2.5 Hazards and Hazardous Materials

This section discusses potential impacts relating to hazards and hazardous materials resulting from implementation of the proposed Campo Wind Project with Boulder Brush Facilities (Project). The analysis is based on review of existing resources; technical data; applicable laws, regulations, and guidelines; and the following technical reports which are included as appendices to this EIR:

- *Preliminary Environmental Site Assessment for the Campo Wind Facilities* prepared by Dudek in January 2019, Updated September 17, 2019 (Appendix F-1)
- *Phase I Environmental Site Assessment, APNs 529-050-01, 529-060-01, 529-090-02, 529-100-01, 529-100-02, 529-100-03, 529-120-01, 529-120-03, 529-130-01, 611-010-01, 611-010-02, 611-010-03, and 611-020-01, San Diego County, California* prepared by Dudek in September 2018 and Memorandum for Additional Assessor Parcel Numbers prepared by Dudek in October 2019 (Appendix F-2)
- *Boulder Brush Facilities Fire Protection Plan (FPP)* prepared by Dudek in November 2019 (Appendix I)
- *Boulder Brush Facilities Construction Fire Prevention Plan (CFPP)* prepared by Dudek in November 2019 (Appendix A of Appendix I).
- *Shadow Flicker Analysis: Campo Wind Project with Boulder Brush Facilities* prepared by AWS Truepower LLC (a UL Company) for Terra-Gen Development Company LLC in November 2019 (Appendix O)
- *Supplemental Shadow Flicker Analysis: Campo Wind Project with Boulder Brush Facilities* prepared by AWS Truepower LLC (a UL Company) for Terra-Gen Development Company LLC in August 2020 (Attachment 1 to Appendix O)

Comments received in response to the Notice of Preparation included concerns regarding fire protection, emergency evacuation/response, oil leakage containment, shadow flicker, low-frequency noise, and electromagnetic field (EMF) effects. These concerns are considered in the preparation of this section, where applicable. A copy of the Notice of Preparation and comment letters received are included in Appendix A of this Environmental Impact Report (EIR).

This section is divided into an analysis of potential impacts to public safety and the environment related to hazardous materials, airports, wildfire, emergency response and evacuation plans, and other public concerns of health effects. The discussion of hazards and hazardous materials describes sites with known hazardous materials contamination, sites with potential hazardous materials contamination, hazardous materials transportation, hazardous materials disposal, and hazardous materials release threats. The discussion of airports examines existing active airport facilities and potential operational hazards within San Diego County, and specifically within the Project Site. The discussion of

emergency response and evacuation plans identifies operations and plans that exist to protect lives and property in the event of a disaster within San Diego County. The wildland fires analysis as provided in Section 2.9, Wildfire, of this EIR, examines fire threat hazards, the potential for wildfires on the Project Site, and the Project's potential impacts on fire and emergency services response times. In addition, a section discussing other health concerns raised during public review is provided, which includes a discussion of shadow flicker, low-frequency noise, and EMF effects.

2.5.1 Existing Conditions

Regional Overview

As described in Chapter 1, Project Description, Location, and Environmental Setting, of this EIR, the Project consists of both the Campo Wind Facilities that would be located on land within the Campo Band of Diegueño Mission Indians (Reservation) Boundary and the Boulder Brush Facilities that would be located on adjacent private lands within the Boulder Brush Boundary. Collectively, the Reservation Boundary and Boulder Brush Boundary comprise the Project Area. Throughout this document, the term "On-Reservation" refers to anything within the Reservation Boundary while the term "Off-Reservation" refers to anything outside of the Reservation Boundary.

The Campo Wind Facilities, which would consist of 60 wind turbines and associated infrastructure, would be located within a corridor of approximately 2,200 acres of land (Campo Corridor) within the approximately 16,000 acres of Reservation land inside the Reservation Boundary. The Boulder Brush Facilities, which would consist of a portion of the Project generation transmission line and related facilities to connect energy generated by the Project to the existing San Diego Gas & Electric (SDG&E) Sunrise Powerlink, would be located within a corridor of approximately 320 acres of land (Boulder Brush Corridor) within the approximately 2,200 acres of Private Lease land parcels inside the Boulder Brush Boundary adjacent to the northeast portion of the Reservation. These private parcels are under the land use and permitting jurisdiction of the County. Collectively, the Campo Corridor and the Boulder Brush Corridor comprise the approximately 2,520-acre Project Site. Project disturbances associated with the construction of the Campo Wind Facilities within the Campo Corridor are expected to be approximately 800 acres while Project disturbances associated with the construction of the Boulder Brush Facilities within the Boulder Brush Corridor are expected to be approximately 130 acres.

The Reservation includes lands both north and south of Interstate (I) 8 along the Tecate Divide, extending from the Manzanita Indian Reservation south to approximately 0.25 miles north of the United States/Mexico International Border. The Reservation is located in the vicinity of the communities of Boulevard, Jacumba, and Live Oak Springs, and is bisected by Church Road. The Boulder Brush Facilities would be located in the McCain Valley area of unincorporated San Diego

County. Land ownership surrounding the Project Site consists of a mixture of private, State of California, Bureau of Land Management, and tribal lands.

The Project Vicinity's regional landscape consists of a mixture of large-lot rural residences, ranch land, and open space with mountainous terrain consisting of steep slopes, prominent ridgelines, and rock outcroppings. The 500-kilovolt (kV) Sunrise Powerlink traverses the northeast portion of the Boulder Brush Boundary. The 500 kV Southwest Powerlink runs along the southern boundary of the Reservation. Wind turbines associated with the Tule Wind Project are located immediately adjacent to the east, north, and northwest of the Boulder Brush Boundary. Wind turbines associated with the Kumeyaay Wind Project are located within the Reservation and adjacent to the Campo Corridor.

Hazardous Materials

Hazardous materials may be encountered during construction activities. Hazardous materials typically require special handling, reuse, and disposal because of their potential to harm human health and the environment. The California Health and Safety Code (H&SC) Section 25501, defines a hazardous material as follows:

> 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. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Potential Hazardous Material Association with Historical Land Uses

A variety of historical land uses and conditions within the Project Site could have potentially resulted in site contamination, representing potential hazards to humans and the environment when new land uses are proposed. The following are two types of historical land uses that occurred on the Project Site that have the potential to result in current site contamination (SWRCB 2018):

- **Historical Agriculture** – Agricultural activities include the application of fertilizers, herbicides, and pesticides that have the potential to contaminate soil and groundwater. Soils contaminated by past agricultural activities are a growing concern, generally because of land use changes involving proposed housing developments on former agricultural lands.
- **Petroleum** – Petroleum hydrocarbons encompass a wide range of compounds, including fuels, oils, paints, dry cleaning solvents, and non-chlorinated solvents. These compounds are used in

all facets of modern life, and can cause soil and groundwater contamination if not properly handled. Underground storage tank programs are intended to protect against the release of petroleum and other hazardous substances from tanks.

Reservation Boundary

A Preliminary Environmental Site Assessment for the Campo Wind Facilities was prepared by Dudek in 2019 (2019 Preliminary ESA) and is included as Appendix F-1 to this EIR. The subject property for the Preliminary ESA included the Reservation Boundary only. Previously, a Phase I Environmental Site Assessment of Approximately 4,660 Acres, Campo Indian Reservation, Southeastern San Diego County, California was prepared by AECOM in 2012. The findings of the previous Phase I ESA are discussed in the 2019 report.

The information gathered in the 2019 Preliminary ESA indicates that the Reservation was mainly undeveloped, with sparse residential and agricultural development since at least 1942 until approximately 1984. Aerial photographs indicate the presence of buildings since at least 1942. Based on the age of buildings, there is a potential for asbestos containing materials and lead-based paint. Construction of I-8 began in approximately 1968, and commercial use of the sand pit appears to have started between 1975 and 1984. The Golden Acorn Casino was opened in 2001, the Kumeyaay Wind turbines On-Reservation were constructed starting in 2005, and additional residential development occurred throughout the 1970s until at least 2009.

The 2012 Phase I ESA did not identify any RECs or de minimis conditions. The conditions do not appear to have changed since the prior Phase I ESA based on the latest search of available records and limited identified development during the intervening period. The 2012 Phase I ESA did, however, identify multiple locations of concern. These locations of concern were not determined to be RECs to the subject property as defined in the 2012 Phase I ESA.

In the 2019 Preliminary ESA, Dudek determined four of the locations of concern identified in the 2012 Phase I ESA to be Recognized Environmental Conditions (RECs)[1]. These include the Campo Materials Company site, Campo Materials sand and gravel pit, the Golden Acorn Casino gas station underground storage tanks, and a formal illegal dump site, as described below. In addition to the RECs listed above, the 2019 Preliminary ESA identified two additional RECs on the Reservation: a Casino unpermitted disposal site and Caltrans underground storage tanks. The 2019

[1] As defined by ASTM E1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, a Recognized Environmental Condition (REC) is "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

Preliminary ESA also identified Camp Lockett as a property with known or suspected munitions and explosives of concern, as discussed below.

- **Campo Materials Company site and sand and gravel pit** (Figure 2.5-1 Site No. 1)

  The Campo Materials Company has numerous MSHA [Mine Safety and Health Administration] citations and associated fines recorded between 2000 and 2017. Based on the information provided, this company has a history of non-compliance and handles hazardous materials on site. This information is indicative of a potential release of hazardous materials to the environment, or the potential of a future release to the environment. The Project Site crosses BIA Rd 10 (Church Rd) approximately 0.1 miles from the entrance to the Campo Materials site. The extent of operations and hazardous material storage areas were not determined during this Preliminary ESA. Therefore, there is a potential for this location to impact the Project Site.

- **Golden Acorn Casino gas station underground storage tanks** (Figure 2.5-1 Site No. 2)

  The Casino has two fuel islands and an associated UST [underground storage tank] farm located on the south side of the property. Based on the Campo Kumeyaay Nation website, the casino was opened in 2001, and historical aerial photographs confirm the gas station islands were present at approximately the same time. Documentation of the registration of the USTs could not be obtained during this Preliminary ESA. The Golden Acorn Casino is located on the east side of the intersection of I-8 (Kumeyaay Hwy) and Old Hwy 80. The Project Site lies approximately 0.25 miles southeast and approximately 0.25 miles north of these fuel islands, and therefore the presence of the fuel islands and tanks is not likely to impact the Project Site.

- **Former illegal dump site** (Figure 2.5-1 Site No. 3).

  A former residential dump site was identified during the 2012 Phase I ESA. Based on the fact that this was an illegal dump site for an unknown number of years, that dumping included abandoned vehicles, and parts of the vehicles were still observed four years later, these are conditions indicative of a release to the environment. This former dump site is located approximately 0.22 miles east of the nearest portion of the Project Site. Based on the distance from the Project Site, surficial soil impacts at the former dump site are not likely to impact the Project Site. Groundwater impacts, if any, are unknown.

- **Unpermitted disposal site** (Figure 2.5-1 Site No. 4).

  The Golden Acorn Casino has a documented, unpermitted solid waste disposal site. The type, duration, and manner of disposal is unknown. Given the known use and lack of additional information available, which indicates a potential release to the environment, this site is considered a REC. Based on the disposal site address, this listing is located on BIA Rd 10 (Church Rd), approximately 450 feet north of the intersection of BIA Rd 10 and State Route

94 (Campo Rd). This potential REC is located within the Reservation, Boundary near the BIA Rd 10/State Route 94 intersection, less than 0.125-mile from the Project Site. Because the limits, exact location, and impacts of the disposal site are unknown, it is possible that it could impact the Project Site.

- **Caltrans underground storage tanks** (Figure 2.5-1 Site No. 5)

  Three USTs owned by the California Department of Transportation are located within the Project Area: two 1,000-gallon diesel fuel tanks installed in 1961, and one 3,000-gallon unleaded fuel tank installed in 1975. This site is located near the Caltrans Boulevard Maintenance Station, located on Old Hwy 80; however, the exact UST locations is undetermined. Based on the age of the tanks, and the lack of environmental regulations regarding tanks at the date of installation, these tanks present conditions indicative of a release or material threat of a future release, and are therefore considered a REC. Based on the GeoSearch Report, the Caltrans maintenance station is located at the southeast corner of Old Hwy 80 and Golden Acorn Way. This location is more than 0.25 miles from the Project Site. Based on the distance from the Project Site, it does not appear this REC will impact the Project Site. However, the exact location of the USTs needs to be confirmed to determine potential impacts to the Project Site.

- **Camp Lockett** (Figure 2.5-1 – Southwest of Reservation Boundary)

  Camp Lockett, which is located adjacent to the Reservation Boundary to the southwest, is also identified in the 2019 Preliminary ESA. Camp Lockett is a former US Army camp previously used for cavalry training and border defense beginning in 1946. The property is known or suspected to contain military munitions and explosives of concern, and therefore may present an explosive hazard. The explosive areas are unknown, and the camp abuts the Project Area.

Boulder Brush Boundary

A Phase I ESA was prepared by Dudek in 2018 for the area contained within the Boulder Brush Boundary (Appendix F-2 to this EIR). The information gathered in the 2018 Phase I ESA indicates that much of the private land within the Boulder Brush Boundary appears to have remained vacant, undeveloped land since 1939. The southwestern portion of the Boulder Brush Boundary may have been used as apparent ranch land in the past, although the dates of this potential land use are unknown. A structure, presumed to be a residence potentially associated with ranching activity, was depicted in historical topographic maps on the southern portion of the Boulder Brush Boundary starting in 1939. A feature labeled "Airway Beacon" was depicted on the northern portion of the Boulder Brush Boundary on historical topographic maps from 1959 through 1997.

The Phase I ESA did not identify any RECs, however, the report did identify groundwater wells, above ground storage tanks, debris, and uninhabitable structures as described below and shown in Figure 2.5-1 and Figure 2.5-2.

- **Groundwater Wells** (Figure 2.5-2 Site No. 6 through No. 9, No. 15)

  Five groundwater wells were observed within the Boulder Brush Boundary during site reconnaissance. Two of the wells are abandoned with no cap (Site No. 6 and No. 7). One well in the northeastern portion is a monitoring well with a locked cover (Site No. 15). The remaining two wells are on the former ranchland to the west, and each is associated with a non-operational pump and motor, and an aboveground storage tank (Site No. 8 and No. 9). The smaller of the two motors was sitting directly on the ground and the vegetation around it appeared to be stressed. Petroleum odors were observed in the vicinity of both aboveground storage tanks.

- **Aboveground Storage Tanks** (Figure 2.5-2 Site No. 8 and No. 9)

  As stated above, two aboveground storage tanks (ASTs) were observed associated with groundwater well pumps. One was a rusted 2,000-gallon tank with open ports at the top. Liquid was observed in the tank, and the tank appeared to be approximately one-third full (Figure 2.5-1 Site No. 8). Petroleum odors were observed near the tank. The second tank was larger, potentially 3,000 to 4,000 gallons, but the exact volume could not be confirmed because the label had rusted over and was located on top of the tank. The ports at the top were open and petroleum odors were observed near the ports (Figure 2.5-1 Site No. 9). No signs of underground storage tanks were observed.

- **Debris** (Figure 2.5-2 Sites No. 10 through No. 14)

  Debris was observed in several locations within the Boulder Brush Boundary. Notably, metal debris, including metal sheets, an old stove, and an abandoned pipe, were observed on the northern portion; metal wire, tires, glass, and other debris were observed near a camping area; and empty cattle feed and water containers were observed near a cattle yard. Signage related to an electrical transmission line that crosses the property indicated that herbicides were in use within the Boulder Brush Boundary.

- **Abandoned Structures** (Figure 2.5-2 Sites No. 15 and No. 16)

  Asbestos and/or lead may be present in the uninhabitable structures observed on the Project Site, given that they were constructed prior to 1959.

Hazardous Waste Transportation

In California, unless specifically exempted, it is unlawful for any person to transport hazardous waste unless the person holds a valid registration issued by the Department of Toxic Substances Control

(DTSC). The DTSC maintains a list of active registered hazardous waste transporters throughout the state. The process of transporting hazardous waste often involves transfer facilities. A transfer facility is any facility that is not an on-site facility related to the transportation of waste. These facilities include loading docks, parking areas, storage areas, and other similar areas. Although not all transfer facilities hold hazardous waste, any operator of a facility that accepts hazardous waste for storage, repackaging, or bulking must obtain formal authorization for those activities through the hazardous waste permit process. Hazardous waste transporters are exempt from storage facility permit requirements as long as they observe the limits on storage time and handling.

Hazardous Materials Disposal

Through the Resource Conservation and Recovery Act (RCRA), Congress directed the U.S. Environmental Protection Agency (EPA) to create regulations that manage hazardous waste from "the cradle to the grave." Under this mandate, the EPA has developed strict requirements for all aspects of hazardous waste management, including recycling, treating, storing, and disposing of hazardous waste. Facilities that recycle, treat, store, and/or dispose of hazardous waste are referred to as treatment, storage, and disposal facilities. Regulations pertaining to these facilities are designed to prevent the release of hazardous materials into the environment and are more stringent than those that apply to generators and transporters. Within unincorporated San Diego County, multiple treatment, storage, and disposal facility sites exist, such as those owned and operated by the U.S. military ~~and SDG&E~~.

Airport Hazards

Airport Land Use Compatibility Plans (ALUCPs) are plans that guide property owners and local jurisdictions in determining what types of proposed new land uses are appropriate around airports. Airport safety zones are established for all public airports as part of the ALUCP, and land use restrictions within safety zones are established to protect people and property on the ground and in the air. Main areas of concern related to airport hazards are overflight safety, airspace protection, flight patterns, and land use compatibility. Hazards associated with airports can have serious human safety and quality of life impacts. Aviation facilities provide a variety of services to local residents, including civil aviation, government use, business flights, charter flights, flight schools, and helicopter operations. The nearest registered airport is Jacumba Airport, located approximately 10 miles southeast of the Project Site. The Project Site is located outside of Jacumba Airport's airport influence area. The Reservation is located approximately 2 miles west of a former private airstrip on Rough Acres Ranch; however, the landowner quitclaimed the right to service the property with fixed-wing aircraft via an aviation restriction/easement (County of San Diego 2015). There are no active private airstrips in the vicinity of the Project Site (San Diego County Airport Land Use Commission 2006).

Wildfire Hazards

The Project Site is located in a moderate to Very High Fire Hazard Severity Zone, as statutorily designated by the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE 2007). The Project Site is located in an area with historically fire-adapted vegetation communities, including chaparral, scrub, and oak woodlands, which are vegetation communities that experience occasional wildfire and can burn in an extreme manner under the occasional severe fire weather (dry and windy) conditions that occur in the area. Based on the region's fuels, fire history, and expected fire behavior, severe fires may occur, with moderate- to severe-intensity fire expected to occur in the Project Area. The rocky terrain and open fuel beds at the Project Site result in the anticipated moderate-intensity fire behavior. The applicable Tribal and County fire codes required for the Project directly address the fire concerns associated with the Project location. Tribal and County fire codes address combustible materials within the vicinity of the Project, usage of heavy machinery, and emergency access and circulation. Fire protection in the Project Area is shared by several agencies, with the Campo Reservation Fire Protection District (CRFPD), the San Diego County Fire Authority (SDCFA), and CAL FIRE providing significant resources. The CRFPD serves the Reservation as well as the La Posta, Manzanita, Jamul, and Ewiiaapaayp Indian Reservations and the surrounding unincorporated lands. The CRFPD also has mutual aid agreements with Off-Reservation fire departments, including SDCFA, CAL FIRE, and the Boulevard Fire and Rescue Department.

