influenced by the Pacific Ocean, and are frequently under the influence of a seasonal, migratory subtropical high-pressure cell known as the "Pacific High" (WRCC 2014a). Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. Local climate, which has a large influence on fire risk, is typical of a Mediterranean area, with hot, dry summers and cool, wet winters. The climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds (WRCC 2014a). The average high temperature for the Project Area during fire season is approximately 83°F, with high temperatures in summer and early fall (July-October) reaching up to 102°F. Precipitation typically occurs in December through April, with annual rainfall ranging from 3.5 to 13.3 inches (from 2012 to 2014), with lower annual accumulation (3.5 to 5.2 inches) in 2015 due to the current drought (DWR 2015; WRCC 2014b). The prevailing wind is an onshore flow from the Pacific Ocean, which is approximately 13 miles to the west. Hot, dry (Santa Ana) winds from the northeast, which typically occur in the fall, can gust up to 50 miles per hour or higher. The Santa Ana winds are due to the pressure gradient between high pressure in the plateaus of the Great Basin and the lower pressure gradient over the Pacific Ocean. Dry vegetation (when fuel moisture of less than 5% is possible) can fuel flames if an ignition occurs. Relative humidity of 12% or less is possible during fire season (NOAA 2007). Extreme conditions, used in fire modeling for the Proposed Project, consist of 92°F temperatures in the summer and winds of up to 50 miles per hour during the fall.

Fuels (Vegetation)

The Project Area, including the Otay Ranch Village 14 and Planning Areas 16/19 and Otay Ranch RMP/MSCP Preserve areas, is currently undeveloped and consists of a variety of vegetation types that were mapped by Dudek (see Appendix 2.4-1, Biological Resources Technical Report). Vegetation mapping is useful for fire planning because it enables each vegetation community to be assigned a fuel model, which is used to predict fire characteristics with the aid of a software program. Vegetative fuels on site are primarily non-native grassland, chaparral, and coastal sage scrub. This vegetation is adapted to periodic wildfire events.

Fire history data indicates that the vegetation last burned in 2007 on a majority of the Project Area. As such, the vegetation is still in the early stages of recovery toward the typical species composition. Disturbed habitat and urban/developed land cover types are also present in the Project Area in small amounts. On-site vegetation is important relative to wildfire, as some vegetation, such as coastal sage scrub and grassland habitats, are highly flammable, and other vegetation, such as oak riparian forest, is less flammable due to its higher moisture content but will burn under certain more intense fire conditions.

Fuel Loads

The importance of vegetative cover on fire suppression efforts is its role in affecting fire behavior. For example, although fires burning in grasslands may exhibit lower flame lengths than those burning in chaparral, fire spread rates in grasslands are often much more rapid than those in other vegetation types. Fuel loading in non-native grassland is estimated to be 0.4 tons per acre, and in chaparral—sage scrub is estimated at between 8.4 to 8.6 tons per acre (Brown 1982; Scott and Burgan 2005; Weise and Regelbrugge 1997). Fuel load is the amount of fuel available to wildfires. Shrub-dominated plant communities tend to have higher fuel loads than grass-dominated plant communities. Tree-dominated communities may have higher fuel loads than shrub-dominated landscapes. However, there are many other facets of fire behavior that govern fire ignition and spread. Therefore, because an area may include higher fuel loads, it does not necessarily mean that it presents a higher fire risk.

Based on modeling and analysis of the Project Area to assess its unique fire risk and fire behavior, it was determined that the California and San Diego County standard of 100-foot-wide fuel modification zones (FMZs) would be suitable to protect the Proposed Project from an anticipated wildfire that may burn in areas adjacent to developed areas. This 100-foot-wide FMZ, when properly maintained, has proven effective at minimizing structure ignition from direct flame impingement or radiant heat, especially for structures constructed using the latest ignition-resistant codes (Appendix 3.1.1-2).

Vegetation Dynamics

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, native shrub species that compose chaparral communities are considered to be less likely to ignite but would exhibit a higher potential hazard (higher-intensity heat and flame length) than grass-dominated plant communities (fast moving, but lower intensity) if ignition occurs. Additionally, vegetative cover influences fire suppression efforts through its effect on fire behavior. For example, although fires burning in grasslands may exhibit lower flame lengths and heat outputs than those burning in native shrub habitats, fire spread rates in grasslands are often more rapid (Appendix 3.1.1-2).

Fire History

Fire history data provides valuable information regarding fire spread, fire frequency, most vulnerable areas, and significant ignition sources. The understanding of why fires occur in an

area and how they typically spread can then be used for planning and designing defensible communities. There have been 68 fires recorded by the California Department of Forestry and Fire Protection (CAL FIRE) since 1910 within 5 miles of the Project Area (CAL FIRE 2015a). This many fires over the last 106 years is not considered a high number for Southern California. On average, CAL FIRE responds to 5,000 wildfires greater than 10 acres each year (CAL FIRE 2015b). In the 107-year timeframe since 1910, only 17 fires have burned portions of the Project Area. The most notable fire, the Harris Fire, occurred in October 2007 and burned approximately 90,440 acres in the southwestern portion of San Diego County, including a large portion of the Project Area. Recorded fires that have burned in the Project Area are listed in Table 3.1.1-1, Fire History in the Project Area.

Based on fire history data for the vicinity, fire return intervals range between 2 and 15 years. These intervals indicate significant wildfire potential in the region and the potential for the Project Area to be subject to occasional wildfire encroachment, most likely from the large expanses of open space to the north and east.

Fire Department Response Capabilities

The Project Area is located within the San Diego County Fire Authority's (SDCFA's) responsibility area. The SDCFA is a combination fire agency that uses both paid and volunteer firefighters. The SDCFA absorbed the former San Diego Rural Fire Protection District's jurisdictional area. The transition and associated realignment of resources occurred to increase fire protection within this particular portion of San Diego County. There is one staffed SDCFA fire station in the vicinity of the Project Area, SDCFA Fire Station No. 36 (Jamul). The nearest City of Chula Vista station is Fire Station No. 8.

SDCFA Fire Station No. 36 is located at 14024 Peaceful Valley Ranch Road in Jamul, approximately 2.5 road miles from the Proposed Project's northernmost entrance. Station No. 36 has seven full-time firefighters, one structural fire engine, one ladder truck, one brush fire engine, one rescue squad truck, and one light and air unit (Appendix 3.1.1-2).

The City of Chula Vista Fire Station No. 8 is located at the intersection of Otay Lakes Road and Woods Drive, approximately 2.9 miles from the southernmost entrance to the Proposed Project. It houses a staffed engine company and a reserve engine. The closest Chula Vista Fire Department ladder truck is housed at Chula Vista Fire Station No. 7 on La Media Drive and Santa Venetia, approximately 6.4 road miles west of the Project Area. The closest interface engine (Type II) is located at Chula Vista Fire Station No. 2 at 80 East J Street, approximately 9.3 miles from the Project Area (Appendix 3.1.1-2).

Airport Hazards

The areas of concern when addressing airport hazards are overflight safety; airspace protection; flight patterns; and land use compatibility relating to the safety of passengers, pilots, and crews on flights and the safety of people on the ground. Hazards associated with airports can have serious human safety and quality of life impacts.