CRFPD handles the management and prevention measures associated with fire issues on the Reservation, and works with CAL FIRE when needed as a responding agency when ground support and air attack assistance are needed for fire suppression. Through a state-wide agreement and an annual state-wide operating plan between the BIA Pacific Region and CAL FIRE, CAL FIRE is the primary wildland fire response agency for all federal Native American reservation land except Hoopa and Tule River. The BIA Pacific Region additionally has an agreement with the Campo Band of Diegueño Mission Indians (Tribe) to provide wildland fire protection. Both have wildland protection responsibility, but CAL FIRE responsibility is primary in wildlands (AECOM 2012).

The Project Area has a long history of wildland fires. As identified in an annual report produced by CAL FIRE, San Diego County is consistently listed among the top-five counties in the state for both number of acres burned and dollar value of fire damage. In the County, fire season is typically defined as May through November, depending on variations in weather conditions. However, the threat of a wildland fire is always present and is influenced by weather conditions throughout the year. In 2016, 131 fires in the County burned a combined 7,963 acres (CAL FIRE 2016).

In general, the eastern portion of San Diego County (including the Project Site) has terrain that is susceptible to wildfire spread, including steep slopes, ravines, mountains, and valleys. The terrain within the Project Site is undulating, and ranges from valley bottoms to boulder-covered ridge lines. Slopes surrounding the hills and valleys are moderate (relatively flat up to 25%). The climate in

eastern San Diego County has a large influence on fire risk as drying vegetation during the summer months becomes fuel available to advancing flames. Typically, the highest fire danger is produced by the high-pressure systems that occur in the Great Basin, which result in the Santa Ana winds of Southern California. Sustained wind speeds recorded during recent major fires in San Diego County exceeded 30 miles per hour and may exceed 50 miles per hour during extreme conditions.

Hazards Associated with Interference with Emergency Response

The Project Site is located within both the CRFPD and the SDCFA responsibility area. In the event of an emergency within the Reservation, emergency response would be initially provided by the CRFPD, which operates a station centrally located within the Reservation. In the event of an emergency located outside of the Reservation, emergency response for the Project would be provided, initially, by the SDCFA and/or CAL FIRE from its co-located Station 47 in Boulevard. The Boulevard Fire Station is located at 40080 Ribbonwood Road and is staffed with SDCFA reserve firefighters and CAL FIRE firefighters.

County of San Diego Department of Environmental Health Hazardous Incident Response Team

The County of San Diego Department of Environmental Health (DEH) Hazardous Incident Response Team (HIRT) is the primary agency in the County responsible for the coordination of chemically related emergencies and complaints. DEH-HIRT consists of 10 California State Certified Hazardous Material Specialists and was founded in 1981 by the Unified Disaster Council. The team responds to incidents in all unincorporated County areas, 18 municipalities, two military bases, and five Native American reservations including the Reservation. It is funded by a Joint Powers Agreement. There are more than 400 responses a year in the DEH-HIRT operation area, and the team responds jointly with the San Diego Fire and Life Safety Services Department's HIRT to investigate and mitigate chemically related emergencies and complaints. Emergency response activities include mitigation, containment, and control actions, as well as hazard identification to evaluate the threat to the local populations and environment. DEH-HIRT is also responsible for handling all after-business-hours complaints for DEH (County of San Diego 2018).

Emergency and Evacuation Plans

Emergency response plans include elements to maintain continuity of government, maintain emergency functions of governmental agencies, provide mobilization and application of resources, provide mutual aid, and provide public information. Emergency response plans are maintained at the federal, state, and local levels for all types of disaster, both natural and human-caused. Local governments have the primary responsibility for preparedness and response activities. The County has numerous levels of emergency response and evacuation plans, including the Operational Area

Emergency Operations Plan that was approved in 2014, which would apply to the Boulder Brush Facilities. The Emergency Operations Plan is used by all key partner agencies within the County to respond to major emergencies and disasters, and describes the roles and responsibilities between the County and its departments with local jurisdictions within the County (County of San Diego 2014). In addition to the Emergency Operations Plan, the County also has a Multi-Jurisdictional Hazard Mitigation Plan that was last revised in 2017 and identifies risks and ways to minimize damage caused by natural and human-caused disasters. Potential hazards or events that may trigger an emergency response in the County include earthquakes, tsunamis, floods, wildland fires, landslides, droughts, hurricanes, tropical storms, and freezes. Emergency response actions could also be triggered by a hazardous materials incident; water or air pollution; a major transportation accident; water, gas, or energy shortage; a health epidemic; a nuclear accident; or terrorism (County of San Diego 2017a). Additionally, the Campo Band of Mission Indians Land Use Plan (Campo Band of Diegueño Mission Indians 2010) states that the Tribe has an emergency plan that is managed by the CRFPD, and that private developers of industrial uses may be asked to provide disaster plans as a condition of approval.

2.5.2 Regulatory Setting

Numerous federal, state, and local regulations have been enacted to prevent or mitigate damage to public health and safety and the environment from the release or threatened release of hazardous substances into the workplace or environment; to protect human health and environmental resources from existing site contamination; and to protect human health and safety from the threat of an emergency, including fire. The Reservation is subject to federal and Tribal regulations only. The Boulder Brush Facilities are subject to federal, state, and local regulations. Below is a discussion of the relevant regulations. The regulations below are relevant to the Project and the topics of hazardous substances, site contamination, and potential emergencies on the Project Site.

Federal Regulations

Hazardous Materials and Wastes

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA). The RCRA establishes a framework for national programs to achieve environmentally sound management of hazardous and non-hazardous wastes. The RCRA was designed to protect human health and the environment, reduce or eliminate the generation of hazardous waste, and conserve energy and natural resources. The RCRA also promotes resource recovery techniques. The Hazardous and Solid Waste Amendments of 1984 expanded the scope

of the RCRA and increased the level of detail in many of its provisions. The Hazardous Waste Management subchapter of the RCRA deals with a variety of issues regarding the management of hazardous materials, including the export of hazardous waste, state programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste. In California, EPA has authorized DTSC to administer the RCRA program, pursuant to the state's Hazardous Waste Control Law.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

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 waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stresses the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, requires 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.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under CFR Title 49. 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.

Emissions and Releases

National Emission Standards for Hazardous Air Pollutants

The EPA's National Emission Standards for Hazardous Air Pollutants requires that a thorough asbestos survey be performed prior to demolition or renovation activities that may disturb ACMs. This requirement may be enforced by federal, state, and local regulatory agencies, and specifies that all suspected ACMs be sampled to determine the presence or absence of asbestos prior to any renovation or demolition activities that may disturb them to prevent potential exposure to workers, building occupants, and the environment.

Chemical Accident Prevention Provisions

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. These rules, which built on existing industry codes and standards, require companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program.

Clean Water Act

Refer to EIR Section 3.1.5.2 for an overview of the Clean Water Act and associated Stormwater Pollution Prevent Plan (SWPPP) requirements. Relevant to the hazards discussion, the Clean Water Act Section 311(j)(1)(C) also includes the Spill Prevention, Control, and Countermeasures (SPCC) Regulation. The intent of this regulation is to prevent oil from entering navigable waters. This regulation typically applies to a total aggregate capacity of aboveground oil storage containers greater than 1,320 gallons or below ground aggregate capacity of 42,000 gallons, with certain exceptions as described in the code. The SPCC establishes procedures, methods, and equipment requirements for these regulated facilities. In addition, it requires facilities subject to the SPCC code to prepare a facility-specific response plan to be implemented in the event of an accidental spill.

Clean Air Act

Under the authority of Section 112(r) of the Clean Air Act, the Chemical Accident Prevention Provisions require facilities that produce, handle, process, distribute, or store more than a "threshold quantity" of any extremely hazardous toxic and flammable substance listed at Title 40 of the Code of Federal Regulations (CFR), Part 68.130, to develop and implement a Risk Management Plan and submit it to EPA. The program is applicable to companies of all sizes that use certain flammable and toxic substances. The Risk Management Plan is intended to help local fire, police, and emergency response personnel (first responders) in the event of an accidental spill or exposure event. The Risk Management Plan is contained within the Clean Air Act (42 USC 7401 et seq.).

Oil Pollution Prevention (40 CFR, Part 112)

The goal of the oil pollution prevention regulation in 40 CFR, Part 112, is to prevent oil discharges from reaching navigable waters of the United States or adjoining shorelines. Facilities that could reasonably be expected to discharge oil into navigable waters in quantities that may be harmful are required to develop and implement SPCC plans per the SPCC Regulation.

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 Congressional act was passed in response to concerns regarding the

environmental and safety hazards posed by the storage and handling of toxic chemicals. SARA Title III establishes requirements for federal, state, and local governments; Native American tribes; and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The act requires states and local emergency planning groups to develop community emergency response plans for protection from Extremely Hazardous Substances, provided in the CFR (Appendix A of 40 CFR 355). In addition, submission of Tier II forms are required under Section 312 that disclose the location and amount of hazardous chemicals present over the last calendar year. The Community Right-to-Know provisions help increase the public's knowledge of and access to information on chemicals at individual facilities, their uses, and their releases into the environment. In California, SARA Title III is implemented through the California Accidental Release Prevention (CalARP) program.

Hazardous Site Cleanup

Risk Assessment and Regional Screening Levels

EPA and DTSC use risk assessments to characterize the nature and magnitude of health risks to humans and ecological receptors from chemical contaminants and other stressors that may be present in the environment. The environmental risk assessments typically fall into one of two areas: Human Health and Ecological. The risk assessment is, to the highest extent possible, a scientific process. In general terms, risk depends on the following three factors: how much of a chemical is present in an environmental medium (air, soil, water), how much contact (exposure) a person or ecological receptor has with the contaminated environmental medium, and the inherent toxicity of the chemical. EPA developed Regional Screening Levels (RSLs), which provide a unified set of screening level/preliminary remediation goals for all regions of EPA for screening chemical contaminants at superfund sites. These tables, which include 813 listed chemicals, are intended to promote national consistency. The RSLs are calculated using the latest toxicity values, default exposure assumptions and physical and chemical properties. An online calculator is also available where default parameters can be changed to reflect site-specific risks. The RSL Generic Tables are considered ready for use, and contain both the screening level calculation and the toxicity values used to create the generic RSL. The RSLs are considered by EPA to be protective for humans (including sensitive groups) over a lifetime. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding RSLs can be assumed to not pose a significant health risk to people who may live (residential RSLs) or work (commercial/industrial RSLs) at the site. The EPA RSL tables were most recently updated in November 2018 (EPA 2018).

The California DTSC Human and Ecological Risk Office (HERO) incorporated the EPA RSLs into the HERO human health risk assessment. The HERO review of the EPA RSLs determined that the revised RSLs (which replaced the EPA Preliminary Remediation Goals [PRGs] in 2008) included some levels that were substantially higher, and therefore less protective, than the previous PRGs. HERO therefore created Human Health Risk Assessment Note 3, which incorporates HERO

recommendations and DTSC-modified screening levels (DTSC-SLs) based on review of the EPA RSLs. HERO reference tables 1, 2, and 3 provide recommended screening levels for compounds in soil, tap water, and air, respectively. The DTSC-SL should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities. DTSC-SLs for soil and tap water are identified in the tables when the value is at least three-fold more stringent than the corresponding EPA RSL, and an air DTSC-SL is identified when it is more stringent than the corresponding EPA RSL by any degree. DTSC also accepts use of the EPA online screening calculator to calculate site-specific screening levels that are more protective of California Environmental Protection Agency (CalEPA) and EPA toxicity values and applied assumptions are consistent with HERO recommendations. HERO Note 3 was most recently updated in June 2018.

Federal Aviation Administration

The Federal Aviation Administration (FAA) has primary responsibility for the safety of civil aviation. The FAA's major functions regarding hazards consist of developing and operating a common system of air traffic control and navigation for civil and military aircraft, developing and implementing programs to control aircraft noise and other environmental effects of civil aviation, regulating United States commercial space transportation, and conducting reviews to determine that the safety of persons and property on the ground are protected. Additionally, the FAA analyzes how proposed buildings, wind turbines, and meteorological towers near airports might affect navigable airspace, and in turn, how they should be lighted and marked (FAA 2015).

The FAA's guidelines for the proper way to light and mark obstructions affecting navigable airspace can be found at Advisory Circular 70/7460-1L for Obstruction Lighting and Marking. Specifically, Chapter 13 of FAA Advisory Circular 70/7460-1L is dedicated to marking and lighting "wind turbine farms." Wind turbine farms are defined as wind turbine developments containing three or more turbines of heights 200 feet or higher aboveground level. Chapter 13.5, Lighting Standards, contains the following general standards established for wind turbine farm lighting (FAA 2015):

- Not all wind turbine units within a wind turbine farm typically need to be lighted, such as when turbines are below 499 feet. Obstruction lights should be placed along the perimeter of the wind turbine farm so that there are no unlit separations or gaps more than 0.5 statute miles (sm) (804 m). Wind turbines within a grid or cluster should not have an unlighted separation or gap of more than one sm (1.6 km) across the interior of a grid or cluster of turbines. (Nighttime wind turbine obstruction lighting should consist of the preferred FAA L-864 aviation red flashing, strobe, or pulsed obstruction lights. Studies have shown that red lights provide the most conspicuity to pilots.
- Daytime lighting of wind turbine farms is not required.
- Light fixtures should be placed as high as possible on the turbine nacelle, so they are visible by a pilot approaching from any direction.

- For linear turbine configurations, lights should be placed on each turbine positioned at each end of the line or string of turbines. Lights should also be placed along the line of turbines so that there is no more than a 1/2-sm (2,640-foot [805-m]) gap between the lighted turbines. In the event the gap between lights on the last segment of turbines is significantly short, it may be appropriate to move the lights on the turbine string back toward the starting point to present a well-balanced string of lights. High concentrations of lights shall be avoided.

The following standards established in Chapter 13.6, Wind Turbines Above 499 Feet, are applicable to wind turbines taller than 499 feet but shorter than 699 feet (FAA 2015):

- In addition to the lighting standards established in Chapter 13.5, the top of the turbine's nacelle should be equipped with a second L-864 flashing red light.
- The two obstruction lights should be arranged horizontally, positioned on opposite sides of the nacelle, visible to a pilot approaching from any direction, and flash simultaneously. This lighting configuration ensures the turbines in this size category are always lighted.
- In the event one of the two obstruction lights fails, no light failure notification is required; however, the light should be restored to service as soon as possible.
- All turbines within this size category should be illuminated, regardless of their location within a wind turbine farm, and should be configured to flash simultaneously with the other turbines in the same farm. This requirement ensures the pilots operating at 500 feet agl have sufficient warning that a wind turbine obstruction may be within their flight path.

The following standard established in Chapter 13.8, Lighting of Wind Turbines During Construction Phase, is applicable to the Campo Wind Facilities (FAA 2015):

- To ensure proper conspicuity of turbines at night during construction, all turbines should be lighted with temporary lighting once they reach a height of 200 feet (61 m) or greater until the permanent lighting configuration is turned on. As the structure's height continues to increase, the temporary lighting should be relocated to the structure's uppermost height. The temporary lighting may be turned off for short periods if they interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An L-810 steady burning red light shall be used to light the structure during the construction phase, if the permanent L-864 flashing-red lights are not in place. If power is not available, turbines should be lighted with a self-contained, solar-powered, LED, steady-burning red light that meets the photometric requirements of an FAA L-810 lighting system. The lights should be positioned to ensure a pilot has an unobstructed view of at least one light at each level. Using a NOTAM (D) to justify not lighting the turbines until the entire project is completed is prohibited.

Emergency Response

Federal Response Plan

The Federal Response Plan of 1999, as amended in 2003 (FEMA 2003) is a signed agreement among 27 federal departments and agencies, including the American Red Cross, which provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency. It supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act and individual agency statutory authorities, and supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

Occupational Health and Safety

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) administers health standards that (1) provide regulations for safety in the workplace; (2) regulate construction safety; and (3) require a Hazards Communication Plan. The plan includes identification and inventory of all hazardous materials for which Safety Data Sheets would be maintained, and employee training in safe handling of said materials (OSHA 2012). Because California has an approved State Plan, only California Occupational Safety and Health Administration (Cal/OSHA) standards apply to the Project Site.

Wildfire Protection

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association (NFPA) codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by ANSI. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. NFPA standards are recommended guidelines and nationally accepted good practices in fire protection but are not law or "codes" unless adopted as such or referenced as such by the California Fire Code or the Local Fire Agency.

- NFPA 850, Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations, 2010: NFPA 850 was prepared for the guidance of those charged with the design, construction, operation, and protection of electric generating plants and high voltage direct current converter stations that are covered by the scope of this document. This

document provides fire hazard control recommendations for the safety of construction and operating personnel, the physical integrity of plant components, fire protection systems and equipment, and the continuity of plant operations.

- NFPA 10, Fire Extinguishers: A long-standing standard, which specifies the types, sizes, rating, and locations for portable fire extinguishers. It also provides information on how to calculate the number and size of portable fire extinguishers needed. NFPA 11, Fire Fighting Foam (Low, Medium, and High Expansion Foam): NFPA 11 is a longstanding standard, which provides recommendations for design and installation of firefighting foam systems and portable equipment. It also provides recommendations regarding calculating the amount of foam concentrate and solution needed on a flammable or combustible liquid fire. NFPA 13, Standard for Installation of Sprinkler Systems: NFPA 13 is the standard for design and installation of fire sprinkler systems in a building. It provides the requirements for the type of system needed in a particular occupancy, water supply, sprinkler head flow and pressures, the locations of sprinkler heads, and installation of the system. This standard is referenced by the California Fire Code.
- NFPA 22, Standard for Water Tanks for Private Fire Protection: Provides recommendations for the design, construction, and installation of water storage tanks for private fire protection systems.
- NFPA 30, Flammable and Combustible Liquids Code: This standard provides recommendations for storage, use, and handling of flammable and combustible liquids. It provides detailed information regarding tank storage, spacing, dispensing of liquids, portable containers, and other related operations. NFPA 30 is referenced by the California Fire Code.
- NFPA 70, National Electrical Code: NFPA 70 is the standard for the design and installation of electrical systems. It includes recommendations for various types of occupancies and also provides recommendations and criteria for the location and installation of "explosion proof" electrical systems.
- NFPA 72, National Fire Alarm and Signaling Code: NFPA 72 is the standard for the design, installation, and operation of fire alarm systems in various occupancies. This standard is used by fire alarm system designers when designing and installing a system. It is utilized also by fire agencies when reviewing plans for new systems.
- NFPA 497, Classification of Flammable Liquids, Gases, and Vapors, and for Electrical Area Installations in Chemical Process Areas: NFPA 497 is the standard, which is utilized along with NFPA 70 to determine flammable gas, flammable liquid, and combustible liquid hazards and to recommend the areas that require explosion-proof electrical systems. It also sets forth the extent of the classified areas.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995 and updated in 2001 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles (NIFC 2009):

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Plan

The National Fire Plan was a Presidential directive in 2000 as a response to severe wildland fires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and assurance for sufficient firefighting capacity in the future. It is a long-term investment that will help protect natural resources in addition to communities, as well as a long-term commitment based on cooperation and communication among federal agencies, states, local governments, tribes, and interested members of the public. There are five key areas addressed under the National Fire Plan:

- Firefighting and Preparedness
- Rehabilitation and Restoration

- Hazardous Fuels Reduction
- Community Assistance
- Accountability

International Fire Code

Created by the International Code Council, the International Fire Code addresses a wide array of conditions hazardous to life and property including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The International Fire Code places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the International Fire Code uses a hazards classification system to determine the appropriate measures to be incorporated in order to protect life and property (often these measures include construction standards and specialized equipment). The International Fire Code uses a permit system (based on hazard classification) to ensure that required measures are instituted.