Eight County-owned public airports are located in San Diego County. Of these, six are located in the unincorporated area: Agua Caliente Airstrip, Borrego Valley Airport, Fallbrook Community Airpark, Jacumba Airport, Ocotillo Airstrip, and Ramona Airport. The Gillespie Field and McClellan–Palomar Airports are also owned by the County but are located in incorporated areas. Residents in the unincorporated area are also served by a number of airports located in incorporated cities, including San Diego International Airport (Lindbergh Field), Montgomery Field, Brown Field Municipal Airport, and Oceanside Municipal Airport.

Emergency Response and Evacuation Plans

To address disasters and emergency situations at the local level, the Unified Disaster Council is the governing body of the Unified San Diego County Emergency Services Organization. The Unified Disaster Council is chaired by a member of the San Diego County Board of Supervisors and is composed of representatives from the 18 incorporated cities. The County Office of Emergency Services serves as staff to the Unified Disaster Council. In this capacity, the Office of Emergency Services serves as the liaison between the operational area and the State Office of Emergency Services, as well as non-governmental agencies such as the American Red Cross.

County of San Diego Operational Area Emergency Plan

The San Diego Operational Area Emergency Plan describes an emergency management system that provides for a planned response to natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization, and describes the overall responsibilities for protecting life and property and ensuring the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector (County of San Diego 2014).

County of San Diego Multijurisdictional Hazard Mitigation Plan

The Multijurisdictional Hazard Mitigation Plan is a countywide plan that identifies risks and ways to minimize damage from natural and human-caused disasters. The plan is a resource document that serves many purposes such as enhancing public awareness, creating a decision

tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing interjurisdictional coordination. This plan was last revised in 2010. The plan is currently being reviewed and revised to reflect changes to the hazards threatening San Diego and the programs in place to minimize or eliminate those hazards. This revision will include an evaluation of the impact that climate change is having on the natural hazards facing San Diego (County of San Diego 2010a).

Emergency Air Support

Helicopters and small planes are used in a variety of emergency response actions such as search and rescue operations and retrieving/carrying water to extinguish wildfires. During an emergency response, aircraft tend to fly low to the ground, thus increasing potential hazards to aircraft from towers and other objects within the airspace. CAL FIRE and the County Sheriff's Department aerial support detail, Aerial Support to Regional Enforcement Agencies (ASTREA), carry out emergency response actions. CAL FIRE is the largest fire department in California and the third largest fire department in the United States. Firefighters working for CAL FIRE are responsible for providing fire protection and other related emergency services, including protection of life and property. The Sheriff's ASTREA operates aircraft throughout San Diego County on a daily basis. These aircraft are involved in law enforcement, search and rescue, and fire-related missions.

3.1.1.1.2 Regulatory Setting

Set forth below are short descriptions of the various federal, state, and local regulations that generally apply to the resource or impact category analyzed in this section of the EIR. This information helps to place the impact analysis within its proper regulatory context. Note, however, that compliance with all applicable regulations is required. For this reason, the EIR does not specifically assess the Proposed Project's ability to comply with such regulations, except in those instances where a regulatory standard is being used as the threshold for determining impact significance.

Federal Regulations

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA) of 1976, as amended. These laws provide for the "cradle to grave" regulation of hazardous wastes. 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.

The EPA has the primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all of RCRA's provisions. California

received authority to implement RCRA in August 1992. The California Department of Toxic Substances Control is responsible for implementing RCRA and California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the CUPA, the California Department of Toxic Substances Control delegated enforcement authority to the Health and Human Services Agency.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation.

CERCLA and SARA

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous substances at these sites, and established a trust fund to provide for cleanup when no financially responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to \$8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act, also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. Sections 301 through 312 of the act are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the SARA Title III

Section 313 program. In California, SARA Title III is implemented through the California Accidental Release Prevention (CalARP) Program.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, 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 IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect against structural fires. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

EPA Region 9 Regional Screening Levels

Regional Screening Levels are risk-based concentrations that are intended to assist risk assessors and others in initial evaluations.

State Regulations

California Health and Safety Code

Hazardous Materials Business Plan and CalARP Program

Two programs found in the California Health and Safety Code Chapter 6.95, Hazardous Materials Release Response Plans and Inventory, are directly applicable to the California Environmental Quality Act issue of risk due to hazardous substance release. In San Diego County, these two programs are referred to as the Hazardous Materials Business Plan program and the CalARP Program. The DEH Hazardous Materials Division is responsible for implementation of the Hazardous Materials Business Plan and the CalARP Program in San Diego County. The Hazardous Materials Business Plan and CalARP Program provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a Hazardous Materials Business Plan or Risk Management Program is required pursuant to the regulation. Congress requires EPA Region 9 to make Risk Management Program information available to the public through EPA's Envirofacts Warehouse (EPA 2017).

Hazardous Waste Control Act

The Hazardous Waste Control Act regulates the generation, treatment, storage, and disposal of hazardous waste. Hazardous waste is any material or substance that is discarded, relinquished, disposed of, or burned, or for which there is no intended use or reuse, and the material or substance causes or significantly contributes to an increase in mortality or illness, or the material or substance poses a substantial present or potential hazard to human health or the environment. These materials or substances include spent solvents and paints (oil and latex), used oil, used oil filters, used acids and corrosives, and unwanted or expired products (e.g., pesticides, aerosol cans, cleaners). If the original material or substance is labeled *danger*, *warning*, *toxic*, *caution*, *poison*, *flammable*, *corrosive*, or *reactive*, the waste is very likely to be hazardous.

State Fire Regulations

State fire regulations are set forth in Section 13000, et seq., of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The state fire marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs) are concentrations of 60 hazardous chemicals in soil or soil gas that the California Environmental Protection Agency (CalEPA) considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA and are contained in the report entitled *Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil*. The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of 1 in 1 million and a hazard quotient of 1.0 for non-cancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the EPA 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 CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/industrial CHHSLs) at the site.

California Code of Regulations

California Fire Code

The California Fire Code (CFC) is Part 9 of Title 24 of the California Code of Regulations. 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 (24 CCR, Part 9). These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years and was most recently updated in 2016, with an effective date of January 1, 2017.

Department of Forestry and Fire Protection

California Code of Regulations, Title 14, Division 1.5 establishes the regulations for CAL FIRE and is applicable in all State Responsibility Areas—areas where CAL FIRE is responsible for wildfire protection. Most of the unincorporated area of San Diego County is a State Responsibility Area, and any development in State Responsibility Areas must comply with these regulations. Among other things, Title 14, Section 1270, et seq., establishes minimum standards for emergency access, fuel modification, setback to property line, signage, and water supply. San Diego County's most recent adoption of the County Consolidated Fire Code (2017) was certified by the State Board of Forestry and Fire Protection, indicating that its code requirements meet or exceed Title 14, Section 1270, et seq., and with that certification, the County Consolidated Fire Code supersedes Title 14, Section 1270, et seq., in the unincorporated areas of the County.

Local Regulations

San Diego County Local Enforcement Agency

The DEH Solid Waste Local Enforcement Agency is the lead agency required to investigate and inspect active, closed, illegal and abandoned waste disposal sites in the unincorporated County and incorporated cities, with the exception of the City of San Diego. The Local Enforcement Agency is responsible for inspection and permitting of active solid waste disposal sites as a certification responsibility required by the California Integrated Waste Management Board and pursuant to their enforcement responsibilities of California Code of Regulations, Title 27, Environmental Division 2, Solid Waste Standards, relating to the protection of public health,

safety, and the environment. The Local Enforcement Agency, in coordination with RWQCB and the California Integrated Waste Management Board, can review work plans and site assessment reports, and issue "no further action" letters related to the remediation of burn dump sites.

San Diego County Hazardous Incident Response Team

The DEH Hazardous Incident Response Team consists of 10 California-Certified Hazardous Material Specialists. The team was founded in 1981 by the Unified Disaster Council and is funded by a Joint Powers Agreement. This team services all unincorporated San Diego County areas, 18 municipalities, two military bases, and five Native American reservations. There are more than 400 responses a year in the Hazardous Incident Response Team operational area. The Hazardous Incident Response Team responds jointly with the San Diego Fire and Life Safety Services Department, Hazardous Incident Response Team, to investigate and mitigate chemically related emergencies or complaints. Emergency response activities include mitigation, containment, and control actions, as well as hazard identification and evaluating the threat to local populations and the environment. The Hazardous Incident Response Team is also responsible for handling all after-business-hours complaints for the DEH (County of San Diego 2012).

County of San Diego Site Assessment and Mitigation Program

The County Site Assessment and Mitigation Program provides oversight of assessments and cleanups in accordance with the California Health and Safety Code and the California Code of Regulations. The Voluntary Assistance Program provides staff consultation, project oversight, and technical and environmental report evaluation and concurrence on projects pertaining to properties contaminated with hazardous substances.

County of San Diego Underground Storage Tank Program

This program administers and enforces federal and state laws and regulations and local ordinances for the construction, installation, modification, upgrade, and removal of USTs. If contamination is discovered or likely to be present, owners or operators are required by law to report the contamination and take corrective action.

County of San Diego Consolidated Fire Code

The County, in collaboration with the local fire protection districts, created the first County Consolidated Fire Code in 2001. The County 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. The ordinances

include permit requirements for the installation, alteration, or repair of new and existing fire protection systems and penalties for violations of the County Consolidated Fire Code. The County Consolidated Fire Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the County Consolidated Fire Code regulates hazardous materials and associated measures to ensure that public health and safety are protected from incidents relating to hazardous substance releases. San Diego County's 2017 County Consolidated Fire Code (the most recent adoption) was certified by the State Board of Forestry and Fire Protection, resulting in its superseding California Code of Regulations Title 14, Section 1270, et seq., as it would otherwise apply within San Diego County.

County of San Diego Defensible Space for Fire Protection Ordinance

This ordinance addresses the accumulation of weeds, rubbish, and other materials on private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public (County of San Diego Code of Regulatory Ordinances, Sections 68.401–68.406). The ordinance constitutes the presence of such weeds, rubbish, and other materials as a public nuisance that must be abated in accordance with the provisions of these sections. This ordinance is enforced in all County service areas and in the unincorporated areas of the County outside of a fire protection district. All fire protection districts have a combustible vegetation abatement program, and many fire protection districts have adopted and enforce the County's ordinance.

County of San Diego Removal of Fire Hazards

SDCFA, in partnership with CAL FIRE, the Bureau of Land Management, and the U.S. Forest Service, is responsible for the enforcement of defensible space inspections (County of San Diego Code of Regulatory Ordinances, Sections 96.1.005: Geographic Limits and 96.1.202: Definitions). Inspectors from CAL FIRE are responsible for the initial inspection of properties to ensure that an adequate defensible space has been created around structures. If violations of the requirements are noted, inspectors provide a list of corrective measures and provide a time frame to complete the tasks. If the violations still exist upon re-inspection, the local fire inspector forwards a complaint to the County for further enforcement action.

County of San Diego General Plan

The County General Plan Safety Element, adopted in 2011, covers the planning period beginning on January 1, 2013, and ending on December 31, 2020. The Safety Element includes maps, goals, and policies that support the guiding principles specified in Chapter 2 of the General Plan. Specifically, Guiding Principle 5 provides direction for the Safety Element to ensure that development accounts for physical constraints and the natural hazards of the land. The Safety

Element supports this principle through numerous policies that locate development away from hazardous areas and ensure safety and security for all communities in the County. Goals and policies of the Safety Element protect residents and areas from wildland and urban fire, crime, hazardous materials incidents, flooding, earthquakes, and hazardous incidents from aircraft. The following goal and policies apply to fire hazards (County of San Diego 2011):

Goal S-3: Minimized Fire Hazards. Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.

- **Policy S-3.1: Defensible Development.** Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.
- Policy S-3.2: Development in Hillsides and Canyons. Require development located near ridgelines, top of slopes, saddles, or other areas where the terrain or topography affect its susceptibility to wildfires to be located and designed to account for topography and reduce the increased risk from fires.
- Policy S-3.3: Minimize Flammable Vegetation. Site and design development to minimize the likelihood of a wildfire spreading to structures by minimizing pockets or peninsulas, or islands of flammable vegetation within a development.
- **Policy S-3.4: Service Availability.** Plan for development where fire and emergency services are available or planned.
- Policy S-3.5: Access Roads. Require development to provide additional access roads
 when necessary to provide for safe access of emergency equipment and civilian
 evacuation concurrently.
- Policy S-3.6: Fire Protection Measures. Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire.
- Policy S-3.7: Fire Resistant Construction. Require all new, remodeled, or rebuilt structures to meet current ignition resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire threat areas.

Otay Ranch General Development Plan/Subregional Plan

The Otay Ranch GDP/SRP includes a safety chapter that addresses the long range and comprehensive protection of the community and residents of Otay Ranch from natural and manmade disasters. The Otay Ranch GDP/SRP includes guiding principles augmented by planning, building, public works, and safety goals, policies, codes and ordinances which, when taken

together, constitute an effective method of protecting life and property. The following policies apply to the Proposed Project (City of Chula Vista and County of San Diego 1993b):

- **Policy:** Otay Ranch SPA [Sectional Planning Area] plans shall include Emergency Disaster Plans to become operative during periods of major emergency.
- **Policy:** Otay Ranch shall participate in cooperative agreements with urban and rural emergency services providers.
- Policy: Incorporate the Otay Ranch Project Area into existing regional disaster preparedness programs. Otay Ranch shall site fire and emergency services facilities consistent with the following factors: a) Ability to meet travel/response time policies; b) Proximity to a pool of volunteer firefighters for service within the unincorporated areas, when appropriate; c) Ability of the site to support the appropriate facility to serve current and future development in the intended service area; d) Distances from other fire stations, including those operated by neighboring districts: e) Safe access to roadways in emergency responses; f) Special needs for fire suppression, and emergency services, including needs created by recreation areas and industrial land uses; g) Avoid close proximity to fault traces; and h) Ability to meet any adopted local community facility level standard, if appropriate. Consideration shall be given to shared law enforcement and fire services facilities such as public safety "storefronts" within village centers, training rooms and equipment storage.
- **Policy:** Otay Ranch shall evaluate the provision of fire suppression sprinkler systems for residential development within the project area as part of SPA plans.
- **Policy:** Fire protection and emergency services facilities shall be available or will be available concurrent with need.
- **Policy:** In areas lacking local public structural fire protection and within the sphere of influence of a fire protection agency, approval of Otay Ranch discretionary applications shall be conditioned on the annexation to that agency.
- Policy: Otay Ranch shall cooperate in the development of a strategy to address emergency medical service facilities and responsibilities in areas lacking a local provider of these services.
- **Policy:** Otay Ranch shall work with affected fire protection agencies to cooperatively develop guidelines for appropriate water provision requirements necessary for fire protection in groundwater dependent areas.
- **Policy:** Otay Ranch shall participate in fire mitigation fee or development impact fee programs to enable fire protection agencies to meet the facility and equipment needs generated by Otay Ranch.