State Regulations

State regulations are applicable to the Boulder Bush Facilities which would be located on private lands under the land use jurisdiction of the County. State regulations are not applicable on the Reservation, and are therefore not applicable to the Campo Wind Facilities.

Hazardous Materials

California Government Code Section 65962.5(a), Cortese List

The Hazardous Waste and Substance Sites (Cortese) List is a planning document used by state and local agencies and developers to comply with California Environmental Quality Act (CEQA) requirements to provide information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires CalEPA to develop, at least annually, an updated Cortese List. DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Hazardous Materials Business Plans

Article 1 of Chapter 6.95 of the California H&SC (Sections 25500–25520) requires any business that handles, stores, or disposes of a hazardous substance at a given threshold to prepare a Hazardous Materials Business Plan (HMBP). HMBPs are intended to minimize hazards to human health and the environment from fires, explosions, or an unplanned release of hazardous substances

into air, soil, or surface water. The HMBP must be carried out immediately whenever a fire, explosion, or unplanned chemical release occurs. An HMBP includes three sections: an inventory of hazardous materials, including a site map that details their locations; an emergency response plan; and an employee training program. HMBPs serve as an aid to employers and employees in managing emergencies at a given facility. They also help better prepare emergency response personnel for handling a wide range of emergencies that might occur at a facility.

HMBPs are submitted to the San Diego County DEH's Hazardous Materials Division (HMD). After initial submission of an HMBP, the business must review and recertify the HMBP every year. The HMBP must also be amended within 30 days whenever there are changes in the amount or location of stored hazardous chemicals on a site. The HMD conducts routine inspections at businesses required to submit an HMBP. The purpose of these inspections is to ensure compliance with existing laws and regulations concerning HMBP requirements, identify existing safety hazards that could cause or contribute to an accidental spill or release, and suggest preventive measures designed to minimize the risk of a spill or release of hazardous materials.

Risk Management Plans

Article 2 of Chapter 6.95 of the California H&SC (Sections 25531–25543.3) requires the owner or operator of a stationary source (non-transportation) with more than a threshold quantity of a regulated substance to prepare a Risk Management Plan pursuant to guidelines in the California H&SC and the CalARP program. State statutes and regulations combine federal and state program requirements for the prevention of accidental releases of listed substances into the atmosphere. The incorporation of the federal and state requirements has been designated the CalARP program. The CalARP program requires that a risk management plan include a hazards assessment program, an accidental release prevention program, and an emergency response plan. The risk management plan must be revised every 5 years or as necessary. The majority of facilities and businesses in the County that have prepared a Risk Management Plan are ammonia refrigeration facilities, water treatment and wastewater treatment plants that handle chlorine gas, and facilities that store flammable chemicals such as methane and propane.

Hazardous Waste

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

DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the RCRA and the California Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies,

including the County DEH. In California, EPA has authorized DTSC to administer the RCRA program, pursuant to the state's Hazardous Waste Control Law.

Title 27 of the California Code of Regulations, Solid Waste

CCR Title 27 contains a waste classification system that applies to solid waste that cannot be discharged directly or indirectly to waters of the state and that, therefore, must be discharged to waste management sites for treatment, storage, or disposal. The California Integrated Waste Management Board and its certified Local Enforcement Agency (LEA) regulate the operation, inspection, permitting, and oversight of maintenance activities at active and closed solid waste management sites and operations.

Underground Storage Tanks

Title 23 of the California Code of Regulations, Underground Storage Tank Act

The Underground Storage Tank Monitoring and Response Program is required under Chapter 6.7 of the California H&SC and Title 23 of the California Code of Regulations (CCR). The program was developed to ensure that the facilities meet regulatory requirements for design, monitoring, maintenance, and emergency response in operating and owning underground storage tanks. The County DEH is the local administering agency for this program.

Occupational Health and Safety

California Occupational Safety and Health Administration

Cal/OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are required to be "as effective as" federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 330 et seq.). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings. The employer is also required, among other things, to have an Illness and Injury Prevention Program.

Cal/OSHA Asbestos and Carcinogen Unit

Cal/OSHA Asbestos and Carcinogen Unit enforces asbestos standards in construction, shipyards, and general industry. This includes identification and removal requirements of asbestos in buildings, as well as health and safety requirements of employees performing work under the Asbestos-In-Construction regulations 8 CCR 1529. Only a Cal/OSHA-Certified Asbestos Consultant can provide asbestos consulting (as defined by the Business and Professions Code, 7180–7189.7, and triggered by the same size and concentration triggers as for registered

contractors). These services include building inspection, abatement project design, contract administration, supervision of site surveillance technicians, sample collection, preparation of asbestos management plans, and clearance air monitoring.

California Department of Public Health

The California Department of Public Health enforces lead laws and regulations related to the prevention of lead poisoning in children, prevention of lead poisoning in occupational workers, accreditation and training for construction-related activities, lead exposure screening and reporting, disclosures, and limitations on the amount of lead found in products. Accredited lead specialists are required to find and abate lead hazards in a construction project and to perform lead-related construction work in an effective and safe manner.

Emissions and Releases

California Emergency Management Agency

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government, and private agencies. The plan is administered by the California Emergency Management Agency and includes response to hazardous materials incidents. The California Emergency Management Agency coordinates the response of other agencies, including CalEPA, the California Highway Patrol, the California Department of Fish and Wildlife, the Regional Water Quality Control Board, the San Diego Air Pollution Control District, the City of San Diego Fire Department, and DEH-HIRT.

Senate Bill 1889, Accidental Release Prevention Law

Senate Bill 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act. Effective January 1, 1997, CalARP replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. CalARP addresses facilities that contain specified hazardous materials, known as "regulated substances," which if involved in an accidental release, could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

Emergency Response

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after a local declaration of emergency and the California Emergency Management Agency gives concurrence with the local declaration, or the governor issues a proclamation of a state emergency. Once the act is activated, local government is eligible for certain types of assistance, depending on the specific declaration or proclamation issued.

Wildfire Protection

California Fire Code

The California Fire Code (CFC) is Chapter 9 of Title 24 of the CCR. It was created by the California Building Standards Commission and is based on the International Fire Code created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. 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.

Title 14 Division 1.5 of the California Code of Regulations

Title 14 of the CCR, 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 the 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, setbacks to property lines, signage, and water supply.

State Fire Regulations

State fire regulations are set forth in Section 13000 et seq. of the California H&SC, 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.

Local Regulations

County of San Diego regulations are applicable to the Boulder Bush Facilities which would be located on private lands under the land use jurisdiction of the County. County regulations are not applicable on the Reservation, and are therefore not applicable to the Campo Wind Facilities.

Emissions and Releases

San Diego County Air Pollution Control District

The mission of the San Diego County Air Pollution Control District is to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement, and develop and implement cost-effective programs meeting state and federal mandates, considering environmental and economic impacts. The Asbestos National Emission Standard for Hazardous Air Pollutants (National Emission Standards for Hazardous Air Pollutants), 40 CFR 61, Subpart M is enforced locally under San Diego Air Pollution Control District Regulation XI, Subpart M – Rule 361.145). This regulation requires the owner or operator of a demolition or renovation to submit an Asbestos Demolition or Renovation Operational Plan14 at least 10 working days before any asbestos stripping or removal work begins (such as, site preparation that would break up, dislodge or similarly disturb asbestos containing material).

Hazardous Materials and Hazardous Waste

San Diego County, Local Enforcement Agency

The County LEA is the lead agency required to investigate and inspect active, closed, illegal, and abandoned waste disposal sites in the unincorporated County of San Diego and incorporated cities, with the exception of the City of San Diego. The LEA 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 the CCR, Title 27, Environmental Division 2, Solid Waste Standards relating to the protection of public health, safety and the environment The LEA, in coordination with the Regional Water Quality Control Board and California Integrated Waste Management Board, can review Work Plans, Site Assessment Reports, and issue no further action letters related to the remediation of burn dump sites.

San Diego County Site Assessment and Mitigation Program

The County DEH maintains the Site Assessment and Mitigation list of contaminated sites that have previously or are currently undergoing environmental investigation and/or remedial actions. The County Site Assessment and Mitigation Program, within the Land and Water Quality Division of the DEH, has a primary purpose to protect human health, water resources, and the environment within San Diego County by providing oversight of assessments and cleanups in accordance with the California H&SC and CCR. The Site Assessment and Mitigation Program's Voluntary Assistance Program provides staff consultation, project oversight, and technical and environmental report evaluation and concurrence (when appropriate) on projects, including properties contaminated with hazardous substances.

Underground Storage Tanks

County of San Diego, Underground Storage Tank Program

The County DEH HMD Underground Storage Tank (UST) Program administers and enforces federal and state laws and regulations and local ordinances for the construction/installation, modification, upgrade, and removal of USTs in San Diego County. If contamination is discovered or likely to be present, owners or operators of USTs are required by law to report the contamination to the DEH HMD and Site Assessment and Mitigation (SAM) Programs and to take corrective action.

Emergency Response

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The County Multi-Jurisdictional Hazard Mitigation Plan is implemented by the County of San Diego Office of Emergency Services. The Multi-Jurisdictional Hazard Mitigation Plan is a County-wide plan that identifies risks posed by natural and human-caused disasters, and discusses ways to minimize potential damage occurring as a result of these disasters. The plan is intended to serve many purposes, including enhancing public understanding and awareness of potential hazardous situations, creating a decision tool for managing hazards, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, providing inter-jurisdictional coordination, and achieving regulatory compliance (County of San Diego 2017a).

Operational Area Emergency Operations Plan

The Office of Emergency Services also implements the Operational Area Emergency Operations Plan in collaboration with the Unified San Diego County Emergency Services Organization. The Plan is for use by the County and all of the cities within the County to respond to major emergencies and disasters. It describes the roles and responsibilities of all County departments (including many city departments), and the relationship between the County and its departments and the jurisdictions within the County. The Plan contains 16 annexes detailing specific emergency operations for different emergency situations (County of San Diego 2014).

Wildfire Hazards

County of San Diego Code of Regulatory Ordinances, Defensible Space for Fire Protection Ordinance

This County Code of Regulatory Ordinances, Sections 68.401–68.406, Defensible Space for Fire Protection Ordinance, addresses the accumulation of weeds, rubbish, and other materials on a private property found to create a fire hazard and be injurious to the health, safety, and general welfare of the public. 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 the ordinance. 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 Code of Regulatory Ordinances, Removal of Fire Hazards

Per the County Code of Regulatory Ordinances, Sections 96.1.005 and 96.1.202, Removal of Fire Hazards, the 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. Inspectors from CAL FIRE are responsible for the initial inspection of properties to ensure an adequate defensible space has been created around structures. If violations of the program requirements are noted, inspectors provide a list of required corrective measures and provide a reasonable timeframe to complete the task. 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 Consolidated Fire Code

The County of San Diego, in collaboration with the local fire protection districts, created the first Consolidated Fire Code in 2001. The Consolidated Fire Code contains the County's and fire protection districts' amendments to the CFC. The purpose of consolidation of the County's and

local fire districts' adoptive ordinances is to promote consistency in the interpretation and enforcement of the CFC for the protection of the public health and safety, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code. The Consolidated Fire Code provides the minimum requirements for access, water supply and distribution, construction type, fire protection systems, and vegetation management. Additionally, the 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. The 2017 Consolidated Fire Code is the most recently adopted version (County of San Diego 2017b).

County of San Diego General Plan

The County of San Diego General Plan guides future growth in the unincorporated areas of the County, and considers projected growth anticipated to occur within various communities. The Plan was updated (and adopted) in August 2011. Policies relevant to emergencies, hazards, and hazardous materials that may occur within the Boulder Brush Boundary are listed below (County of San Diego 2011a, 2011b).

Land Use Element

- **Policy LU-6.10: Protection from Hazards**. Require that development be located and designed to protect property and residents from the risks of natural and man-induced hazards.

Safety

- **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-3.3: 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.

- P**olicy S-4.2: Coordination to Minimize Fuel Management Impacts.** Consider comments from CAL FIRE, U.S. Forest Service, local fire districts, and wildlife agencies for recommendations regarding mitigation for impacts to habitat and species into fuel management projects.
- **Policy S-6.1: Water Supply.** Ensure that water supply systems for development are adequate to combat structural and wildland fires.
- **Policy S-6.3: Funding Fire Protection Services.** Require development to contribute its fair share towards funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.
- **Policy S-6.4: Fire Protection Services for Development.** Require that development demonstrate that fire services can be provided that meet the minimum travel times identified in Table S-1 (Travel Time Standards) (20 minutes in the RL-40, 80, and 160 land use designations).
- **Policy S-6.5: Concurrency of Fire Protection Services.** Ensure that fire protection staffing, facilities and equipment required to serve development are operating prior to, or in conjunction with, the development. Allow incremental growth to occur until a new facility can be supported by development.
- **Policy S-11.1: Land Use Location**. Require that land uses involving the storage, transfer, or processing of hazardous materials be located and designed to minimize risk and comply with all applicable hazardous materials regulations.
- **Policy S-11.3: Hazards Sensitive Uses.** Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such a schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.
- **Policy S-11.4: Contaminated Lands.** Require areas of known or suspected contamination to be assessed prior to reuse. The reuse shall be in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.
- **Policy S-11.5: Development Adjacent to Agricultural Operations.** Require development adjacent to existing agricultural operations in Semi-Rural and Rural Lands to adequately buffer agricultural areas and ensure compliance with relevant safety codes where pesticides or other hazardous materials are used.

- **Policy S-15.3: Hazardous Obstructions within Airport Approach and Departure**. Restrict development of potentially hazardous obstructions or other hazards to flight located within airport approach and departure areas or known flight patterns and discourage uses that may impact airport operations or do not meet Federal or State aviation standards.

Subregional Plans

The Boulder Brush Boundary is located within the Mountain Empire Subregional Plan and adjacent to the Boulevard Subregional Community Plan planning area boundaries. The Boulevard Subregional Plan contains the following policies related to Hazards and Hazardous Materials, particularly to Emergency Preparedness and Response (County of San Diego 2011c):

- **Policy S 1.1.1** Seek funding opportunities for year-round staffing of the CAL FIRE and Boulevard Fire and Rescue Department.
- **Policy S 2.1.1**: Seek funding opportunities and sponsors to secure emergency supplies and equipment, including emergency generators and adequate and safe fuel storage.

Tribal Regulations

Under the Campo Lease, the following Tribal regulations and plans are not applicable to the Campo Wind Facilities, although they are described below for informational purposes. Additionally, Tribal regulations are not applicable on private land (Boulder Brush Facilities).

Campo Band of Mission Indians Land Use Code

The Campo Band of Mission Indians Land Use Code was adopted by the Tribe on June 15, 1992, and amended on June 1, 2011. The purpose of the Land Use Code is to promote the health, safety, and general welfare of the residents on the Reservation and to develop and maintain adequate standards for diversity in land use and building patterns. The Tribe is guided by the goals set forth in its Land Use Code, which are to protect the natural and physical resources on the Reservation, including "groundwater and air, preserving tribal traditions and culture, retaining wilderness areas, providing adequate housing for all tribal members, promoting employment for tribal members, and improving the standard of living for tribal members" (Campo Band of Diegueño Mission Indians 2011).

Campo Band of Mission Indians Land Use Plan

The Campo Band of Mission Indians Land Use Plan was originally adopted by the Tribe in June of 1978, and most recently revised and adopted in December of 2010. The purpose of the Land Use Plan is to ensure that future development within the Reservation occurs in a manner consistent with the Tribe's goals for "economic and social development and with its concern that such

development does not threaten the environment and cultural resources of the Reservation or surrounding communities." In addition, it is important to the Tribe to "support a viable economic development plan for achieving balanced economic growth, providing jobs, and improving the standard of living for tribal members without adversely affecting the Tribe's environment and cultural resources." Lastly, the Land Use Plan is meant to "provide technical information about the area's resources and potential, so that future growth and change may be directed in an orderly and appropriate fashion" (Campo Band of Diegueño Mission Indians 2010). The Land Use Plan includes goals and policies related to Health Services (Section 7.4.9), Disaster Preparedness (Section 7.4.10), Noise (Section 7.6), and Safety (Section 7.8).

CRFPD, the district responsible for serving the Reservation and surrounding communities, honors the Insurance Services Office (ISO) regulations and state fire codes and practices.

2.5.3 Analysis of Project Effects and Determination as to Significance

Although the County as Lead Agency is analyzing the Project as a whole, the County's land use jurisdiction is limited to the Boulder Brush Facilities. The Bureau of Indian Affairs (BIA) has jurisdiction over the Campo Wind Facilities and has prepared an Environmental Impact Statement (EIS) to evaluate Project effects under the National Environmental Policy Act (NEPA). This analysis hereby adopts and incorporates by reference the EIS. In addition, this chapter provides an analysis of Project impacts, both on the Reservation and on private lands, pursuant to the requirements of CEQA and consistent with the County's own guidelines.

The analysis herein is based on review of existing resources; technical data; applicable laws, regulations, and guidelines; as well as Environmental Site Assessments prepared for the Project.

Direct, indirect, and cumulative impacts pertaining to hazards and hazardous materials are evaluated based on specified thresholds identified in the CEQA Guidelines (Appendix G) and in the County of San Diego's Guidelines for Determining Significance, including the following:

- County Guidelines for Determining Significance, Hazardous Materials and Existing Contamination (County of San Diego 2007a)
- County Guidelines for Determining Significance, Airport Hazards (County of San Diego 2007b)
- County Guidelines for Determining Significance and Report Format and Content Requirements, Wildland Fire and Fire Protection (County of San Diego 2010)

2.5.3.1 Hazardous Materials

Guidelines for the Determination of Significance

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would do any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Additionally, as stated in the County's Guidelines for Determining Significance, Hazardous Materials and Existing Contamination (County of San Diego 2007a) applies to both the direct impact analysis and the cumulative impact analysis. A project would have a significant impact if it proposes any of the following. 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.