3.1.1.2 Analysis of Project Effects and Determination as to Significance

3.1.1.2.1 Hazardous Substance Handling

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Hazardous Materials and Existing Contamination* (County of San Diego 2007a) apply to the direct and indirect impact analysis and the cumulative impact analysis. A project would generally be considered to have a significant effect if it proposes any of the following, absent specific evidence to the contrary. Conversely, if a project does not propose any of the following, it would generally not be considered to have a significant effect related to hazardous substances and existing contamination, absent specific evidence of such an effect (County of San Diego 2007a):

- The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the Health 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.
- The project is a business, operation, or facility that would handle regulated substances subject to California Accidental Release Prevention Risk Management Program requirements that in the event of a release could adversely affect children's health due to the presence of a school or day care within one-quarter mile of the facility.

Analysis

Construction of the Proposed Project would involve the transport of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, and solvents. These materials would be used and stored in designated construction staging areas within the boundaries of the Project Area. These materials would be transported, handled, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment. Therefore, a **less-than-significant** impact would occur.

Once construction is complete, the transport, use, or disposal of hazardous materials would be limited to household cleaning products, landscaping chemicals and fertilizers, and other substances associated with residential and recreational (park) uses. Any hazardous materials would be transported and handled in accordance with all federal, state, and local laws

regulating the management and use of hazardous materials. The Proposed Project does not include any businesses, operations, or facilities that would handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the California Health and Safety Code, generate hazardous waste regulated under Chapter 6.5 of the California Health and Safety Code, or store hazardous substances in USTs regulated under Chapter 6.7 of the California Health and Safety Code. Additionally, no land uses included in the Proposed Project would involve handling regulated substances subject to the CalARP RMP within 0.25 miles of a school or daycare facility. Therefore, impacts would be **less than significant**.

3.1.1.2.2 Existing On-Site Contamination

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Hazardous Materials and Existing Contamination* (County of San Diego 2007a) applies to the direct and indirect impact analysis and the cumulative impact analysis. A significant impact would result if:

- The project is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5³ 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.
- The project proposes structure(s) for human occupancy and/or significant linear excavation within 1,000 feet of an open, abandoned, or closed landfill (excluding burnsites) and as a result, the project would create a significant hazard to the public or the environment.⁴
- The project is proposed on or within 250 feet of the boundary of a parcel identified as containing, (from the historic burning of trash); and as a result, the project would create a significant hazard to the public or the environment.⁵

Includes the EnviroStor database; the List of LUST Sites by County and fiscal year from the State Water Resources Control Board (SWRCB) GeoTracker database; the list of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit; the list of "active" cease and desist orders and cleanup abatement orders from the SWRCB; and the list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by the California Department of Toxic Substances Control. See http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm.

⁴ Hazards near landfills include potential gas migration into structures and migration of landfill gas via subsurface utilities that act as a conduit for landfill gas; however, other proposed uses could also be adversely affected by landfill gas.

Hazards associated with being located near a burn site include the potential for soils contaminated with burn ash to migrate on site. When a project is located near a parcel known to contain a burn site, the DEH Local Enforcement Agency and the Department of Public Works Solid Waste Division (for County-managed site) will need to be contacted to determine the accuracy of the delineated boundaries of the burn site and to verify whether the project could be subject to a potential hazard.

- The project is proposed on or within 1,000 feet of a FUDS [Formerly Used Defense Site] and it has been determined that it is probable that munitions or other hazards are located on site that could represent a significant hazard to the public or the environment.
- The project could result in human or environmental exposure to soils or groundwater that exceed EPA Region 9 PRGs [Preliminary Remediation Goals], CalEPA CHHSLs, or Primary State or Federal Maximum Contaminant Levels (MCLs) for applicable contaminants, and the exposure would represent a hazard to the public or the environment.
- The project will involve the demolition of commercial, industrial, or residential structures that may contain ACM [asbestos-containing materials], LBP [lead-based paint] and/or other hazardous materials, and, as a result, the project would represent a significant hazard to the public or the environment.⁷

Analysis

To determine whether any existing hazardous materials sites are located in the Project Area or vicinity, a records search of federal, state, and local government hazardous materials sites databases was conducted by EDR (see Appendix 3.1.1-1). The search radii used for government databases met or exceeded the standard search distance adopted by the ASTM. No on-site facilities were identified during the database search.

As mentioned under Section 3.1.1.1, two off-site facilities within a 0.5-mile radius of the Project Area were identified on the SLIC list. Given their distance and orientation relative to the Project Area, they are not considered to be of environmental concern to the Project Area (Appendix 3.1-1).

One off-site facility located at 13330 Proctor Valley Road, approximately 1,000 feet north of the Project Area, was identified on the RWQCB LUSTs list. An underground diesel tank was removed from the property in 2004, and subsequent site assessments identified low

This guideline addresses the potential for undocumented site contamination, based on a Phase I Environmental Site Assessment or other similar site assessment, to represent a potentially significant impact to humans or the environment. Site contamination may have been the result of historic agriculture, petroleum spills, aerially deposited lead on lands adjacent to freeways, or other contaminated media. Where contamination may have impacted groundwater resources, reference to the primary state or federal MCLs is consistent with the guideline included in the Guidelines for Determining Significance for Groundwater Resources, but is included in this document to recognize that groundwater quality can be affected by hazardous materials. The PRGs, CHHSLs, and MCLs are screening criteria and not legally enforceable standards. A project could exceed a screening level but not have a significant hazard impact if data demonstrates that the site would not pose health or safety hazards. For example, certain chemicals such as arsenic, dioxins, and furans have a very low PRG, and many sites will exceed set screening levels based solely on background levels. However, depending on the levels found on site, a hazard to the public or the environment may not be present.

Buildings constructed after 1980 would not typically contain these hazardous building materials because asbestos and LBP [were] banned in 1978. Polychlorinated biphenyls, found in light ballasts, transformers, and other commercial products, were banned from sale in 1979.

concentrations of diesel in the shallow soil. San Diego County DEH issued a "no further action" letter in October 2006. The Proposed Project would not result in human or environmental exposure to soils or groundwater that exceed EPA screening levels, the CalEPA CHHSLs, or state or federal MCLs. Thus, this site is not considered to be of concern to the Project Area.

As described previously under the subheading "Areas with Potential Hazardous Materials Contamination," radon gas is not considered an environmental concern for this site. Also, there are no structures currently on the subject property that might contain asbestos, so the potential presence of asbestos in building materials is not a concern. No information was found that indicated the use, storage, or disposal of LBP on the site, and none of the materials observed on site are suspected of containing LBP. In addition, no information was obtained to suggest the actual or probable presence of USTs or ASTs in the Project Area, and the Proposed Project is not 250 feet or less from the boundary of an identified burn ash site.