- The project is a business, operation, or facility that proposes to handle hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC, generate hazardous waste regulated under Chapter 6.5 of the H&SC, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC, and the project will not be able to comply with applicable hazardous substance regulations.
- The project is a business, operation, or facility that would handle regulated substances subject to CalARP risk management plan requirements that in the event of a release could adversely affect children's health due to the presence of a school or daycare within one-quarter mile of the facility.

Analysis

Handling and Accidental Release of Hazardous Materials

Project

Numerous federal, state, and local regulations exist that require strict adherence to guidelines regarding the use, transportation, and disposal of such hazardous materials. Regulations that would be required of those transporting, using, or disposing of hazardous materials are discussed in Section 2.5.2, Regulatory Setting, and include the RCRA, CERCLA, the Hazardous Materials Transportation Act, the International Fire Code, Title 22 and Title 27 of the CCR, and the County Consolidated Fire Code.

The Project would involve construction and operation of a 60-turbine renewable wind energy generation project including associated facilities such as access roads, underground collection cables, a collector substation, a high-voltage substation, 500 kV switchyard, operations and maintenance (O&M) facility, permanent and temporary meteorological towers, 230 kV gen-tie line, and a temporary laydown yard and concrete batch plant for use during construction. The Project is not expected to require demolition of existing structures, therefore asbestos and lead-based paint are not a concern. Additionally, no underground storage tanks are proposed as part of the Project. Furthermore, no extremely hazardous materials (as defined by 40 CFR 355) are anticipated to be produced, used, stored or disposed of as a result of construction or operation of the Project. The Project Site is not located within 0.25 miles of a school and would not include the use of a regulated substance subject to CalARP risk management plan requirements (19 CCR, Division 2, Chapter 4.5). The nearest school is the Clover Flat Elementary School, located approximately 2 miles from the Campo Corridor and 3 miles from the Boulder Brush Corridor. As such, the Project would not expose a school to regulated substances that could adversely affect children's health. Based on the analysis provided, the Project would comply with hazardous substance regulations, would not expose persons to hazardous materials, and would not produce hazardous emissions within 0.25 miles of an existing or proposed school.

The Project would comply with applicable hazardous substance regulations associated with the use, transport, emission, and disposal of such materials, and no potential releases of hazardous substances would occur within 0.25 miles of a school. However, as described above, because accidental spills and unauthorized releases of hazardous materials are always possible, both during construction and operation, impacts would be **potentially significant** (**Impact HZ-1/HZ-A**).

Boulder Brush Facilities

With regard to Chapter 6.95 of the H&SC, the enforcement of Chapter 6.95 on private lands is carried out by the County DEH Hazardous Materials Division (HMD). The DEH HMD is

considered the Certified Unified Program Agency for the County. As the Certified Unified Program Agency, DEH HMD is required to regulate hazardous materials business plans and chemical inventories, hazardous waste tiered permitting, underground storage tanks, and risk management plans. During construction, the Boulder Brush Facilities would potentially include on-site use and storage of hazardous materials, including petroleum and other substances in excess of 55 gallons, which would necessitate the development of an HMBP in accordance with Chapter 6.95 of the H&SC, Division 20 (Assembly Bill [AB] 2185 and AB 2189). The HMBP would address storage, use, transportation, and disposal of each hazardous material anticipated to be used at the site, and would establish inspection procedures, storage requirements, material quantities and limits, inventory control, nonhazardous product substitutes, and disposition of excess material. The HMBP would also identify requirements for notices to federal and local emergency response authorities, as well as emergency response plans. The Boulder Brush Facilities have been designed to comply with the requirement of Chapter 6.95 of the H&SC, including containment provisions for potential spills.

Once operational, the Boulder Brush Facilities would include the use and storage of limited quantities of off-the-shelf substances potentially covered under Chapter 6.95 of the H&SC, to maintain on-site equipment and facilities. Storage and handling of any materials covered under Chapter 6.95 of the H&SC would be undertaken in accordance with all applicable regulations.

All storage, handling, transport, emission, and disposal of hazardous substances associated with the Boulder Brush Facilities would be in full compliance with applicable regulations. California Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or authorized agent has met, or is meeting, the applicable requirements of the H&SC, Division 20, Chapter 6.95, Article 2, Sections 25500–25520. Nonetheless, because accidental spills and unauthorized releases of hazardous materials are always possible, potential impacts could occur (**Impact HZ-1/HZ-A**).

Additionally, the DEH HMD is required to conduct ongoing routine inspections for the Boulder Brush Facilities to ensure compliance with existing laws and regulations, to identify safety hazards that could cause or contribute to an accidental spill or release, and to suggest preventive measures to minimize the risk of a spill or release of hazardous substances during construction, operation and decommissioning activities. The Boulder Brush Facilities would not include the use, and would therefore prevent the release, of substances covered under the CalARP or California Accidental Release Prevention Program. Additionally, operation and maintenance of the Boulder Brush Facilities would fully comply with DEH HMD Certified Unified Program Agency requirements related to hazardous materials management and emergency response to minimize risk related to hazardous materials.

Campo Wind Facilities

BIA has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate Project effects under NEPA. The BIA's EIS analysis finds that the use of hazardous materials for their intended purpose would not pose a significant risk to the public or environment; however, accidental spills or unauthorized releases of hazardous materials on the Reservation during construction and operation could result in soil contamination and the potential exposure of workers and/or the public to contamination. Therefore, because accidental spills and unauthorized releases of hazardous materials are always possible, impacts would be **potentially significant** (**Impact HZ-A**).

Hazardous Materials Sites

Project

This analysis of hazardous materials sites is based on the 2019 Preliminary ESA prepared for the Campo Wind Facilities (Reservation Boundary) and the 2018 Phase I ESA prepared for the property contained within the Boulder Brush Boundary.

RECs were identified within the Reservation Boundary, as described in the 2019 Preliminary ESA and in Section 2.5.1 above. Although construction is not currently proposed on any sites as having a REC, the exact geographic footprint of the Campo Corridor on the Reservation is subject to change depending on geotechnical constraints. If the design of the Campo Wind Facilities changes, resulting in construction on a new, unanalyzed area outside of the Campo Corridor, the Project may result in adverse effects associated with hazardous material within the Reservation Boundary. As such, the Project would result in a **potentially significant impact** (**Impact HZ-B**) regarding hazardous materials.

Boulder Brush Facilities

The Phase I ESA revealed no evidence of RECs in connection with the Boulder Brush Boundary. However, the report did identify environmental concerns regarding the groundwater wells, above ground storage tanks, and debris as described previously in Section 2.5.1. Additionally, the 2018 Phase I ESA found that the area within the Boulder Brush Boundary is not included in the State of California Hazardous Waste and Substances sites list, nor is it located within 1,000 feet of a Formerly Used Defense Site. Asbestos and/or lead may be present in the uninhabitable structures observed within the Boulder Brush Boundary, given that they were constructed prior to 1959. Disturbance of these structures is not expected for construction and operation of the Boulder Brush Facilities; however, if structures are removed,

testing and reports for asbestos and/or lead may be required. The County will require conditions of approval for the Boulder Brush Facilities as follows:

- All wells located within the Boulder Brush Corridor which would not be utilized by the Boulder Brush Facilities will be conditioned by the County to be decommissioned in accordance with local, state and federal requirements.
- Any above ground storage tanks within the Boulder Brush Corridor will be conditioned to be removed, tested, and remediated. Remediation shall be completed under the supervision of the County Department of Environmental Health (DEH).
- Any structures or debris that are encountered in the immediate vicinity, or impedes development of the Project, shall be removed or demolished.
- Testing and reporting for asbestos and/or lead may be required for structure removal.

Therefore, with implementation of the conditions listed above, the Boulder Brush Facilities would result in **less-than-significant** impacts associated with hazardous materials within the Boulder Brush Corridor.

Campo Wind Facilities

The 2019 Preliminary ESA identified RECs within the Reservation Boundary. These RECs are also listed in Section 2.5.1 above and shown in Figure 2.5-1. Although construction is not currently proposed on any sites as having a REC, the exact geographic footprint of the Campo Wind Facilities on the Reservation is subject to change depending on geotechnical constraints. The Campo Materials site, which located approximately 0.1 miles from a proposed access road component of the Campo Wind Facilities is the nearest identified REC. Construction that occurs in the vicinity of a potential REC could result in impacts associated with soil, groundwater, or soil gas contaminated with hazardous materials. Operations would not be expected to impact existing RECS, as impacts are generally subsurface. If the design of the Campo Wind Facilities changes, resulting in construction on a new, unanalyzed area outside of the Campo Corridor, the Campo Wind Facilities may result in adverse effects associated with hazardous materials within the Reservation Boundary. As such, the Campo Wind Facilities would result in a **potentially significant impact** (**Impact HZ-B**) regarding hazardous materials.

2.5.3.2 Airport Hazards

Guidelines for the Determination of Significance

Pursuant with Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would:

- Result in a safety hazard for people residing or working in the project area, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport; or

Additionally, as stated in the County's Guidelines for Determining Significance, Airport Hazards (County of San Diego 2007b), a significant impact would result if:

- The project is located within an established AIA [airport influence area] for a public airport or public use airport and proposes a development intensity, flight obstruction, or other land use that conflicts with the ALUCP or CLUP [Comprehensive Land Use Plan] (if no ALUCP is adopted) and as a result, the project may result in a significant airport hazard.
- Conflicts with FAA Regulations: The 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

Project

As discussed in Section 2.5.1, the nearest registered airport to the Project Site is the Jacumba Airport located approximately 9 miles southeast of the Project Site. The airport is considered a low-activity airport that is mainly used as a glider facility by single-engine aircrafts and sailplanes. The Project Site is located outside of the Jacumba Airport ALUCP's airport influence area (San Diego County Airport Land Use Commission 2006). As such, the Project Site is not located within an ALUCP or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport (County of San Diego 2011d, Figure M-1, Airport Locations). Therefore, the Project would not conflict with an ALUCP.

Due to the height of the proposed turbines ~~,~~the Developer would be required to submit form FAA 7460-1 to the FAA 45 days prior to the start of construction. Appropriate filing of these forms to the FAA would ensure that the Project is in compliance with FAA regulations. With compliance with FAA regulations, the Project would result in **less-than-significant** impacts.

2.5.3.3 Wildfire Hazards

Guidelines for the Determination of Significance

Pursuant with Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Additionally, as stated in the County's Guidelines for Determining Significance and Report Format and Content Requirements, Wildland Fire and Fire Protection (County of San Diego 2010) 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 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:

- The project cannot demonstrate compliance with all applicable fire codes.
- 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.
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire.
- The project would require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
- The project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Analysis

Project

A Fire Protection Plan (FPP) and a Construction Fire Prevention Plan (CFPP) have been prepared for the Boulder Brush Facilities and are included as Appendix I of this EIR. The FPP has been prepared pursuant to Section 4903 of the San Diego County Consolidated Fire Code to address

potential adverse environmental effects that the Boulder Brush Facilities may have on or from wildland fire. The FPP provides analysis and documentation that the Boulder Brush Facilities are consistent with the San Diego County (County) significance checklist and does not exacerbate the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires based on its conformance with applicable fire and building codes. Requirements and recommendations provided in the FPP are based on site-specific fire environment analysis and the characteristics of the Boulder Brush Facilities, and incorporate input from the County, area fire planning documents, site risk analysis, and standard principles of fire protection planning.

Based on wildfire analysis provided in the Boulder Brush Facilities FPP, the wildland fire risk in the vicinity of the Project Site has been analyzed and it has been determined that wildfires are likely occurrences. The Project would increase the potential for a wildfire and could impact the public and environment by exposure to wildfire due to installation of wind energy generation facility and associated infrastructure, construction activities and ground disturbance with heavy construction equipment. The primary fire risks associated with construction and decommissioning of the Project include:

- Earth-moving equipment that can create sparks, heat sources, or fuel and hydraulic leaks.
- Chainsaws that may result in vegetation ignition from overheating, spark, or fuel leak.
- Vehicles that may contain heated exhausts/catalytic converters in contact with vegetation that could result in ignition.
- Welders that can be an open heat source.
- Wood chippers that could include flammable fuels and hydraulic fluid that may overheat and spray onto vegetation with a hose failure.
- Grinders that could cause sparks from grinding metal components and may land on a receptive fuel bed.
- Torches that are a heat source and open flame, and resulting heated metal shards that may come in contact with vegetation.
- Blasting activities that may cause vegetation ignition from open flame, excessive heat, or contact of heated material on dry vegetation.
- Additional human-caused ignitions related to discarded cigarettes, matches, temporary electrical connections, inappropriately placed generators, poor maintenance of equipment, and other factors.
- Operational equipment on the Project Site including, transformers, electric collection and transmission lines, substations, switchyard, vehicles, and gas- or electric-powered small hand

tools. This equipment represents a risk of sparking or igniting nearby fuels, particularly with off-site flammable vegetation and during high wind conditions.

The Project is not expected to result in significant public service impacts to fire protection with the implementation of standard fire prevention procedures, such as fuel modification zones, regular inspections, and routine mechanical maintenance. Additionally, the Project would be equipped with up to three water trucks each of 4,000-gallon capacity during construction, three 10,000-gallon water tanks would be installed near the high-voltage substation, and two 10,000-gallon water tanks dedicated for firefighting purposes would be installed at both the collector substation yard and the O&M facility.

As described in detail in Section 3.1.8, Public Services, demand for fire protection related to the Project would not exceed the availability of services provided by the CRFPD or the SDCFA. The Project would include 10 to 12 full-time employees, who would be located principally in the O&M building in an area commensurate with existing residences on the Reservation and surrounding rural communities. The Project Area and surrounding communities are in an area of high wildfire risk due to the presence of vegetated slopes and occurrences of high winds. However, the Project would not exacerbate the potential for exposure to wildfire risk exposure or associated pollutant exposure as the Project facilities would be similar to those already in existence in the area and would include improved access roads allowing for emergency access and evacuation.

The Project would not include structures downslope or downstream of potential flooding or land slide areas. The Project layout is designed in a manner that would minimalize impacts to existing drainage and flow paths. Project grading would avoid defined flow paths where possible. The crossing structures have been designed to pass storm flows in a similar manner to that of existing conditions, and would not alter the flow patterns, runoff quantity, or increase the erosive effects of the storm flow (Appendix K).

During operation of the Project, no grading, trenching, or excavation activities are expected. As such, the drainage pattern of the Project Area would not be altered. Therefore, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes and impacts would be **less than significant**.

During construction, operation, and decommissioning of the Project, there would be increased human activity and ignition sources, including equipment that could create spark, be a source of heat, or leak flammable materials on the Project Site. While the Project would comply with all applicable fire codes and provide design features for fire suppression, the Project would be located in a Very High Fire Hazard Severity Zone, as statutorily designated by CAL FIRE, and additional measures are warranted to mitigate the potential for wildland fire. As such, the Project would result in a **potentially significant impact** (**Impact HZ-2/HZ-B**) regarding wildfire hazards.

Boulder Brush Facilities

The Boulder Brush Facilities include construction of a high-voltage substation, switchyard, and approximately 3.5 miles of overhead gen-tie line in a rural setting that currently includes semi-distributed and undisturbed wildland fuels as well as existing electrical infrastructure (Sunrise Powerlink). In addition, the Boulder Brush Boundary is adjacent to other existing wind facilities (Kumeyaay Wind and Tule Wind). Land within the Boulder Brush Boundary is currently subject to ignition sources, including a substantial electrical transmission line easement on the northern portion of the property associated with the 500 kV Sunrise Powerlink and off-highway vehicle use. Other types of potential ignition sources that currently exist within the area include roadways, an electrical transmission line, and machinery associated with rural residential. The Boulder Brush Facilities would include potential ignition sources, but would also include conversion of ignitable fuels to lower-flammability landscape, and include 24-hour surveillance by a combination of on-site workers and existing webcams (SDG&E fire watch cameras and University of California at San Diego HPwren (High Performance Wireless Research and Education Network) cameras), anticipated to aid in earlier observation and reporting of wildfires.

The Boulder Brush Facilities would comply with the County's Consolidated Fire Code, as applicable, and would provide additional measures that enhance fire safety and protection. The Boulder Brush Facilities would include fire access and circulation throughout the Boulder Brush Corridor. Permanent access roads on private land would be 16 to 30 feet wide and would be able to support fire apparatus. Fire access within the Boulder Brush Boundary would be improved from its current condition that provides only limited access. A new paved access road from the Boulder Brush Facilities entrance up to the high-voltage substation and switchyard would be up to 30 feet wide and paved (final width is subject to acceptance by SDG&E and the SDCFA). An approximately one-mile long section of Ribbonwood Road that is currently unpaved from its intersection with Opalocka Road to the Boulder Brush Boundary, and ranges from 12 feet wide to 40 feet, would be widened up to 30 feet and paved. These improvements would improve emergency access for fire prevention and control.

Additionally, three 10,000-gallon water tanks would be installed near the high voltage substation and switchyard for firefighting purposes during operations. Moreover, the Boulder Brush Facilities would not include any occupants that could be exposed to wildfire risk exposure or associated pollutant exposure.

A CFPP has been prepared for implementation during construction of the Boulder Brush Facilities (Appendix A to the FPP, Appendix I of this EIR). The primary goals of the Boulder Brush Facilities CFPP are to address these identified sources and risks so personnel involved with construction and decommissioning of the Boulder Brush Facilities have clearly defined protocols and procedures for reducing fire risk and maintaining a fire-safe worksite. To reduce fire risk and

maintain a fire safe worksite, the following Fire Prevention Measures would be implemented for the Boulder Brush Facilities construction and decommissioning activities:

- Minimize combustible and flammable materials storage on site.
- Store any combustible or flammable materials away from ignition sources.
- Clear parking areas and fuel or oil storage areas of all grass and brush by a distance of at least 30 feet.
- Keep evacuation routes free of obstructions.
- Label all containers as to contents and store in the same location as flammable or combustible liquids.
- Perform hot works according to fire safe practices in a controlled environment and with fire suppression equipment at the job site.
- Dispose of combustible waste promptly and according to applicable laws and regulations.
- Report and repair all fuel leaks without delay.
- Do not overload circuits or rely on extension cords where other upgrades would be safer.
- Turn off and unplug electrical equipment when not in use.
- Adhere to the guidelines provided for all hot work.
- Restrict use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to outside of the official fire season to the greatest extent feasible. When the above tools are used, water tenders equipped with hoses, shovels, Pulaskis, and axes shall easily be accessible to personnel.
- Equip vehicles with a 3A-40BC Dry Chemical Fire Extinguisher, a 5-gallon backpack pump fire extinguisher, and a 48-inch round point shovel.
- During significant emergency situations, an evacuation notice may be issued by the site manager or site safety officer. When an evacuation has been called, all site employees must gather at the designated assembly area and the site safety officer will account for all personnel. Once all employees are accounted for, vehicles will safely convoy from the site to safe zones, which are generally areas off site, away from the threat.