The Phase I Environmental Site Assessment investigations included a 3-mile-radius search of the Coal Combustion Residues Surface Impoundments List (primarily coal ash) and a 2.5-mile search distance of Steam-Electric Plant Operation Data. No sites were found within the search areas.

A government records search was also done on the Solid Waste Information System, which contains an inventory of active and inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites. No such sites were reported within the search area.

A records search with a 3.5-mile search distance was done for FUDS, which includes locations of FUDS properties where the U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions. No such sites were found within the search area. The nearest site is approximately 5.0 miles south of the Project Area at the former Brown Field Bombing Range on Otay Mesa.

Finally, no damaged containers, stressed vegetation, odorous soils, surface waters, dumps, or lagoons were observed during the site inspection. Therefore, because none of the observations during the on-site reconnaissance indicate an environmental concern, impacts related to contamination would be **less than significant.**

The improvements for the Proctor Valley Road North Option and Perimeter Trial Option improvements would be subject to the same on-site conditions as previously analyzed, and impacts would be the same as those described. No improvements are proposed for the Preserve Trail Option; therefore, no additional impacts would occur.

3.1.1.2.3 Airport Hazards

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Airport Hazards* (County of San Diego 2007b) applies to the direct and indirect impact analysis as well as the cumulative impact analysis.

A significant impact would result, if any of the following occurs (County of San Diego 2007b):

- Projects near public airports with an adopted ALUCP [Airport Land Use Compatibility Plan] or CLUP [Comprehensive Land Use Plan]: The project is located within an established AIA [airport influence area] for a public or public use airport and proposes a development intensity, flight obstruction, or other land use that conflicts with the ALUCP or CLUP (if no ALUCP is adopted) and as a result, the project may result in a significant airport hazard.
- Projects near airports not subject to an ALUCP or Comprehensive Land Use Plan (CLUP): The project is located within 2 miles of a public or public use airport or within 1 mile of a private airport, and proposes any of the following:
 - o Residential densities inconsistent with the California Airport Land Use Planning Handbook's Safety Compatibility Criteria Guidelines for Maximum Residential Density and as a result, the project may result in a significant airport hazard.
 - Non-residential land uses that exceed the California Airport Land Use Planning Handbook's Safety Compatibility Criteria Guidelines for Maximum Non-Residential Intensity and as a result, the project may result in a significant airport hazard.
 - An incompatible use identified in the California Airport Land Use Planning Handbook's Safety Compatibility Criteria Guidelines for Safety Compatibility Zones – Prohibited Uses and as a result, the project may result in a significant airport hazard.
- Conflicts with FAA [Federal Aviation Administration] Regulations: The proposed project
 is determined by the FAA to constitute a hazard to aviation based on FAA review of
 Form 7460-1, is inconsistent with current FAA Heliport Design Criteria for Heliports not
 subject to an ALUCP or CLUP, or conflicts with FAA rules or regulations related to
 airport hazards, and as a result, the project may result in a significant airport hazard.

Analysis

The Project Area is not located within the AIA of an ALUCP, or within 2 miles of a public airport, or within 1 mile of private use airport. The nearest airport is Brown Field, which is

approximately 7 miles southwest of the Project Area, and the nearest private airstrip, John Nichol's Field, is approximately 3 miles southeast of the Project Area. Lindbergh Field is approximately 15 miles northwest of the Project Area.

The Proposed Project would not involve construction of any structure equal to or greater than 150 feet in height, constituting a safety hazard to aircraft or operations from an airport or heliport. The Proposed Project is not subject to FAA review of Form 7460-1 due to meeting height and distance requirements. FAA Heliport Design Criteria does not apply to the Proposed Project, nor does the Proposed Project conflict with FAA rules and regulations related to airport hazards. Therefore, the Proposed Project would not result in a significant airport hazard; **impacts would be less than significant**.

3.1.1.2.4 Wildfire Hazards

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Wildland Fire and Fire Protection* (County of San Diego 2010b) applies to the direct and indirect impact analysis as well as the cumulative impact analysis.

An affirmative response to, or confirmation of, any one of the following guidelines would generally be considered a significant impact related to wildland fire and fire protection as a result of a project, in the absence of evidence to the contrary (County of San Diego 2010b):

- A comprehensive Fire Protection Plan has been accepted, and the project is inconsistent with its recommendations.
- 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.
- The project cannot demonstrate compliance with all applicable fire codes.

<u>Analysis</u>

Given the history of wildfire in the vicinity, including the 2007 Harris Fire that burned through the Project Area, combined with topography, vegetation, climate, nearby ignition sources, and anticipated fire behavior, the Project Area, in its current condition, is considered to be vulnerable to wildfire ignition and spread during extreme fire weather. Wildfires may start on, burn onto, or spark into the Project Area. The most common type of fire anticipated in the vicinity of the Project Area is a wind-driven fire from the north/northeast, moving downslope or northeast to

southwest through Proctor Valley through the chamise-chaparral and sage scrub shrubs found on the foothills of the Jamul Mountains.

The post-development condition of the Project Area would diminish the ability of a wildfire to spread as it has historically in Proctor Valley. The Proposed Project's landscaped and irrigated areas and FMZs, as well as the paved roadways and ignition-resistant structures, would result in reduced fire intensity and spread rates around the Project Area, creating defensible space for firefighters. Additionally, provisions for a fire station in the area would reduce the response time to wildfire ignitions and increase the likelihood of successful initial attacks that limit the spread of wildfires. This fire station would also become part of the regional fire service delivery plan for the SDCFA for this portion of the county and would support fire and emergency service provision in the communities of Jamul, Dulzura, and Otay Mesa.

Even with the The introduction of up to 1,119 new homes would not increase the potential likelihood of arson, off-road vehicle-related fires, or shooting-related fires—it is anticipated that wildfire ignitions would not increase from current levels with the Project Area. Existing ignition sources include vehicles, recreational vehicles, tossed cigarettes, unauthorized activities/arson, electrical transmission lines, activities at existing nearby developed communities, and off-site fires that may drop embers into the fuel bed within the Project Area. Post-construction ignition sources would include vehicles, although roadside FMZs would be provided, reducing the potential for a vehicle-related fire escaping into the Otay Ranch RMP/MSCP Preserve fuels. Unauthorized activities such as off-road vehicles and shooting may still occur, but there will be more "monitors" (i.e., future residents) in the area to discourage and report such activities, resulting in an anticipated decreased occurrence.

Existing development in the project vicinity may still start wildfires through structure fires, maintenance equipment, unsupervised children, or others, but the Proposed Project provides early identification and reporting through additional people in the area and additional response capabilities due to the planned new fire station.

Additionally, the Proposed Project would convert flammable vegetation to ignition-resistant landscapes, reducing the amount of fuel in the fuel bed. Embers falling in the area from distant fires will have less flammable open space available. Ignitions from electrical transmission lines would be the same post-construction, since the Proposed Project's electrical lines would be buried. The Proposed Project's homes would be ignition resistant, fitted with interior sprinklers, and provided wide buffers to the adjacent Otay Ranch RMP/MSCP Preserve fuels, reducing the potential for a structure-related fire to burn into the adjacent Otay Ranch RMP/MSCP Preserve.

The Proposed Project will implement requirements of and be consistent with its FPP. As part of the FPP, fire behavior modeling using the BehavePlus model and a site fire risk analysis were

conducted. The FPP establishes standards for fuel modification, building design and construction, and other pertinent development infrastructure criteria aimed to reduce wildland fire risk on the Project Area. The Proposed Project's FPP (Appendix 3.1.1-2 of this EIR) is summarized as follows.

The FPP complies with the requirements of the 2017 County Consolidated Fire Code and the 2016 California Fire and Building Codes. The recommendations in the FPP meet fire safety, building design elements, infrastructure, fuel management/modification, and landscaping recommendations of the applicable codes. The recommendations provided in the FPP were made for the structures within a wildland/urban interface (WUI) area. Further, the FPP analyzed the Proposed Project's impacts related to the following thresholds from CEQA Appendix G:

- Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildland are adjacent to urbanized areas or where residences are intermixed with wildland?
- Would the project result in inadequate emergency access?
- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance service ratios, response times or other performance objectives for fire protection?
- Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

When properly implemented on an ongoing basis, the fire protection strategies provided in the FPP would significantly reduce the potential fire threat to vegetation from the Proposed Project and conversely, from vegetation on the structures, and should assist the fire authority in responding to emergencies in the Project Area. The Proposed Project's fire protection system includes a redundant layering of protection methods that have been shown through post-fire-damage assessments to reduce risk of structural ignition. Modern infrastructure and the latest ignition-resistant construction methods and materials would be used. Further, all structures are required to include interior, automatic fire sprinklers, consistent with the fire codes. Fuel modification would occur within designated FMZs and developed landscapes throughout the interior of the Proposed Project. In addition, a public safety site within the Village Core would house a fire station equipped with a Type I or Type II-fire engine suited to respond to structural and vegetation fires.

Emergency Response

The Safety Element of the San Diego County General Plan establishes travel time standards for new development. Table S-1 sets a 5-minute travel time for Village (VR-2 to VR-30) and limited Semi-Rural Residential Areas (SR-0.5 and SR-1) and Development located within a Village Boundary. A 10-minute travel time applies to Semi-Rural Residential Areas (>SR-1 and SR-2 and SR-4) and Development located within a Rural Village Boundary. The Village 14 component of the Project Area is subject to the 5-minute travel time, and the Planning Area 16/19 portions of the Proposed Project are subject to the 10-minute travel time.

SDCFA will serve the Proposed Project because the Project Area is in County Service Area, 135, and the County has indicated that it can and would provide fire and emergency medical response. Fire service will be provided by SDCFA from a proposed centrally located, on-site station that will be capable of responding to 96% of the Proposed Project's lots, including all of Village 14, within the County General Plan's 5-minute travel time standard. Existing SDCFA Station No. 36 can respond to about 1% of the Proposed Project's lots (located in Planning Areas 16/19) within 5 minutes and the remaining lots within Planning Areas 16/19 within 6 minutes travel time, well under the rural residential General Plan 10-minute travel time for this land use.

The proposed fire station would ensure that the General Plan's travel time standards can be met for the Project Area. This fire station would be a residential fire station with two engine bays meeting SDCFA's current configuration standards for this type of facility. The Proposed Project would provide a Type I or II-fire engine to SDCFA's specifications. Current staff programs call for two career firefighter positions and one reserve firefighter, until a third career position can be financed. See Section 3.1.6, Public Services, for more detail regarding emergency response capabilities and response times to be provided by the Proposed Project.

The other fire agency in the vicinity is the Chula Vista Fire Department, but the Proposed Project is not within their jurisdictional area and neither of the two closest Chula Vista Fire Department fire stations can provide service to any of the proposed structures within the County General Plan's travel time standards.

Code Compliance

Based on the results of the FPP's analysis and findings, the following FPP implementation measures would be provided by the Proposed Project as part of the proposed development plan (Appendix 3.1.1-2). Modern infrastructure would be provided along with implementation of the latest ignition-resistant construction methods and materials. Further, all structures are required to include interior, automatic fire sprinklers consistent with the fire codes. Fuel

modification will occur on perimeter edges adjacent to open space/conservation areas, and throughout the interior of the Proposed Project.

- 1. A <u>construction Construction FPP</u> would be prepared, detailing the important construction-phase restrictions and fire safety requirements to <u>be</u> implemented to reduce risk of ignitions and plans for responding to <u>an unlikely any potential ignitions</u>.
- 2. Proposed Project buildings would be constructed of ignition-resistant materials based on the latest building and fire codes.
- 3. Fuel modification Modification Zones will be provided throughout the perimeter of the site-Project Area and would be up to 120 feet wide in most locations, including the rear yard areas as part of the modified zone. Maintenance will occur as neededrequired, and the homeowner's association (HOA) will annually hire a third-party, SDCFA-approved FMZ inspector to provide annual certification that fuel modification meets the FPP requirements.
- 4. One-acre and larger lots (lots designated as 1, 2, or 3 acres) will include fuel modification equal to 100 feet in width from all combustible buildings of more than 250 square feet in size. The FMZ will begin at the structure and extend outward in all directions (i.e., front, sides, and rear of house). Homeowners will be responsible for maintaining the FMZs and they will be included in the annual HOA or Approved Management Entity funded third-party inspections.
- 5. Large lots in Planning Areas 16/19 would include limited building zones (LBZs) where the properties are adjacent to open space areas. The LBZs would designate buffer areas where no building would be allowed. If a structure is built adjacent to the LBZ, then the LBZ can be maintained as an FMZ.
- 6. Fire apparatus access roads would be provided throughout the community, varying in width and configuration, but would all provide at least the minimum required unobstructed travel lanes, lengths, turnouts, turnarounds, and clearances required by the applicable code.
- 7. Firefighting staging areas and temporary refuge areas would be available throughout the development, as well as along roadways and Project Area green spaces so that firefighters will be able to stage operations and seek temporary refuge from wildfire, if necessary.
- 8. Water capacity and delivery would provide for a reliable water source for operations and during emergencies requiring extended fire flow.
- 9. A site-specific evacuation plan will behas been prepared for the Proposed Project and will includes input and review with from SDCFA, law enforcement, and San Diego County Office of Emergency Services.

The community HOA would include an outreach and educational role to coordinate with SDCFA, oversee landscape committee enforcement of fire safe landscaping, ensure that fire safety measures detailed in this FPP have been implemented, and educate residents on and prepare facility-wide "Ready, Set, Go!" plans.

The Proposed Project also includes additional project design features as part of the Proposed Project, which are listed in Table 3.1.1-2, Project Design Features: Code Exceeding or Alternative Materials and Methods Fire Safety. Coupled with the project design features required by the FPP, the inclusion of a proposed on-site fire station, and the provision of defensible space incorporated into the Proposed Project, the overall intensity of a wildland fire would be low. Provisions for modified fuel areas separating wildland fuels from structures would also reduce the number of fuel-related structure losses. These project design features, also included in the FPP, are now required by the latest Building and Fire Codes, are required for new development in WUI areas, and would form the basis of the system to provide adequate access by emergency responders and provide the protection necessary to minimize structural ignitions. Features required by 2016 California Building Code include the following:

- 1. Application of the latest adopted ignition-resistant building codes
- 2. Exterior wall coverings are to be non-combustible or ignition resistant
- 3. Multi-pane glazing with a minimum of one tempered pane
- 4. Ember-resistant vents (recommend BrandGuard, O'Hagin, or similar vents)
- 5. Interior, automatic fire sprinklers to code for occupancy type
- 6. Modern infrastructure, access roads, and water delivery system
- 7. Maintained FMZs
- 8. Fire apparatus access roads throughout the Project Area's developed areas

In addition to the code-required fire safety features, the Proposed Project would provide additional features, including heat-deflecting landscape walls at strategic perimeter locations to augment the FMZs and to provide additional perimeter protection for homes with a downslope at the edge of a rear yard (Appendix 3.1.1-2). The Proposed Project demonstrates compliance with applicable fire codes, consistency with the Proposed Project's FPP, and the ability to meet the County's emergency response objectives. Table 3.1.1-2 lists project design features that exceed code standards. As such, wildland fire impacts would be **less than significant**.