Construction activities would be limited and precautions may be taken on site during periods of a Red Flag Warning, when conditions such as low humidity and high winds are present. Upon announcement of a Red Flag Warning, red flags will be prominently displayed at the Boulder Brush Facilities entrance gate indicating to employees and contractors that restrictions are in place. Additionally, any “hot work” (work that could result in ignition sources or increase fire risk) or

work conducted in close proximity to vegetation would be prohibited during Red Flag Warning conditions. Areas may be evacuated where personnel may be exposed to higher risks. If vehicles are required to be used during Red Flag Warning conditions, vehicles shall remain on paved roads.

While the Boulder Brush Developer would participate in a Fire Service Developer Agreement with the County, which would outline a fair-share funding agreement for fire services, and the Boulder Brush Facilities would comply with all applicable fire codes and provide design features for fire suppression as recommended and required by the FPP, they would be located in a Very High Fire Hazard Severity Zone, as statutorily designated by CAL FIRE, and additional measures are warranted to mitigate the potential for wildfire. As such, the Boulder Brush Facilities would result in a **potentially significant impact** (**Impact HZ-2**) regarding wildfire hazards.

Campo Wind Facilities

The Campo Wind Facilities would include 60 turbines, an underground electrical collection system interconnected between each turbine, a collector substation, an O&M Facility, approximately 5.5 miles of an overhead gen-tie line, and access roads. These facilities would be developed in a rural setting that currently includes semi-distributed and undisturbed wildland fuels as well as existing wind turbines (Golden Acorn, Kumeyaay Wind and Tule Wind) and other electrical infrastructure (Sunrise Powerlink and Southwest Powerlink). As previously discussed, the Campo Wind Facilities may incrementally increase potential ignition sources in the area with construction, ongoing O&M, and decommissioning activities, but would also reduce the available wildland fuels, and would result in a higher level of fire monitoring and awareness due to Project monitoring and security measures. The types of potential ignition sources that currently exist in the area include off-road-vehicles and roadways, electrical transmission lines, and machinery associated with rural residential land uses. Campo Wind Facilities would include potential ignition sources (transformers, gen-tie line, and wind turbines), but would also include conversion of ignitable fuels to lower-flammability landscape, and include 24-hour surveillance by a combination of on-site workers and electronic monitoring, anticipated to aid in earlier observation and reporting of wildfires. Additionally, a CFPP would be prepared to the satisfaction of the CRFPD for the Campo Wind Facilities would provide basic direction for fire safety awareness on-site during construction and decommissioning activities.

The Campo Wind Facilities would include fire access and circulation throughout the Campo Corridor. Planned emergency access for fire prevention and control is considered adequate for this type of facility. The Campo Wind Facilities would include 10-12 full time employees that would be located principally in the O&M building in an area commensurate with existing residences on the Reservation. The Reservation is in an area of high wildfire risk due to the presence of vegetated slopes and occurrences of high winds. However, the Campo Wind Facilities would not exacerbate the potential for exposure to wildfire risk exposure or associated pollutant exposure as the Campo

Wind Facilities would be similar to those already in existence on the Reservation (Golden Acorn turbine, Kumeyaay Wind and Southwest Powerlink) and would include improved access roads allowing for emergency access and evacuation.

During construction, operation, and decommissioning of the Project, there would be increased human activity and ignition sources, including equipment that could create spark, be a source of heat, or leak flammable materials within the Campo Corridor. While the Campo Wind Facilities would comply with all applicable fire codes and provide project design features for fire suppression, they would be located in a Very High Fire Hazard Severity Zone, as statutorily designated by CAL FIRE. As such, the Campo Wind Facilities would result in a **potentially significant impact** (**Impact HZ-C**) regarding wildfire hazards.

BIA has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate Project effects under NEPA. The EIS analysis finds that the Campo Wind Facilities would increase the potential for a wildfire and could impact the public and environment by exposure to wildfire due to construction activities. The risk of wildfire would be related to combustion of native plants caused by smoking, refueling, and operating vehicles and other off-road equipment. However, the Campo Wind Facilities are not expected to result in significant public service impacts to fire protection with the implementation of standard fire prevention procedures, such as fuel modification zones, regular inspections, and routine mechanical maintenance. During construction, the Project would be equipped with up to three water trucks, each of 4,000-gallon capacity. For firefighting purposes during operations, two 10,000-gallon water tanks would be installed at the collector substation year and two 10,000-gallon tanks would be installed at the O&M facility on the Reservation. Thus, demand for fire protection related to the Campo Wind Facilities would not exceed the availability of services provided by the CRFPD.

2.5.3.4 Hazards Associated with Interference with Emergency Responses

Guidelines for the Determination of Significance

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on the environment if it would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Additionally, the County's Guidelines for Determining Significance, Airport Hazards, and Guidelines for Determining Significance and Report Format and Content Requirements, Wildland Fire and Fire Protection (County of San Diego 2007b, 2010) apply 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 be a significant impact related to wildland fire and fire protection as a result of a project, in the absence of evidence to the contrary:

- The project does not meet the emergency response objectives identified in the Safety Element of the County General Plan or offer feasible alternatives that achieve comparable emergency response objectives. The fire and emergency services response time established in the Safety Element of the San Diego County General Plan Table S-1 is less than 20 minutes.
- 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.
- The project would substantially impair an adopted emergency response plan or emergency evacuation plan.

Analysis

Project

To better establish Mutual Aid capabilities and improve communications between jurisdictions and agencies, as well as assist the cities and the County in developing emergency plans and exercising those plans, the San Diego County Operational Area (OA) was formed. The OA Emergency Operations Plan (EOP) is used by the County and all of the cities within the county to respond to major emergencies and disasters, including wildfire. The OA EOP describes the roles and responsibilities of all departments and the relationship between the County and its departments and the jurisdictions within the county. The OA EOP has been adopted and is complete with 16 functional annexes, including an Evacuation Annex (Annex Q). The OA Evacuation Annex is intended to be used as a template for the development of other jurisdictional evacuation plans and describes how emergencies are managed and how the evacuation of residents and their pets are implemented. The OA Evacuation Annex outlines strategies, procedures, recommendations, and organizational structures that can be used to implement a coordinated evacuation effort in the OA (Unified San Diego County Emergency Services Organization and County of San Diego – Operational Area Emergency Operations Plan, September 2018.)

An increase in demand for fire protection and emergency services would occur at the Project Site due to increased activity, higher amounts of fuel on the site, and a greater number of ignition sources on the site, including equipment and human activities.

Travel times in the area from the closest fire station are currently within the County of San Diego General Plan guideline of 20 minutes for rural use areas. The Project Site is located within both the CRFPD and the SDFCA responsibility area and emergency response for the Project would

be provided initially by the CRFPD Station located centrally within the Reservation, and/or by SDCFA and/or CAL FIRE from the co-located Station 47 in Boulevard, California, and the McCain Valley CAL FIRE Camp. The Boulevard Fire Station is located approximately 6.8 miles from the most remote portion of the Boulder Brush Boundary (high-voltage substation location) and approximately 3 miles from the site access point off of Ribbonwood Road, and has a calculated travel time of approximately 12.2 minutes (based on a 6.8-mile distance).2 This travel and response time is compliant with the San Diego County General Plan Safety Element, Table S-1, Travel Time Standards from the Closest Fire Station (County of San Diego 2011b), and also compliant with the required Consolidated Fire Code response time and distance requirements for a rural land use zoning.

In addition to the responding fire stations, additional resources for emergency response are provided by automatic and mutual aid agreements. In the County's unincorporated regions, emergency, fire, and medical services are provided by Fire Protection Districts, County Service Areas, and CAL FIRE. Collectively, there are an estimated 2,800 firefighters currently responsible for fire protection. Due to the remote location of the Project Site, fire and emergency services generally consist of volunteer departments and CAL FIRE. The unincorporated area of San Diego County has a Cooperative Fire Protection Agreement with CAL FIRE for the provision of fire and emergency services in the eastern portion of the County, and covers response to wildfires, structural fires, floods, hazardous material spills, swift-water rescues, civil disturbances, earthquakes, and medical emergencies. Fire emergencies, among other incidents that require emergency response, may occur on site and would be serviced by the CRFPD and SDFCA's Boulevard Fire Station, CAL FIRE, and other mutual and automatic aid agreements throughout the County and state, when necessary.

Construction, operation, and decommissioning of the Project would result in a nominal increase in the demand for fire protection services in the area. However, travel time from the Boulevard Fire Station is approximately 12.2 minutes, which complies with the San Diego County General Plan response time threshold of 20 minutes for a rural area. The Project would not adversely affect response times and, therefore, the Project would not result in the need for increased fire protection facilities or services in the area during construction, operation or decommissioning.

Additionally, as discussed in Section 2.8, Traffic and Transportation, a Construction Traffic Control Plan and notification procedures would be implemented to ensure safe and efficient traffic flow in the area during Project construction. The Plan would be prepared in consultation with the

2 Travel distances were derived from Google Earth road data and driving on the access roads to fire stations from the Project Site; travel times were calculated applying the nationally recognized Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard formula (T = 0.65 + 1.7 D, where T = time and D = distance). The ISO response travel time formula discounts speed for intersections and vehicle deceleration and acceleration, and does not include turnout time.

County and CEPA and would address transportation activities such as the delivery of turbine components, main assembly cranes, and other large pieces of equipment to reduce impacts to traffic flow. The Plan would also identify the requirements for road design, and construction.

An indirect increase in demand for fire protection services could occur if a project causes an increase in population, which could possibly result in an increase in fire emergency service calls. The Project would include permanent staff, up to 12 personnel, on site during operation, inspection, and maintenance activities. This on-site population would vary, and therefore does not fit into typical models to calculate projected call volume for emergency services. To calculate the emergency call service level, a conservative comparison was applied. Using half of the 24-hour equivalency of 12 people (i.e., 6) and the County fire agencies' estimate of 82 annual calls per 1,000 population (Appendix I), it is estimated that the Project's 6 daylight employees would generate up to 0.5 calls per year ((82 ÷ 1,000) × 6). Emergency service requirements during operation are not expected to be significantly impacted with an increase of up to 0.5 calls per year for the Boulevard Fire Station, which currently responds to one call per day in their respective primary service area (Appendix I).

Construction of the Project is expected to occur over approximately 14 months and employ a peak maximum of 561 construction workers, which would equate to an estimated 46 calls per year ((82 ÷ 1,000) × 561) for the temporary construction period. During construction, a conservative estimate of 41 calls over a 14-month period is not expected to generate the need for a new fire facility, and implementation of the Boulder Brush Facilities CFPP (and a CFPP prepared to the satisfaction of the CRFPD for the Campo Wind Facilities) would lessen the risk of fire emergencies during construction. Additionally, potential calls for emergency response required for construction activities on the Reservation would be routed to CRFPD.

The Project would include fire access and circulation throughout the Project Site and adequate emergency access would be provided. Construction of the Project would not decrease or inhibit adequate response action or times from servicing fire stations and the Boulder Brush Developer would adhere to a Fire Service Developer Agreement with San Diego County/SDCFA that would provide funding to support improvements to future fire services; therefore, construction and implementation of the Boulder Brush Facilities would not impair an adopted emergency response or adopted emergency evacuation plan. In addition, with implementation of an FPP prepared to the satisfaction of the CRFPD and Developer funding contributions to local fire and emergency response capabilities, construction and implementation of the Campo Wind Facilities would not impair an adopted emergency response or adopted emergency evacuation plan.

For the reasons stated above, impacts to emergency response and evacuation plans as a result of the Project would be **less than significant**.

Boulder Brush Facilities

Construction, operation and decommissioning of the Boulder Brush Facilities (except for the SDG&E-owned and operated switchyard and connection lines to Sunrise Powerlink, which would not be decommissioned) would result in a temporary increase in the demand for fire protection services in the area. However, travel time from the Boulevard Fire Station is approximately 12.2 minutes, which complies with the San Diego County General Plan response time threshold of 20 minutes for a rural area. The Boulder Brush Facilities would not adversely affect response times and, therefore, would not result in the need for increased fire protection facilities or services in the area during construction, operation or decommissioning. The Campo Wind Facilities would employ 10 to 12 full-time employees throughout the operating life of the Project; no additional employees would be required for Boulder Brush Facilities operations.

Additionally, as discussed in Section 3.8, Traffic and Transportation, a Construction Traffic Control Plan and notification procedures would be implemented to ensure safe and efficient traffic flow in the area during construction. The Plan would be prepared in consultation with the County and CEPA and would address transportation activities such as the delivery of turbine components, main assembly cranes, and other large pieces of equipment to reduce impacts to traffic flow. The Plan would also identify the requirements for road design, and construction.

The Boulder Brush Facilities would include fire access and circulation throughout the Boulder Brush Corridor and adequate emergency access would be provided. Construction of the Boulder Brush Facilities would not decrease or inhibit adequate response action or times from Fire Station 47, access roads to the Boulder Brush Facilities would be improved, and the Boulder Brush Developer would adhere to the Fire Service Developer Agreement with San Diego County/SDCFA that would provide funding to support improvements to future fire services consistent with the County General Plan. Therefore, construction and implementation of the Boulder Brush Facilities would not impair an adopted emergency response and emergency evacuation plan. Impacts to emergency response and evacuation plans as a result of the Boulder Brush Facilities would be **less than significant**.

Campo Wind Facilities

Construction, operation and decommissioning of the Campo Wind Facilities would result in a temporary increase in the demand for fire protection services in the area. However, as described above, the Project would not adversely affect response times; therefore, the Campo Wind Facilities would not result in the need for increased fire protection facilities or services in the area during construction, operation or decommissioning.

An indirect increase in demand for fire protection services could occur when a project causes an increase in population, which could possibly result in an increase in fire emergency service calls. According to the Developer, the Campo Wind Facilities would employ 10 to 12 full-time employees throughout the operating life of the Project. This on-site population would vary, and therefore does not fit into typical models to calculate projected call volume for emergency services. As discussed above, service level requirements are not expected to be significantly impacted with the increase of less than 0.5 calls per year for the Boulevard Fire Station or the Campo Reservation Fire Station, which currently responds to fewer than two calls per day in the respective service area.

As discussed above, fire access and circulation throughout the Campo Wind Facilities and adequate emergency access would be provided. Construction would not decrease or inhibit adequate response action or times from servicing fire stations. Furthermore, as discussed above, and in Section 2.8, Traffic and Transportation, a Construction Traffic Control Plan and notification procedures would be implemented to ensure safe and efficient traffic flow in the area during construction. The Plan would be prepared in consultation with the County and CEPA and would address transportation activities such as the delivery of turbine components, main assembly cranes, and other large pieces of equipment to reduce impacts to traffic flow. Therefore, construction and implementation of the Campo Wind Facilities would not impair an adopted emergency response and emergency evacuation plan.

BIA has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate Project effects under NEPA. The EIS analysis finds that the Campo Wind Facilities would increase the potential for a wildfire and could impact the public and environment by exposure to wildfire due to construction activities. However, the Campo Wind Facilities are not expected to result in significant public service impacts to fire protection with implementation of standard fire prevention procedures, such as fire management zones, regular inspections, and routine mechanical maintenance. As demand for fire protection related to the Campo Wind Facilities would not exceed the availability of services provided by the CRFPD, impacts would be **less than significant**.

2.5.3.5 Public Concerns of Health Effects

Recognizing there is public interest and concern regarding potential health effects from renewable wind energy projects, including wind turbines and associated infrastructure, the following discussion provides information regarding public concerns of health effects related to infrasound, low-frequency noise, electromagnetic fields (EMFs), and shadow flicker. In the context of CEQA for determination of environmental impacts, there are no defined or adopted CEQA standards for defining health risks from these concerns, and no general agreement has been reached among scientists that these effects contribute to health risks. The issues discussed in this section are defined below.

Infrasound: Sounds are based on their loudness (i.e. volume or sound pressure level) or pitch (i.e. tonal or frequency content). The standard unit used to describe the tonal or frequency content is the Hertz (Hz) (County of San Diego 2012). Infrasound is acoustic oscillations that occur at frequencies below 20 Hz, which is generally below the range of human hearing. Natural sources of infrasound include wind or weather patterns causing air oscillations, ocean waves, and turbulence (Bedard 1999; Epsilon 2009).

Low-Frequency Noise: The typical range for low frequency is 20 Hz to 200 Hz. A young non-pathological ear can perceive sounds ranging from 20 Hz to 20,000 Hz (County of San Diego 2012).

Electromagnetic Fields: Electromagnetic fields, also known as electric and magnetic fields (EMF), are invisible lines of force that are present wherever electricity flows such as around appliances and power lines. These fields are low energy, extremely low frequency fields (SDG&E 2015).

Exposure to EMFs comes from common sources such as distribution and transmission lines, wiring in walls, ground currents in water pipes, and from electrical appliances such as microwaves, clothes washers, fluorescent lamps, computers, televisions and hair dryers (SDG&E 2015).

Shadow Flicker: Shadow flicker is a term used to describe the flickering of shadows that are cast by a wind turbine's rotating blades when the sun is behind them. It is caused when the rotor of the turbine is between the observer and the sun, and generally occurs during the morning or evening hours when the sun is low in the sky (AWS 2019).

County of San Diego Public Health Position Statement

The County Planning Commission held a series of meetings on the County's Wind Energy Ordinance. At their May 11, 2012, meeting, the Planning Commission requested a report on the potential health effects of wind turbines. The report was issued by Public Health Services on July 10, 2012. Subsequently, on July 20, 2012, the Planning Commission recommended approval of the Wind Energy Ordinance and requested staff to report back in the future with an update to this report on potential health effects of wind turbines. The Board of Supervisors (Board) considered and approved the Wind Energy Ordinance on May 15, 2013. The 2012 Position Statement was included in the Board report, and in their decision, the Board determined that public health issues were adequately addressed.

To provide an update to the County Health Position Statement dated July 2012, a public health position statement was prepared in February 2019. The updated 2019 position statement summarizes conclusions from the most recent peer-reviewed literature and scientific publications, with respect to any causal link or other associations between wind turbines and individual health or public health concerns regarding infrasound, low-frequency noise, electromagnetic fields, and shadow flicker.

The discussion provided below is based on the literature review conducted for the County 2019 Public Health Position Statement, as well as an independent review of available literature and scientific publications on issues related to infrasound, low-frequency noise, EMF and shadow flicker.

Infrasound

Turbines associated with the Campo Wind Facilities and the transformer within the Boulder Brush Facilities high-voltage substation are anticipated to be the primary sources of infrasound during Project operations. The health concerns associated with infrasound include affects to the vestibular (sensory) system, which aids in the control of positioning and movement of the head and body. Based upon the County's review of available primary-source scientific literature, the County 2019 Public Health Position Statement states that no conclusive evidence has been provided that confirms infrasound directly causes health effects such as mental health problems, headaches, pain, stiffness, or diseases such as diabetes, cardiovascular disease, tinnitus, or hearing damage (County of San Diego 2019). Additionally, no epidemiological studies have concluded that generation of infrasound from wind turbines results in direct health effects (Lepoutre et al. 2017).

Low-Frequency Noise

Turbines associated with the Campo Wind Facilities, the On- and Off-Reservation gen-tie line, and the high-voltage substation and switchyard would generate low-frequency noise. The high-voltage substation and switchyard located within the Boulder Brush Corridor would have the greatest potential for the generation of low-frequency noise. In addition, the transformer within the Boulder Brush Facilities that would be installed in the high-voltage substation area is anticipated to be the major continuous producer of noise during Project operations. While there would be other electrical equipment on site, consistent with similar noise studies of substations with adjoining switchyards, such other potential noise sources would be intermittent and infrequent (Acentech Incorporated 2015).

The County 2019 Public Health Position Statement (County of San Diego 2019) summarized literature reviews on low-frequency noise, and concluded that available peer-reviewed literature provides no clear evidence that the operation of wind turbines and associated infrastructure directly contributes to health concerns as a result of low-frequency noise.

Additionally, a Project-specific C-weighted analysis was completed that evaluates low-frequency noise generated by Project wind turbines on the Reservation that could potentially impact private lands (Appendix G Acoustical Analysis Report for the Campo Wind Project with Boulder Brush Facilities). Refer to EIR Section 2.6, Noise, for a detailed discussion.

Electromagnetic Fields

Wind turbines associated with the Campo Wind Facilities, the On- and Off-Reservation gen-tie line, and the high-voltage substation and switchyard within the Boulder Brush Corridor would create varying amounts of EMFs and related harmonic components from associated Project electrical facilities. EMFs attenuate rapidly with distance from the source. The California Public Utilities Commission (CPUC) implemented a number of EMF measurements, research, and education programs, and provided direction that led to the preparation of the California Department of Health Services' review of existing studies related to EMFs from power lines and associated potential health risks. The CPUC stated, "at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences" (CPUC 2018). The CPUC has not established any connection between EMF exposure and negative effects to human health.

Additionally, the County 2019 Public Health Position Statement (County of San Diego 2019) summarized literature reviews on EMFs, and concluded that available literature provides no clear evidence that the operation of wind turbines and associated infrastructure directly contributes to health concerns as a result of EMFs.

Shadow Flicker

The wind turbines associated with the Campo Wind Facilities are anticipated to be the source of shadow flicker. Shadow flicker may be a source of annoyance for those residing in the vicinity of turbines. The primary health concern regarding shadow flicker is related to the risk of seizures for individuals with photosensitive epilepsy. A peer-reviewed epidemiological study, which included a literature review conducted on the health effects of wind turbine operations, identified that three-blade wind turbines with a rotation of less than 60 rotations per minute (rpm) would not likely contribute to photo-induced epilepsy in individuals who are photosensitive (Knopper et al. 2014). For turbines with three blades, a maximum speed of rotation of 60 rpm translates to a rotation frequency range of 3 Hz. Common turbine models typically spin far slower than 60 rpm (Knopper et al. 2014). Modern wind turbines, such as those that will be utilized for the Project, rotate at under 20 rpm (0.33 Hz).

There are no state or local regulations under CEQA applicable to shadow flicker. While shadow flicker is not regulated in applicable state or federal law, Alameda County in the Final Program Environmental Impact Report (EIR) for the Altamont Pass Wind Resource Area Repowering (Alameda County Community Development Agency 2014) employed a guideline of shadow flicker in excess of 30 minutes in a given day or 30 hours in a given year to evaluate shadow flicker effects. Per Alameda County's EIR, shadow flicker in excess of this guideline could be disruptive to residents who would be exposed to these conditions for long periods of time.

Although the County does not have local regulations pertaining to shadow flicker, a shadow flicker analysis was conducted by AWS Truepower LLC to analyze potential effects from turbines associated with the Campo Wind Facilities (Appendix O, Shadow Flicker Analysis). Based on the shadow flicker modeling conducted as part of this analysis, On- and Off-Reservations receptors may experience shadow flicker effects. It should be noted that shadow flicker would result from turbines associated with the Campo Wind Facilities which are located within the Reservation Boundary, and thus, turbine siting and approval are outside the control of the County. Additionally, for informational purposes, and due to public comments received which noted the difference in the rotor diameter described in Chapter 1 (up to approximately 460 feet) and the rotor diameter assumed in the Shadow Flicker analysis (450 feet), the County conducted a Supplemental Shadow Flicker Analysis (August 2020) which is included as Attachment 1 to Appendix O. The Supplemental Shadow Flicker Analysis assumed a rotor diameter of 460 feet, consistent with the Project description in Chapter 1 of the Draft EIR, whereas the 2019 analysis assumed the same maximum tip height but a rotor diameter of 450 feet. The supplemental analysis compared the modelled results based on a rotor diameter of 460 feet versus a rotor diameter of 450 feet and determined that it would not materially change the Shadow Flicker Analysis (Appendix O) in the Draft EIR. Refer to Section 2.1, Aesthetics, and Appendix O of this EIR, for a detailed analysis regarding shadow flicker.

Therefore, although some receptors may experience shadow flicker, it is not anticipated that shadow flicker would result in adverse health effects due to the projected slow rate of rotation of the Project's turbine blades (Knopper et al. 2014).

2.5.4 Cumulative Impact Analysis

The cumulative study area for potential contamination impacts is limited to the areas immediately surrounding the Project Site (approximately a 1,000-foot buffer); however, regarding the transport, storage, and use of hazardous materials, the cumulative study area would be all of rural southeast San Diego. For airport hazards the cumulative study area would be the general region and would include any other project that has the potential to impede flight paths, restrict emergency response via aircraft, or interfere with navigable airspace (taller than 200 feet). The cumulative study area for wildfires would include any contiguous open space land that is connected to the Project Site. For emergency response, the cumulative study area would be the SDCFA and/or CAL FIRE jurisdictional boundaries.

Hazardous Materials

The subject property addressed in the Phase I ESA investigation (2018 Torrey Wind Phase I ESA) which included the Boulder Brush Corridor, revealed no evidence of RECs. Additionally, the Phase I ESA found that the subject property is not included in the State of California Hazardous Waste and Substances sites list, nor is it located within 1,000 feet of a Formerly Used

Defense Site. The Preliminary ESA prepared for the Campo Wind Facilities identified RECs within the Reservation boundary; however, there is no evidence of RECs in connection with the Campo Corridor (Appendix F-2). Other cumulative projects, including each of those listed in Table 1-4, Cumulative – Reasonably Foreseeable, Approved, and Pending Projects, in Chapter 1 of this EIR, would similarly be required to survey for potential areas of hazardous contamination, and if such areas were found, would be required to remediate any contaminated areas. Therefore, the Project would not have a cumulatively considerable contribution to any potential cumulative impact related to hazardous sites contamination.

During construction, O&M, and decommissioning of the Project, typical hazardous materials would be brought and used on site. Numerous federal, state, and local regulations exist that require strict adherence to specific guidelines regarding the use, transportation, and disposal of such hazardous materials. For example, the Boulder Brush Facilities would potentially include on-site use and storage of hazardous materials, which would necessitate the development of an HMBP in accordance with Chapter 6.95 of the H&SC, Division 20 (AB 2185 and AB 2189). The Boulder Brush Facilities would comply with the requirement of Chapter 6.95 of the H&SC, including containment provisions for potential spills.

Compliance with applicable laws and regulations would reduce the risk of an accidental release of a hazardous material, and the use of hazardous materials to maintain the wind turbines and related energy infrastructure for their intended purpose are not expected to pose a hazard to the public or environment. Other cumulative projects (listed in Table 1-4) would also be subject to all applicable laws and regulations governing the use, storage, and disposal of hazardous materials. Other renewable energy projects in the area, including solar and wind energy generation projects such as the Tule Wind Farm and Jacumba Solar projects, pose similar risks associated with the handling, use, transportation, storage, and disposal of hazardous materials as the Project. The Project, as with all other cumulative projects, would comply with applicable laws and regulations intended to minimize the risk and threat to public health from the accidental release of hazardous materials. Additionally, recreational and residential resources are located far enough away from the Project Site such that accidental release of hazardous materials would not likely result in adverse effects. With adherence to all applicable laws, the risk of an accidental release of a hazardous material from the Project and cumulative projects would not pose a hazard to the public or environment, and **impacts would not be cumulatively considerable**.

The Project Site is not located within 0.25 miles of a school and would not include the use of a regulated substance subject to CalARP risk management plan requirements (per 19 CCR, Division 2, Chapter 4.5). Therefore, the Project **would not contribute to a cumulatively considerable impact** relative to emissions or use of regulated substances subject to CalARP risk management plan requirements.

Airport Hazards

The Project would not result in safety hazard impacts associated with air traffic following compliance with FAA rules and regulations. Due to the height of the proposed turbines, the Project would be required to file form FAA 7460-1 to the FAA within 45 days prior to the start of construction. Other cumulative wind turbine projects in the area, including Tule Wind, Torrey Wine and Kumeyaay Wind Projects, would all have to comply with FAA regulations and requirements, including filing form FAA 7460-1, as necessary and where potential hazards have been identified related to airport hazards. Environmental documentation and approval of cumulative projects would ensure that airport and aircraft safety is provided and complies with applicable FAA regulations are complied with, including providing appropriate FAA notifications as necessary and where potential hazards are identified related to airport hazards. Modifications or project design features could be required, which could include markings or lighting features.

Additionally, as concluded in Section 2.5.3.2, the Project Site is not located within an ALUCP or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. Therefore, the Project would not conflict with an ALUCP. Therefore, the Project, in combination with cumulative projects, would be in compliance with applicable FAA rules and regulations and would not result in significant airport hazards, and thus **would not result in a cumulatively considerable impact** associated with airport hazards.

Wildfire Hazards

Based on wildfire analysis provided in the Boulder Brush Facilities FPP (Appendix I), the wildland fire risk in the vicinity of the Project Site has been analyzed, and it has been determined that wildfires are likely occurrences; however, the frequency, duration, or size of wildfire events would not increase in severity due to implementation of the Project.

It is also possible that adjacent project construction schedules would overlap with the Project's construction schedule, in particular JVR Solar, Torrey Wind, and the Cameron Solar projects. As required by the County's Consolidated Fire Code, Section 4903, proposed projects would be required to prepare CFPP and FPPs to lessen fire risk during and after construction, and would likely include additional mitigation and design measures. Mitigation and/or design measures could include "hot work" restrictions, Red Flag Warning protocols, contractor fire suppression equipment mandates, and vegetation clearing and management, among others.

Once construction is complete, the Project would introduce potential ignition sources that do not currently exist on the site. Equipment on the site that may be ignition sources during O&M activities include transformers, electric collection and transmission lines, substations, vehicles, and gas- or electric-powered small hand tools. This equipment represents a risk of sparking or igniting nearby fuels, particularly with off-site flammable vegetation and during high wind conditions. To reduce the

risk of fire on the site and improve the effectiveness of an emergency response should a fire occur on site, a site-specific FPP would be implemented for the Boulder Brush Facilities, as required by the Consolidated Fire Code, Section 4903. The FPP for the Boulder Brush Facilities would provide design measures to ensure compliance with the Consolidated Fire Code. Cumulative projects would undergo similar review for adequate fire protection, and would be required to implement design measures or mitigation measures, as necessary. Such projects would be required to submit a project-specific FPP, required by the Consolidated Fire Code, Section 4903. The FPP for the Campo Wind Facilities prepared to the satisfaction of the CRFPD would be subject to review and approval by the CRFPD to which equal rigor is applied as County Fire review for projects on private lands within the County.

Cumulative projects may also include mitigation that requires funding to assist the CRFPD and SDCFA in improving the response and firefighting effectiveness within their jurisdiction as part of their Fire Service Developer Agreement. The Project's Fire Service Developer Agreement would ensure funding for firefighting and emergency medical resources to comply with General Plan Safety Element Policy S-6.3 for new development, which requires development projects to contribute fair-share funding toward fire services. Funding provided by projects result in capital that can be used toward firefighting and emergency response improvements so that the County's firefighting agencies are able to perform their mission into the future at levels consistent with the General Plan. Implementation of FPPs and CFPPs, and project design features would reduce the Project's proportionate share of fire impacts on a cumulative level, and the payment of fair-share fees would ensure consistency with General Plan policies. Therefore, the Project, in combination with cumulative projects, would be in compliance with applicable fire codes, and **would not result in a cumulatively considerable impact** associated with wildland fires during construction or operation.

Hazards Associated with Interference with Emergency Responses

Cumulative projects in the Project vicinity could have the potential to impair existing emergency and evacuation plans during construction. This could occur from an increase in population that is induced from cumulative projects that are unaccounted for in emergency plans; an increase in population that emergency response teams are unable to service adequately in the event of a disaster; or evacuation route impairment if development projects concurrently block multiple evacuation or access roads, such as during construction, resulting in impaired emergency response times. Emergency medical response is supplemented by fire protection response services because the first responders to emergency medical responses are sometimes fire response units, and in rural areas of the County, emergency response is often served by fire response units. Emergency medical response incidents would increase with an increase in the local population, even temporarily, due to the Project and cumulative projects. During Project construction, emergency response times would not be inhibited such that they would exceed the established County response time of 20 minutes. The Project is projected to add an estimated 0.5 calls per year to the CRFPD fire station and the co-located CAL FIRE and SDCFA Boulevard Fire Station 47. Both stations are within a short driving

distance of the Project Site, and would have the ability to respond under the County's established response time of 20 minutes. The addition of 0.5 calls per year to a rural fire station is not considered significant and would not require the construction of additional fire station facilities based on that increase alone. Even with potential overlap of existing construction schedules for adjacent projects, emergency response capabilities would not be degraded such that a cumulative impact would occur. The Project and each of the cumulative projects would be required to comply with the emergency response objectives and to implement CFPP and FPPs. Therefore, the Project, in combination with cumulative projects, **would not result in a significant cumulative impact** to emergency responses.

Hazards Associated with Low-Frequency Noise

As previously stated, no general agreement has been reached among scientists that low-frequency noise creates a health risk. Additionally, there are no defined or adopted CEQA standards for defining health risks from low-frequency noise. As a result, the information is provided below for the benefit of the public and decision makers.

The Project's wind turbines, gen-tie line, high-voltage substation, and switchyard would generate low-frequency noise. The Project, when combined with other existing and foreseeable future projects, including renewable energy projects listed in Table 1-4, would contribute to an increase the cumulative low-frequency noise in the Project Vicinity.

The County 2019 Public Health Position Statement summarized literature reviews on this topic, and concluded that available literature provides no clear evidence that the operation of wind turbines and associated infrastructure directly contributes to health concerns as a result of low-frequency noise (County of San Diego 2019).

Hazards Associated with Electromagnetic Fields

As previously stated, no general agreement has been reached among scientists that EMFs creates a health risk. Additionally, there are no defined or adopted CEQA standards for defining health risks from EMFs. As a result, the EMF information is provided below for the benefit of the public and decision makers.

The Project's wind turbines, gen-tie line, high-voltage substation, and switchyard may create varying amounts of EMFs and related harmonic components. The Project, when combined with other existing and foreseeable future projects, including renewable energy projects listed in Table 1-4, would contribute to an increase the cumulative sources of EMF in the Project Vicinity.

There is inadequate evidence of health effects due to EMF at low exposure levels. The California Public Utilities Commission (CPUC) implemented a number of EMF measurements, research, and education programs, and provided direction that led to the preparation of the California

Department of Health Services' review of existing studies related to EMFs from power lines and associated potential health risks. The CPUC stated, "at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences" (CPUC 2018). The CPUC has not established any connection between EMF exposure and negative effects to human health.

Shadow Flicker

There are no state or local regulations under CEQA applicable to shadow flicker. AWS Truepower LLC modeled the cumulative potential shadow flicker from the Project combined with existing and foreseeable future cumulative projects (Appendix O). Based on the shadow flicker model, both On- and Off-Reservations receptors may experience cumulative shadow flicker. See Section 2.1 and Appendix O of this EIR, for a detailed discussion on shadow flicker.

The County 2019 Public Health Position Statement summarized literature reviews on this topic and concluded that available literature indicated that modern wind turbine operations are not likely to contribute to a risk of photo-induced epilepsy due to the slow rotation of turbine blades (Knopper et al. 2014). As such, the Project, when combined with cumulative projects in the area, is not anticipated to result in shadow flicker-related health effects.

2.5.5 Significance of Impacts Prior to Mitigation

Handling and Accidental Release of Hazardous Materials

Project

While the Project would comply with hazardous substance regulations, there is always the possibility that accidental spills and/or unauthorized releases of hazardous materials could occur. Similarly, if a spill or unauthorized release of hazardous materials were to occur on the Project Site, the Project could potentially expose people to hazardous materials, resulting in a **potentially significant impact** (**Impact HZ-1/HZ-A**) with regard to the handling and/or accidental release of hazardous materials.

While the Project could potentially result in the accidental release of hazardous materials, potentially exposing people to hazardous materials; the Project Site is not located within 0.25 miles of an existing or proposed school or daycare facility. Additionally, the Project would not handle or store hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC; would be in compliance with applicable hazardous substance regulations; and would not generate hazardous waste regulated under Chapter 6.5 of the H&SC, the DEH HMD Certified Unified Program Agency, and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC. As the Project would not be located within 0.25 miles of a school or daycare facility, impacts would be **less than significant.**

Boulder Brush Facilities

While the Boulder Brush Facilities would comply with hazardous substance regulations, there is always the possibility that accidental spills and/or unauthorized releases of hazardous materials could occur. Therefore, Boulder Brush Facilities could potentially expose people to hazardous materials, resulting in a **potentially significant impact** (**Impact HZ-1**) with regard to the handling and/or accidental release of hazardous materials.

The Boulder Brush Facilities would not be located within 0.25 miles of an existing or proposed school or daycare facility. Additionally, the Boulder Brush Facilities would not handle or store hazardous substances in excess of the threshold quantities listed in Chapter 6.95 of the H&SC; would be in compliance with applicable hazardous substance regulations; would not generate hazardous waste regulated under Chapter 6.5 of the H&SC, the DEH HMD Certified Unified Program Agency; and/or store hazardous substances in underground storage tanks regulated under Chapter 6.7 of the H&SC. As the Boulder Brush Facilities would not be a located within 0.25 miles of a school or daycare facility, impacts would be **less than significant.**

Campo Wind Facilities

While the Campo Wind Facilities would comply with hazardous substance regulations, there is always the possibility that accidental spills and/or unauthorized releases of hazardous materials could occur. Therefore, the Campo Wind Facilities could potentially expose people to hazardous materials, resulting in a **potentially significant impact** (**Impact HZ-A**) with regard to the handling and/or accidental release of hazardous materials.

As the Campo Wind Facilities would not be located within 0.25 miles of a school or daycare facility, impacts would be **less than significant.**

Hazardous Materials Sites

Project

This analysis of hazardous materials sites is based on the 2019 Preliminary ESA prepared for the Campo Wind Facilities (Reservation Boundary) and the 2018 Phase I ESA prepared for the property contained within the Boulder Brush Boundary.