3.1.1.2.5 Emergency Response Plans

Guidelines for the Determination of Significance

For the purpose of this EIR, the County's *Guidelines for Determining Significance: Emergency Response Plans* (County of San Diego 2007c) apply to the direct and indirect impact analysis, as well as the cumulative impact analysis. In addition, the Proposed Project's Wildland Fire Evacuation Plan has been prepared based on the Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan – Evacuation Annex (Appendix 3.1.1-3). It also incorporates key information from the Jamul Community Protection Plan (Jamul Disaster Team 2006), Evacuation Plan Appendix.

The Proposed Project would have a significant impact related to emergency response if any of the following occur:

- The project proposes one of the following unique institutions in a dam inundation zone as identified on the inundation map prepared by the dam owner:
 - Hospital
 - o School
 - Skilled nursing facility
 - o Retirement home
 - Mental healthcare facility
 - o Care facility with patients that have disabilities
 - Adult and childcare facility
 - Jails/detention facility
 - O Stadium, arena, or amphitheater
 - Any other use that would involve concentrations of people that could be exposed to death in the event of a dam failure

• The project proposes a structure or tower 100 feet or greater in height on a peak or other location where no structures or towers of similar height already exist, and as a result, the project could cause hazards to emergency response aircraft resulting in interference with the implementation of an emergency response.⁸

Analysis

The Operational Area Emergency Plan is a framework document that provides direction to local jurisdictions in San Diego County to develop specific emergency plans. It provides guidance for emergency planning and requires subsequent plans to be established by each jurisdiction that has responsibilities in a disaster situation. The Proposed Project would not interfere with this plan because it would not prohibit subsequent plans from being established. The Project Area is not located in a dam inundation zone and therefore would not interfere with a dam evacuation plan, nor would the Proposed Project result in potential impacts related to inundation.

The Proposed Project's Wildland Fire Evacuation Plan identifies the Emergency Evacuation Routes available to Village 14 and Planning Areas 16/19 and focuses on wildland fire evacuations, although many of the concepts and protocols will be applicable to other emergency situations (Appendix 3.1.1-3). Ultimately, this plan will be used by the HOA to educate community residents as to their evacuation responsibilities and recommended actions during wildfires and other similar emergencies.

Site access, including roads, gates, and driveways, would comply with the requirements of the Consolidated County Fire Code (Section 96.1.503). The Proposed Project includes improvements to vehicle capacity through road widening, paving, and related improvements. For example, on-site roads will be constructed to a minimum unobstructed width of 24 feet and 26 feet at commercial buildings and schools. The Proposed Project would comply with secondary access and avoidance of dead-end roads that exceed the maximum allowable dead-end road length800 or 1,320 feet, respectively. Any gates on private roads or on private driveways may be permitted, must comply with SDCFA standards for electric gates, and will not represent a dead-end road condition that jeopardizes the dead-end road length requirements for the Proposed Project; see Section 6.3 of the FPP (Appendix 3.1.1-2) for more specifications on road requirements and emergency access. In addition, the Proposed

The extent to which the Proposed Project would interfere with emergency air support services, resulting in a potentially significant impact, would be determined based on consultation with the County Sheriff and/or CAL FIRE considering the Proposed Project's attributes and site conditions (Sheriff's ASTREA Base: 619.956.4930; CAL FIRE Air Ops, San Diego Unit: 619.590.5100). Guidelines for Determining Significance for Airport Hazards addresses the potential hazards to aviation around airports and heliports. This significance guideline is intended to address other aviation obstructions to low-flying aircraft (i.e., emergency responders) that are not captured in the FAA's height standards but that could interfere with implementation of emergency response plans.

Project does not propose a structure or tower 100 feet or greater in height and would not cause hazards to emergency response aircraft. Impacts related to interference with emergency responses would be **less than significant**.

3.1.1.2.6 Exposure to Vectors

Guidelines for Determination of Significance

A significant impact from exposure to vectors would occur if the Proposed Project (County of San Diego 2009):

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

Rationale for Selection of Guidelines

The significance guidelines for exposure to vectors are from the County's *Guidelines for Determining Significance and Report Format and Content Requirements: Vectors* (County of San Diego 2009), Guidelines 4.1 through 4.3. Guideline 4.1 (first bullet) is included to recognize that sources of standing water, particularly where the water would be standing for more than 72 hours, provides excellent habitat for mosquito breeding; Guideline 4.2 (second bullet) is included because areas of concentrated manure and composting operations and facilities typically require careful management to minimize vector production; and Guideline 4.3 (third bullet) addresses the potential for a project to result in a substantial increase in the number of residents located near an existing off-site vector breeding source.

Analysis

Exposure to Vectors from Stormwater Management Basins

As described in Section 3.1.2, Hydrology and Water Quality, the Proposed Project proposes 14 bioretention basins. These biofiltration basins are located at the downstream portions of the developed areas and along Proctor Valley Road, and serve as both pollution control and flow control measures. More detailed information on the basins is provided in Section 3.1.2. Consistent with permit requirements, these biofiltration basins are designed to drain within 72 hours and are not expected to have standing water that would serve as a breeding ground for mosquitos, which require a week of standing water conditions to complete the mosquito larvae breeding cycle.

Further, maintenance of the biofiltration basins is required by the municipal separate storm sewer system (MS4) permit to ensure these facilities function as designed. Regional MS4 permits are required by the California RWQCB, San Diego Region, to regulate discharges from Phase I MS4s in the San Diego Region (California Water Boards 2017). This would include periodic inspections, which would be performed following each significant storm (defined as 24-hour rainfall events in excess of 1 inch). The inspections would include checks for structural integrity of the basins and their outlet devices. The inspector would identify any repairs and maintenance activities deemed necessary, including the removal of trash, debris, and sediment from the upper chamber of the basin area. Sediment would be removed to maintain the designed volume of storage in the basin. A registered civil engineer would also conduct semi-annual inspections of each water quality basin to provide a thorough inspection of the basin area, and to identify any required repairs or corrective maintenance activity needed to maintain the hydraulic performance of the basins. Semi-annual maintenance activities would include removal of the heavy vegetation that would inevitably grow in the basin. Roughly one-half of the vegetation would be removed from the basin at each annual maintenance session, including all woody or aquatic vegetation and other obstructions to flow. Because of the design of the biofiltration basins coupled with regular inspections, the biofiltration basins are not expected to be regularly filled with water and, thus, would not serve as a potential breeding ground for mosquitos. Accordingly, impacts related to the exposure to vectors would be **less than significant**.