Boulder Brush Facilities

The Phase I ESA revealed no evidence of RECs in connection with the Boulder Brush Boundary. However, the report did identify environmental concerns regarding the groundwater wells, above ground storage tanks, and debris as described previously in Section 2.5.1, as well as the potential

for asbestos and lead-based paint. The County will require conditions of approval for the Boulder Brush Facilities, as described in Section 2.5.3.1. Therefore, with implementation of the County conditions of approval, the Boulder Brush Facilities would result in **less-than-significant** impacts associated with hazardous materials.

Campo Wind Facilities

RECs were identified within the Reservation Boundary, as described in the 2019 Preliminary ESA and in Section 2.5.1 above. Although construction is not currently proposed on any sites as having a REC, the exact geographic footprint of the Campo Corridor on the Reservation is subject to change depending on geotechnical constraints. If the design of the Campo Wind Facilities changes, resulting in construction on a new, unanalyzed area outside of the Campo Corridor, the Project may result in adverse effects associated with hazardous material within the Reservation Boundary. As such, the Project would result in a **potentially significant impact** (**Impact HZ-B**) regarding hazardous materials.

Airport Hazards

Project

The Project is not located in a public airport or public use airport influence area, and would not cause glare impacts for aircraft (glare impacts as a result of the Project is discussed in detail in Section 2.1 of this EIR). However, the Project is subject to FAA regulations. Based on the FAA Notice Criteria Tool and CFR Title 14 Part 77.9, the Project may impact navigation signal reception (FAA 2018). Accordingly, notification to the FAA must be filed 45 days prior to the start of construction for the Project, and form FAA 7460-1 must be submitted. Appropriate filing of these forms to the FAA would ensure that the Project is in compliance with FAA regulations. With compliance with FAA regulations, the Project would have a **less-than-significant impact**.

Boulder Brush Facilities

The Boulder Brush Facilities would not be located in a public airport or public use airport influence area, would not include components over 200 feet in height, and would not cause glare impacts for aircraft. Based on the FAA Notice Criteria Tool and CFR Title 14 Part 77.9, the Boulder Brush Facilities would not impact navigation signal reception (FAA 2018). The Boulder Brush Facilities would result in a **less-than-significant impact**.

Campo Wind Facilities

The Campo Wind Facilities would not be located in a public airport or public use airport influence area and would not cause glare impacts for aircraft. However, the Campo Wind Facilities would be subject to FAA regulations. Based on the FAA Notice Criteria Tool and CFR Title 14 Part 77.9, the Campo Wind Facilities may impact navigation signal reception (FAA 2018). Accordingly,

notification to the FAA must be filed 45 days prior to the start of construction, and form FAA 7460-1 must be submitted. Appropriate filing to the FAA would ensure that the Campo Wind Facilities are in compliance with FAA regulations. Compliance with FAA regulations would result in a **less-than-significant impact**.

Wildfire Hazards

Project

During construction, operation, and decommissioning of the Project, there would be increased human activity and ignition sources, including equipment that could create spark, be a source of heat, or leak flammable materials on the Project Site. While the Project would comply with all applicable fire codes and provide project design features for fire suppression, the Project would be located in a Very High Fire Hazard Severity Zone, as statutorily designated by CAL FIRE, and additional measures are warranted to mitigate the potential for wildland fire. As such, the Project would result in a **potentially significant impact** (**Impact BI-12/BI-H**) regarding wildfire hazards.

Boulder Brush Facilities

The Boulder Brush Facilities would be located in a Very High Fire Hazard Severity Zone, as statutorily designated by CAL FIRE, and additional measures are warranted to mitigate the potential for wildland fire. As such, the Boulder Brush Facilities would result in a **potentially significant impact** (**Impact BI-12**) regarding wildfire hazards.

Campo Wind Facilities

The Campo Wind Facilities would be located in a Very High Fire Hazard Severity Zone, as statutorily designated by CAL FIRE, and additional measures are warranted to mitigate the potential for wildland fire. As such, the Campo Wind Facilities would result in a **potentially significant impact** (**Impact BI-H**) regarding wildfire hazards.

Hazards Associated with Interference with Emergency Responses

Project

The Project would involve construction of 60 wind turbines up to approximately 586 feet in height. Additionally, the Project Site is located adjacent to wind turbines of similar height and construction. The Project is subject to FAA rules and review as part the FAA Part 77.9 process. The Project does propose a structure or tower 200 feet or greater in height on a peak or other location where no structures or towers of similar height already exist and needs to file and incorporate FAA recommendations.

Appropriate filing to the FAA would ensure that the Project is in compliance with FAA regulations, and therefore, would result in a **less-than-significant impact**.

Boulder Brush Facilities

The Boulder Brush Facilities would be included in submittal to and adherence of FAA rules and review as part the FAA Part 77.9 process. The Boulder Brush Facilities do not propose a structure or tower 200 feet or greater in height. Additionally, the Project meets emergency response objectives and times identified in the County's General Plan Safety Element for additional emergency response services. Compliance with objectives outlined in the County of San Diego General Plan Safety Element would ensure impacts as a result of Boulder Brush Facilities on private lands would be **less than significant**.

Campo Wind Facilities

The Campo Wind Facilities would involve construction of 60 wind turbines up to approximately 586 feet in height. Additionally, the Project Site is located adjacent to wind turbines of similar height and construction. The Project is subject to FAA rules and review as part the FAA Part 77.9 process. The Campo Wind Facilities includes structures or towers 200 feet or greater in height and needs to file and incorporate FAA recommendations. Appropriate filing of these forms to the FAA would ensure that the Campo Wind Facilities is in compliance with FAA regulations. Compliance with FAA regulations and objectives outlined in the County of San Diego General Plan Safety Element would ensure impacts as a result of Campo Wind Facilities on private lands would be **less than significant**.

Public Concerns for Health

Low-Frequency Noise

Based on an evaluation recent peer-reviewed literature, including a literature review conducted by the County (County of San Diego 2019), additional research is needed to conclude if there is a direct link between low-frequency noise generated by turbines and health effects.

Electromagnetic Fields

The CPUC has not established any connection between EMF exposure and negative effects to human health (CPUC 2018).

Additionally, as stated in the Public Health Position Statement for Human Health Effects of Wind Turbines issued by the County on February 25, 2019 (County of San Diego 2019), "based on the weight of evidence, it is not expected that EMF from wind turbines [or from the power lines required for distribution of the generated electricity] is likely to be a causative agent for negative health effects in the community." This would also apply to transmission lines required for distribution of the generated electricity. The Project, including cumulative projects, is not

anticipated to result in measurable levels of EMFs as there is inadequate evidence of health effects at low exposure levels.

Shadow Flicker

Although the County does not have local regulations pertaining to shadow flicker, a shadow flicker analysis was conducted for the Campo Wind Facilities. According to the modeling performed as part of the shadow flicker analysis, some receptors may experience shadow flicker. Refer to Section 2.1 and Appendix O of this EIR, for a detailed analysis regarding shadow flicker.

Therefore, although some receptors may be exposed to shadow flicker, due to the slow rotation of the Project's turbine blades, it is not anticipated that shadow flicker would result in adverse health effects.

2.5.6 Mitigation Measures

Project

The mitigation measures outlined herein are provided to reduce impacts associated with the handling and/or accidental release of hazardous materials, as well as the possibility of wildland fires.

M-HZ-1 and **M-WF-1** shall be required as part of the County's Major Use Permit approval to address impacts identified associated with the Boulder Brush Facilities.

M-HZ-A through **M-HZ-C** and **M-BI-C (h)** are the recommended mitigation measures in the EIS for the Campo Wind Facilities, subject to the BIA's record of decision (ROD).

Boulder Brush Facilities

M-HZ-1 is provided to reduce impacts associated with the handling and/or accidental release of hazardous materials. **M-WF-1** is provided to address wildfire hazards. These mitigation measures shall be required of Boulder Brush Facilities as part of the County's Major Use Permit approval to address impacts identified associated with the Boulder Brush Facilities.

M-HZ-1 **Hazardous Materials Management Plan (HMMP).** Prior to approval of final construction plans by the County, the Boulder Brush Developer and/or contractor(s) will prepare an HMMP for the construction phase of the Boulder Brush Facilities, which would be reviewed and approved by the coordinating agencies. The HMMP would be included as part of all contractor specifications and final construction plans to the satisfaction of the appropriate agency. The HMMP would include the following components:

- The HMMP shall identify all hazardous materials that could be present on any portion of the construction site, including fuels, solvents, and petroleum products. The HMMP would address storage, use, transport, and disposal of

each hazardous material anticipated to be used at the site. The HMMP would establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials.

- The HMMP would identify secondary containment and spill prevention countermeasures, as well as a contingency HMMP to identify potential spill hazards, how to prevent their occurrence, and responses for different quantities of spills that may occur. Secondary containment and countermeasures would be in place throughout construction so that if any leaks or spills occur, responses shall be made immediately. Emergency spill supplies and equipment would be clearly marked and located adjacent to areas of work and in temporary construction staging areas.
- The HMMP would identify adequate safety and fire-suppression devices for construction-related activities involving toxic, flammable, or explosive materials (including refueling construction vehicles and equipment). Such devices would be readily accessible at the Boulder Brush Facilities, as specified by the County Fire Department and per the Uniform Building Code and Uniform Fire Code.
- Prior to construction, the Boulder Brush Developer/all contractor and subcontractor personnel would receive training regarding the components of the HMMP, as well as applicable environmental laws and regulations related to hazardous materials handling, storage, and spill prevention and response measures.
- The Boulder Brush Developer and/or Boulder Brush Developer's contractor would designate a qualified environmental field representative who would be on site to observe, enforce, and document adherence to the plan for all construction activities. The HMMP would be submitted to the appropriate agencies for approval prior to construction.

M-WF-1 **Fire Protection Measures**. To minimize the fire risk, all fire protection measures and features identified in the Boulder Brush Facilities Fire Protection Plan (FPP) shall be implemented in conjunction with development of the Boulder Brush Facilities.

The following measures and design considerations identified in Section 7 of the FPP (Appendix I) would be employed:

- FMZs throughout the Boulder Brush Corridor for Off-Reservation gen-tie power line structures, high-voltage substation, switchyard, and access roads (Required measure).

- A contiguous fuel modification zone 50 feet outside of the perimeter fences (approximately 100 feet from the electrical components) around the high-voltage substation and switchyard would be maintained. The high-voltage substation pad area will be free of vegetation around all electrical equipment (Required measure).
- A technical report (See Appendix H to this FPP for more details) indicating special precautions for firefighting response (Code-exceeding measure).
- Up to 30-foot wide primary access road that connects to the high-voltage substation and switchyard. 16-foot wide roads provide access to Off-Reservation gen-tie power line structures (Required measure).
- Off-Reservation gen-tie power line poles would be non-combustible (steel) with lightning protection (Code-exceeding measure).
- Participation in an Agreement with SDCFA, for funding firefighting and emergency medical resources, the details of which will be determined in the Fire Service Developer Agreement (Required measure).
- Boulder Brush Developer annual fuel modification zone inspections to ensure compliance with this FPP (Code-exceeding measure).
- Motion sensor illuminated (and/or reflective) signage at main entrance (Required measure).
- Preparation and implementation of a CFPP for the Boulder Brush Facilities. (Code-exceeding measure).
- Class B/C, 15-pound portable carbon dioxide (CO_2) fire extinguishers mounted at high-voltage transformer units (Required measure).
- Three (3) 10,000-gallon water tanks will be installed near the switchyard and high-voltage substation dedicated for firefighting purposes (Required measure).
- During construction, one pick-up truck would be outfitted with Skid-Mounted Unit, including fire pump, hoses, and nozzle, and personnel properly trained to use the firefighting equipment. After construction is completed, the pickup truck will remain on the Project Site and personnel will be trained to use the firefighting equipment (Required measure).
- Boulder Brush Facilities contact information with local fire agencies/stations to assist responding firefighters during an emergency (Required measure).

- On-going maintenance of all facility components for the life of the Boulder Brush Facilities (Required measure).
- Maintenance logs to be kept and made available upon request to SDCFA/CAL FIRE (Required measure).
- Consistent placarding and labeling of all components for fire safety/response (Required measure).

Additional measures to reduce the risk of ignitions would also be employed, as appropriate, during each phase of the Boulder Brush Facilities (construction, operation, maintenance, and decommissioning). These measures would be enforced by the site Safety Officer (SSO) and through ongoing worker safety training:

- Fire rules shall be posted on the Facilities bulletin board at the contractor's field office or permanent operations and maintenance building in areas visible to employees. This shall include the field offices of all contractors and subcontractors if more than one.
- Internal combustion engines used for construction of the Boulder Brush Facilities shall be equipped with spark arrestors that are in good working order.
- Once initial two-track roads have been cut, light-duty trucks and cars shall be used only on roads where the roadway is cleared of vegetation. Mufflers on cars and light-duty trucks shall be maintained in good working order.
- A cache of shovels, Mcleods, and Pulaskis shall be available at staging sites. The amount of equipment shall be determined by consultation between SSO and SDCFA/CAL FIRE. Additionally, on-site pickup trucks would be equipped with first aid kits, fire extinguishers, and shovels. Contractor vehicles would be required to include the same basic equipment.
- Equipment parking areas and small stationary engine sites (e.g., generators) shall be cleared of extraneous flammable materials and provided with a gravel surface.
- Restrict use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives during Red Flag Warnings. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall be easily accessible to personnel.
- A fire watch (person responsible for monitoring for ignitions) shall be provided during hot work and shall monitor for a minimum of 30 minutes following completion of the hot work activities.

- No smoking within 50 feet of combustible materials storage, 25 feet of dispensing, 20 feet of storage/refueling areas, and no smoking on Red Flag Warning days. No smoking signs shall be posted in these areas.
- Each construction area (if construction occurs simultaneously at various locations) shall be equipped with fire extinguishers and firefighting equipment sufficient to extinguish small fires.
- The Boulder Brush Developer shall ensure coordination with SDCFA/CAL FIRE to create a training component for emergency first responders to prepare for specialized emergency incidents that may occur at the Boulder Brush Facilities.
- Construction workers, plant personnel, and maintenance workers visiting the plant and/or transmission lines to perform maintenance activities shall receive training on the evacuation plans and routes, proper use of firefighting equipment and procedures to be followed in the event of a fire. Training records shall be maintained and be available for review by the SDCFA/CAL FIRE.
- Employees shall participate in annual fire prevention and response training exercises with SDCFA/CAL FIRE.
- Implement ongoing fire patrols during Red Flag Warning periods. The SSO shall be assigned as fire patrol to monitor work activities when an activity risk exists for fire compliance. The SSO shall verify proper tools and equipment are on site, assess any fire agency work restrictions, and serve as a lookout for fire starts, including staying behind (e.g., a fire watch) to make certain no residual fire exists. The SSO shall perform routine patrols of the facilities during the fire season equipped with a portable fire extinguisher and communications equipment. SDCFA/CAL FIRE shall be notified of the name and contact information of the SSO in the event of any change.
- Remote monitoring of major electrical equipment (transformers and inverters) shall screen for unusual operating conditions. Higher than nominal temperatures, for example, could be compared with other operational factors to indicate the potential for overheating which, under certain conditions, could precipitate a fire. Units could then be shut down or generation could be curtailed remotely until corrective actions are taken.
- Fires ignited on site shall be immediately reported to SDCFA and CAL FIRE.
- The engineering, procurement, and construction contracts for the Boulder Brush Facilities shall clearly state the fire safety requirements that are the

responsibility of any person who enters the Boulder Brush Facilities, as described in the CFPP.

- Upon completion of constructing the internal roadway network, light trucks and cars shall be used only on roads where the roadway is cleared of vegetation. Roads are to be kept free of ruts, drainages, wash boarding, and maintained in a hard-compacted state to support fire engines.

  a) All site Vehicles used during construction, operation and maintenance, and decommissioning shall be equipped with the following fire prevention equipment (employee vehicles are not required to include this equipment):

     - 10 pound, 4A:80BC dry chemical fire extinguisher
     - 46-inch round-point shovel
     - 5 gallons of water or a 5-gallon water backpack
     - First aid kit

- No driving (cars, trucks, all-terrain vehicles, or similar) over unmaintained dry vegetation shall occur.
- Vehicles can be parked a minimum of 10 feet from vegetation as long as the vehicle is parked in an area previously cleared of vegetation.
- Site activities shall be restricted during Red Flag Warning weather periods; stay alert to fire and weather conditions and, in the event of an emergency, evacuate employees if it is safe to do so.
- Consultants/contractors shall conduct operations safely to limit the risk of fire.
- Minimize combustible and flammable materials storage on site.
- Store combustible or flammable materials that need to be on site away from ignition sources.
- Keep evacuation routes free of obstructions.
- Tanks and containers shall be labeled as required in CFC Chapter 34, to identify potentially hazardous materials with their contents, and store in the same location as flammable or combustible liquids.
- Perform "hot work"[3] according to fire safety practices in a controlled environment and with fire suppression equipment at the job site. "Hot work"

[3] 'Hot work" is defined as operations involving cutting, welding, thermite welding, brazing, soldering, grinding, thermal spraying, thawing pipe, or other similar operations. Hot work areas are defined as the areas exposed to sparks, hot slag, radiant heat, or convective heat because of the hot work.

is defined as operations involving cutting, welding, thermite welding, brazing, soldering, grinding, thermal spraying, thawing pipe, or other similar operations. Hot work areas are defined as the areas exposed to sparks, hot slag, radiant heat, or convective heat because of the hot work.

- A fire watch person (Fire Patrol), with extinguishing capability (e.g. fire extinguishers), should be in place for all 'Hot Work" activities during construction. Ensure hot work adheres to the guidelines provided.
- Report and repair fuel leaks without delay.
- Do not overload circuits or rely on extension cords where other options would be safer.
- Turn off and unplug electrical equipment when not in use.

Campo Wind Facilities

M-HZ-A through **M-HZ-C** are recommended in the EIS and included herein, to reduce impacts associated with the handling and/or accidental release of hazardous materials. **M-HZ-D** addresses wind turbine setbacks. **M-BI-C (h)** addresses wildfire hazards, and is first outlined in Chapter 2.3, Biological Resources of this EIR. This measure is the recommended mitigation measure included in the EIS, for the Campo Wind Facilities on the Reservation, subject to the BIA's ROD.

M-HZ-A **Hazardous Materials Management Plan (HMMP).** Prior to approval of final construction plans by the Campo Environmental Protection Agency, the Developer and/or contractor(s) will prepare an HMMP for the construction phase of the Campo Wind Facilities, which would be reviewed and approved by the coordinating agencies. The HMMP would be included as part of all contractor specifications and final construction plans to the satisfaction of the appropriate agency. The HMMP would include the following components:

- The HMMP shall identify all hazardous materials that could be present on any portion of the construction site, including fuels, solvents, and petroleum products. The HMMP would address storage, use, transport, and disposal of each hazardous material anticipated to be used at the site. The HMMP would establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials.
- The HMMP would identify secondary containment and spill prevention countermeasures, as well as a contingency HMMP to identify potential spill hazards, how to prevent their occurrence, and responses for different

quantities of spills that may occur. Secondary containment and countermeasures would be in place throughout construction so that if any leaks or spills occur, responses shall be made immediately. Emergency spill supplies and equipment would be clearly marked and located adjacent to all areas of work and in temporary construction staging areas.