Exposure to Vectors from On-Site Manure or Composting Operations

The Proposed Project proposes residential, school, parks, and open space land uses and would not include any facilities involving the production, use, and/or storage of manure or a composting operation. Therefore, there would be *no impact* from exposure to vectors from manure or compost operations.

Exposure of Residents to Off-Site Vector Sources

Currently, the Project Area is undeveloped and unoccupied and does not support any significant vectors such as mosquitoes, rats, or flies. No properties within 0.25 miles of the Project Area contain agricultural ponds, confined animal facilities, or other vector-breeding sources. In addition, the Proposed Project does not propose any activities, such as equestrian facilities, that would support vectors or facilitate an increase of vectors in the Project Area. However, Proposed Project residences would be located within 1 mile of the Upper or Lower Otay Reservoirs. Regular changes in water elevations, presence of fish and birds as predators, wind waves, and fishing boat turbulence avoid conditions for creation of stagnant pools of water that would be mosquito breeding sources, which require a week of standing water conditions to complete the mosquito larvae breeding cycle. The County DEH identifies typical conditions of standing water necessary for mosquito breeding, and streams, lakes, and reservoirs are not included as typical sources. Because implementation of the Proposed Project would not cause an increase in residents exposed to vector-breeding sources, impacts related to vector exposure would be **less than significant**.

3.1.1.3 Cumulative Impact Analysis

Cumulative impacts related to hazards and hazardous materials would result from projects that combine and increase exposure to hazards and hazardous materials. Hazardous soils, USTs, and other existing sources of hazardous materials are generally site specific and handled on a projectby-project basis. None of the identified cumulative projects listed in Chapter 1, Project Description, Location, and Environmental Setting, of this EIR would be expected to increase exposure to or the chances of release of hazardous materials, because each proposed land use (residential, public facilities, and infrastructure improvements) does not typically involve large quantities of potentially hazardous materials. Further, cumulative projects would be required to comply with federal, state, and local standards regarding the handling, use, transportation, storage, and disposal of hazardous materials, which are intended to minimize risk to public health and the environment. In addition to these standards, cumulative projects would be required to minimize erosion and pollution discharge through compliance with RWQCB permits and implementation of project-specific BMPs and stormwater pollution prevention plans (or equivalent, per project). As such, the Proposed Project would not result in a cumulatively considerable impact related to the transportation, use, or storage of hazardous materials or related to a hazardous materials site.

A significant risk of wildland fires currently exists in San Diego County. As such, cumulative projects located in the County, specifically Villages 13, 15, and 17, Jamul Highlands Estates and Lyons Valley 8, are at risk for wildland fire (see Figure 1-16, Cumulative Projects, in Chapter 1 of this EIR). Although policies have been developed to manage fire risk, existing and future

residents and structures would continue to be at risk unless strategies beyond existing regulations are implemented. Implementation of the Proposed Project could contribute to the risk of wildland fires because it would result in development in an area prone to wildfires and would create a new development edge near a wildfire-prone area. However, with implementation of an FPP that requires fuel modification, inclusion of a proposed fire station centrally located within the Project Area, provision of defensible space incorporated into the Proposed Project, and requirements that structures be built with fire-resistant materials, impacts from the Proposed Project would not result in a cumulative wildland fire impact.

3.1.1.4 Conclusion

The Proposed Project does not include uses that would use hazardous substances in excess quantities, and no on-site hazardous contamination is present. The Project Area is not located within the AIA of an ALUCP, within 2 miles of a public airport, or within 1 mile of a private use airport, nor would any of the proposed uses pose a hazard to airport safety.

Based on implementation of the FPP requirements, compliance with applicable fire codes, and inclusion of a fire station in the Project Area, the Proposed Project would not have significant impacts relating to wildfire hazards. The FPP and its requirements would be incorporated by reference into the Proposed Project's final Conditions of Approval to ensure compliance with County codes/regulations and significance standards. Additionally, the County's emergency response and multijurisdictional fire efforts will be able to provide adequate emergency response.

Impacts related to hazards and hazardous materials would be **less than significant**.

Table 3.1.1-1
Fire History in the Project Area

Fire Year	Fire Name	Total Area Burned (acres)
1910	Unnamed	9,218
1911	Unnamed	32,308
1950	Wet Back	18,192
1968	Proctor	10,617
1970	Laguna	175,425
1980	Otay No. 6	13,059
1980	Proctor	9,996
1981	Proctor No. 1	2,523
1981	Proctor No. 2	413
1984	Proctor	11,604
1985	Miller	32,414
1989	Proctor No. 7	2,423

Table 3.1.1-1
Fire History in the Project Area

Fire Year	Fire Name	Total Area Burned (acres)
1999	Proctor	7,004
2003	Mine/Otay	46,291
2005	Proctor	204
2006	Proctor	54
2007	Harris	90,440

Table 3.1.1-2
Project Design Features: Code Exceeding or Alternative Materials and Methods Fire Safety

Feature No.	Code Exceeding or Alternative Material or Method Feature
1	Construction Fire Prevention Plan. Details the important construction phase restrictions and fire safety requirements that would be implemented to reduce risk of ignitions and pre-plans for responding to an unlikely ignition.
2	Community Evacuation Plan. A site-specific evacuation plan has been prepared for the Proposed Project and includes input and review with SDCFA, law enforcement, and San Diego County Office of Emergency Services. (CODE EXCEEDING)
3	HOA Wildfire Education and Outreach. The Community HOA would include an outreach and educational role to coordinate with SDCFA, oversee landscape committee enforcement of fire safe landscaping, ensure fire safety measures detailed in this FPP have been implemented, and educate residents on and prepare facility-wide "Ready, Set, Go!" plans. (CODE EXCEEDING)
4	Heat-Deflecting Landscape Walls. Walls would be provided for 38 lots to provide additional fire protection and to enhance structure setback from top of slope. At a few locations, where FMZ is constrained to approximately 70 feet, walls would be provided as mitigation to provide same practical effect. (ALTERNATIVE MATERIALS AND METHODS FOR FMZ REDUCTIONS IN SOME LOCATIONS. ALSO A CODE EXCEEDING MEASURE AS IT IS NOT REQUIRED FOR STRUCTURE SETBACK)
5	FMZ Third-Party Inspections. Annual FMZ and LBZ/LBA inspections would be funded by the HOA and conducted by a qualified third-party consultant to certify that the Proposed Project's FMZs are maintained and LBZ/LBA have no authorized structures. (CODE EXCEEDING)
5	Planning Areas 16/19 Roadside FMZs. Roadside FMZs would be 50 feet wide on either side of the road, 30 feet wider than required, where roads traverse open areas with adjacent native fuels. (CODE EXCEEDING)
6	Planning Areas 16/19 FMZ Maintenance Enforcement. The HOA would be responsible for enforcing private property maintenance of large lot FMZs in PA 16/19. These FMZ areas would also be inspected by the third-party inspector. (CODE EXCEEDING)
7	Trail Maintenance. Trails within the Otay Ranch RMP/MSCP Preserve would include ongoing maintenance of flammable vegetation but not including vegetation removal alongside the trails. (CODE EXCEEDING)
8	Wider Roads and Driveway Exclusion. In South Village 14, Streets "A" and "M" include wider roads and do not have driveways, enabling free traffic flow and enhanced evacuation capability. (CODE EXCEEDING)