- The HMMP would identify adequate safety and fire-suppression devices for construction-related activities involving toxic, flammable, or explosive materials (including refueling construction vehicles and equipment). Such devices would be readily accessible at the Camo Wind Facilities, as specified by the Campo Reservation Fire Protection District (CRFPD) and per the Uniform Building Code and Uniform Fire Code.
- Prior to construction, the Developer/all contractor and subcontractor personnel would receive training regarding the components of the HMMP, as well as applicable environmental laws and regulations related to hazardous materials handling, storage, and spill prevention and response measures.
- The Developer or Developer's contractor would designate a qualified environmental field representative who would be on site to observe, enforce, and document adherence to the plan for all construction activities. The HMMP would be submitted to the appropriate agencies for approval prior to construction.

M-HZ-B **Health and Safety Program.** Prior to approval of final construction plans, the Developer or Developer's contractor(s) will prepare a Health and Safety Program (HSP) for each phase of the Campo Wind Facilities (i.e., construction, operation, and decommissioning). The HSP would be developed to protect both workers and the general public during all phases of the Campo Wind Facilities and would be implemented to educate construction workers about the hazards associated with the Campo Wind Facilities and the safety measures that must be taken to prevent injury. The HSP would include standards regarding occupational safety, safe work practices for each task, hazard training requirements for workers, and mechanisms for documentation and reporting.

Regarding occupational health and safety, the HSP would identify all applicable federal and Tribal occupational safety standards; establish safe work practices for each task (e.g., requirements for personal protective equipment and safety harnesses; OSHA standard practices for safe use of explosives and blasting agents; and measures for reducing occupational electromagnetic field exposures); establish fire safety evacuation procedures; and define safety

performance standards. The HSP would include a training program to identify hazard training requirements for workers and establish procedures for providing required training to all workers. The HSP would include worker training regarding how to identify potentially contaminated soils and/or groundwater. Documentation of training and a mechanism for reporting serious accidents to appropriate agencies would be established.

The HSP would identify requirements for temporary fencing around staging areas, storage yards, and excavation areas during construction or decommissioning activities. Such fencing would be designed to restrict transient traffic, off-highway vehicle use, and the general public from accessing areas under construction and would be removed once construction or decommissioning activities are complete. The HSP would also identify appropriate measures to be taken during operation of the Campo Wind Facilities to limit public access to hazardous facilities (e.g., permanent fencing, locked access).

M-HZ-C **Safety Assessment**. Prior to commencing construction activities, the Developer or Developer's contractor(s) shall prepare a safety assessment to describe potential safety issues associated with the Campo Wind Facilities, how safety prevention measures would be implemented, where medical aid kits would be located, the appropriate response action for each safety hazard, and procedures for notifying the appropriate authorities and agencies involved. The safety assessment shall address issues such as site access/hazards, construction hazards, safe work practices, security, heavy equipment transportation, traffic management, emergency procedures, and fire control.

M-HZ-D **Wind Turbine Safety Zone and Setbacks.** Prior to approval of final construction plans and as part of the HSP (**M-HZ-B**), it is recommended that the Developer demonstrate to the Tribe adequate setbacks for wind turbine generators from residents and occupied buildings, roads, rights-of-way, transmission lines, and other public access areas, in compliance with the Campo Lease. Plans detailing the proposed setbacks would be submitted to the Tribe for review and approval at least 30 days prior to construction.

M-BI-C (h) **Fire Protection**. To minimize the potential exposure of the Project to fire hazards, a Boulder Brush Fire Protection Plan (FPP) shall be prepared and a Fire Protection Plan for the Campo Wind Facilities shall be prepared to the satisfaction of the CRFPD. The FPPs shall be implemented in conjunction with development of the Project.

2.5.7 Conclusion

This section provides a synopsis of the conclusion reached in each of the impact analyses, and the level of impact that would occur after mitigation measures are implemented.

Hazardous Materials

Project

With implementation of an HMMP (**M-HZ-1** and **M-HZ-A**), the possibility of an accidental spill and/or unauthorized release of hazardous materials is minimized. Implementation of an HSP (**M-HZ-B**) and Safety Assessment (**M-HZ-C**) would minimize exposure of occupational workers, the general public, and the environment from potentially contaminated materials. Furthermore, the Developer would ensure that the Project is in compliance with all applicable laws and regulations. Therefore, with implementation of an HMMP, the Project would result in **less-than-significant** impacts related to hazardous materials contamination, including the routine transport, use, and disposal of hazardous substances.

Boulder Brush Facilities

Implementation of an HMMP (**M-HZ-1**) would ensure that the possibility of an accidental spill and/or unauthorized release of hazardous materials on private land is minimized. Additionally, the Boulder Brush Facilities would comply with all applicable laws and regulations. Therefore, implementation of **M-HZ-1** would result in **less-than-significant** impacts related to hazardous materials contamination, including the routine transport, use, and disposal of hazardous substances.

Campo Wind Facilities

Implementation of an HMMP (**M-HZ-A**) would ensure that the possibility of an accidental spill and/or unauthorized release of hazardous materials on the Reservation is minimized. Implementation of a HSP (**M-HZ-B**) and a Safety Assessment (**M-HZ-C**) would minimize exposure of occupational workers, the general public, and the environment from potentially contaminated materials. Implementation of **M-HZ-D** would reduce the potential health and safety risks of wind turbines. Additionally, the Campo Wind Facilities would comply with all applicable laws and regulations. Therefore, implementation of **M-HZ-A, M-HZ-B, M-HZ-C,** and **M-HZ-D** would result in **less-than-significant** impacts related to hazardous materials contamination, including the routine transport, use, and disposal of hazardous substances.

Mitigation measures **M-HZ-A through M-HZ-D** are recommended in the EIS, to be part of the BIA approval and ROD. While the County cannot guarantee that the BIA will require implementation of recommended mitigation measures on tribal land as part of its decision under

the regulations governing the leasing of tribal land at 25 CFR Part 162, BIA has prepared an EIS for the Project that recommends these mitigation measures, and BIA can and should include these measures as a requirement of the BIA approval and ROD.

Airport Hazards

Project

The Project would result in **less-than-significant impacts** to an airport land use plan because it does not propose incompatible uses within 2 miles of a public airport or public use airport, or within the vicinity of an active private airstrip that would result in a safety hazard for people residing or working in the Project Area. Additionally, with Project compliance with applicable FAA regulations and recommendations, impacts would be **less than significant**.

Boulder Brush Facilities

The Boulder Brush Facilities would result in **less-than-significant impacts** to an airport land use plan because it does not propose incompatible uses within 2 miles of a public airport or public use airport, or within the vicinity of an active private airstrip that would result in a safety hazard for people residing or working in the Project Area; impacts would be **less than significant**. Therefore, Boulder Brush Facilities would not result in airport hazards.

Campo Wind Facilities

The Campo Wind Facilities would result in **less-than-significant impacts** to an airport land use plan because it does not propose incompatible uses within 2 miles of a public airport or public use airport, or within the vicinity of an active private airstrip that would result in a safety hazard for people residing or working in the Project Area. Additionally, with compliance with applicable FAA regulations and recommendations, impacts would be **less than significant** regarding FAA regulatory compliance. Therefore, Campo Wind Facilities would not result in airport hazards.

Wildfire Hazards

Project

The Project could potentially create wildfire hazards during construction and decommissioning activities due to increased activity and ignition sources. However, with the implementation of FPPs (**M-WF-1/M-BI-C (h)**), impacts would be less than significant because the FPPs would ensure compliance with the Consolidated Fire Code and additional wildfire-related regulations, and would provide project design features to minimize fire risk. Additionally, with implementation of a Traffic Control Plan and required construction notification procedures, in addition to operational

compliance with FPPs, impacts to access for emergency responders during a wildfire hazard during the construction, operation, and decommissioning phases would be **less than significant.**

Boulder Brush Facilities

With the implementation of an FPP (**M-WF-1**), impacts would be less than significant since the FPP would ensure compliance with the Consolidated Fire Code and additional wildfire-related regulations, and would provide project design features to minimize fire risk. Additionally, with implementation of a Traffic Control Plan and required construction notification procedures, in addition to operational compliance with the FPP, impacts to access for emergency responders during a wildfire hazard during the construction, operation, and decommissioning phases on private lands would be **less than significant.**

Campo Wind Facilities

Compliance with applicable wildfire-related regulations and implementation of project design features would minimize fire risk. Additionally, with implementation of a Traffic Control Plan and required construction notification procedures, as well as operational compliance with an FPP prepared to the satisfaction of the CRFPD (**M-BI-C (h)**), impacts to access for emergency responders during a wildfire hazard during the construction, operation, and decommissioning phases on the Reservation would be **less than significant.**

M-BI-C (h) is recommended in the EIS, to be part of the BIA approval and ROD. While the County cannot guarantee that the BIA will require implementation of recommended mitigation measures on tribal land as part of its decision under the regulations governing the leasing of tribal land at 25 CFR Part 162, the BIA has prepared an EIS for the Project with these same recommended mitigation measures, and BIA can and should include these measures as a requirement of the BIA approval and ROD.

Hazards Associated with Interference with Emergency Responses

Project

The Project would not exceed emergency response objectives identified in the Safety Element of the County General Plan and would be in compliance with FAA regulations which would ensure that the Project would not result in significant risks associated with aviation activities for emergency response. Therefore, impacts would be **less than significant.**

Boulder Brush Facilities

The Boulder Brush Facilities would not exceed emergency response objectives identified in the Safety Element of the County General Plan. Therefore, impacts as a result of Boulder Brush Facilities would be **less than significant.**

Campo Wind Facilities

Compliance with FAA regulations ensure that the Campo Wind Facilities would not result in significant risks associated with aviation activities for emergency response. Additionally, the Campo Wind Facilities would be located adjacent to existing towers of similar height. Therefore, impacts as a result of Campo Wind Facilities would be **less than significant.**

Public Concerns for Health

Low-Frequency Noise

The Project is not anticipated to result in an adverse health effects related to low-frequency noise. Based on the findings in the Public Health Position Statement for Human Health Effects of Wind Turbines (County of San Diego 2019), additional research is needed to conclude if there is a direct link between low-frequency noise generated by turbines and health effects. Therefore, no mitigation is required or provided.

Electromagnetic Fields

The Project is not anticipated to result in an adverse health effects related to EMF. The California Public Utilities Commission (CPUC) implemented a number of EMF measurements, research, and education programs, and provided direction that led to the preparation of the California Department of Health Services' review of existing studies related to EMFs from power lines and associated potential health risks. The CPUC stated, "at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences" (CPUC 2018). The CPUC has not established any connection between EMF exposure and negative effects to human health. Therefore, no mitigation is provided or required.

Shadow Flicker

Although some receptors may be exposed to shadow flicker, due to the slow rotation of the Project's turbine blades, it is not anticipated that shadow flicker would result in adverse health effects.

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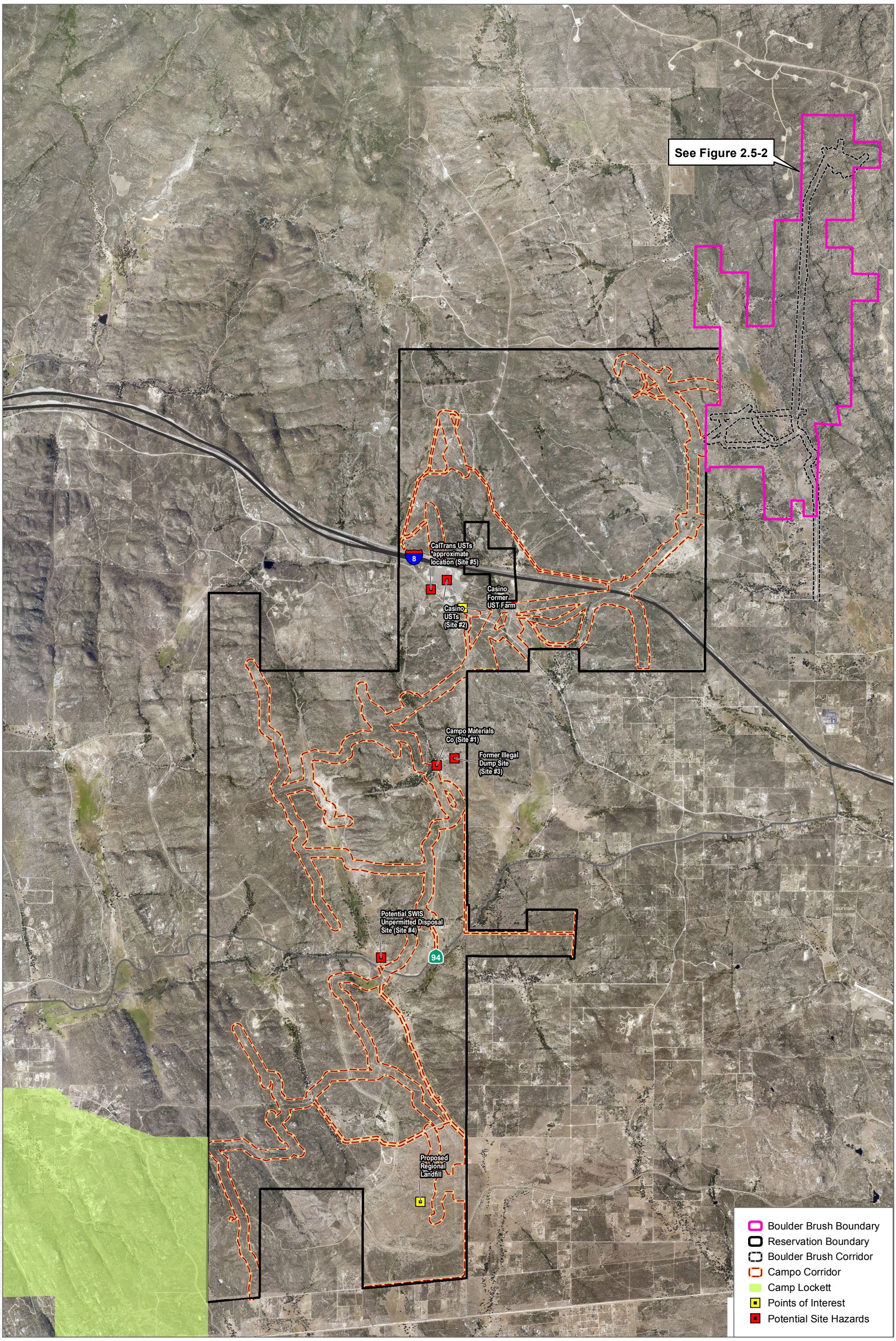

SOURCE: SANGIS 2017

DUDEK

0 1,950 3,900 Feet

FIGURE 2.5-1

Reservation Boundary Hazards

Campo Wind Project with Boulder Brush Facilities

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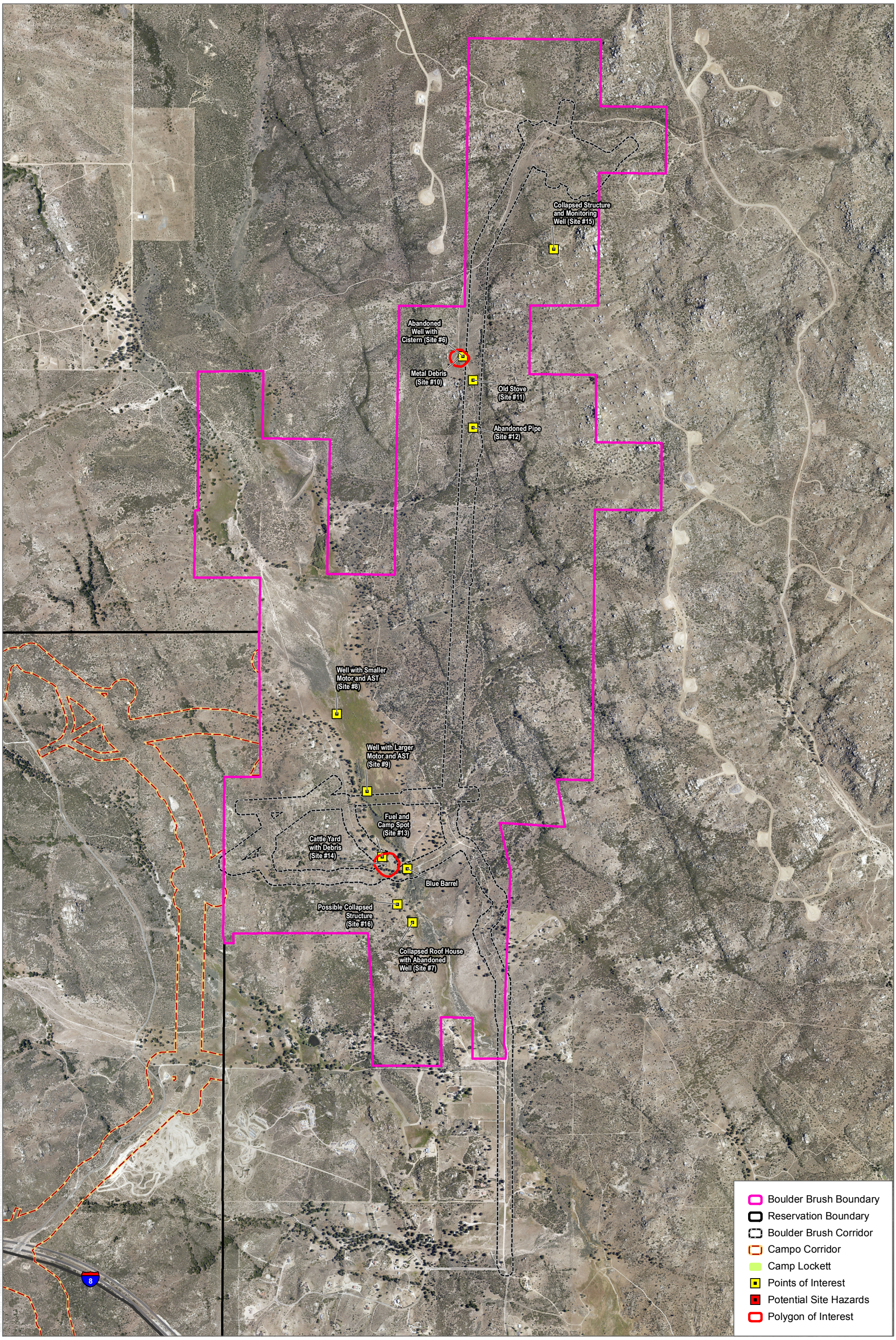

SOURCE: SANGIS 2017

DUDEK

0 750 1,500 Feet

FIGURE 2.5-2

Boulder Brush Boundary Hazards

Campo Wind Project with Boulder Brush Facilities

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