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Document Title:	Section 3-9 Hazards and Hazardous Materials
Description:	This Section evaluates the direct, indirect and cumulative impacts the Project may have related to hazards and hazardous materials and identifies any required Applicant-Proposed Measures (APM) and any required Mitigation Measures.
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3.9 HAZARDS AND HAZARDOUS MATERIALS

This section describes existing hazards and hazardous materials conditions that could affect or be affected by the project. The analysis describes the applicable regulations, presents an overview of existing conditions, identifies the criteria used for determining the significance of environmental impacts, lists applicant-proposed measures (APMs) that would be incorporated into the project to avoid or substantially lessen potentially significant impacts to the extent feasible, and describes the potential hazards or hazardous materials impacts of the proposed project. Hazards that relate to geology and seismicity are discussed in Section 3.7, Geology and Soils. The analysis is based on a review of existing resources, technical data, and applicable laws, regulations, plans, and policies, as well as the following technical reports prepared for the project:

- *Phase I Environmental Site Assessment for the Soda Mountain Solar Project, LLC*, San Bernardino County, California prepared by SWCA Environmental Consultants (SWCA) (2024) (Appendix I)

3.9.1 Regulatory Setting

3.9.1.1 Federal

ENVIRONMENTAL PROTECTION AGENCY CALIFORNIA TOXICS RULE

In 2000, the U.S. Environmental Protection Agency (EPA) promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in California to protect human health and the environment. Under Clean Water Act Section 303(c)(2)(B), the EPA requires states to adopt numeric water quality criteria for priority toxic pollutants for which the EPA has issued criteria guidance and the presence or discharge of which could reasonably be expected to interfere with maintaining designated uses. These federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries.

RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act (RCRA) (42 United States Code [USC] 6901 et seq.), enacted in 1976, governs the management and disposal of solid and hazardous waste. Congress enacted RCRA to address the increasing problems the nation faced from its growing volume of municipal and industrial waste. RCRA amended the Solid Waste Disposal Act of 1965. It set national goals for

1. protecting human health and the natural environment from the potential hazards of waste disposal,
2. promoting conservation of energy and natural resources,
3. reducing the amount of waste generated through source reduction and recycling, and
4. ensuring the management of waste in an environmentally sound manner.

RCRA is now most widely known for the regulations promulgated under the act that set standards for the treatment, storage, and disposal of hazardous waste in the United States.

The EPA has published waste management regulations, which are codified in 40 Code of Federal Regulations (CFR) 239–282. Regulations regarding management of hazardous waste begin in Part 260. As noted below, California has enacted laws and created regulations that are at least as stringent as the

federal regulations. Furthermore, the RCRA statute authorizes states (including California) to carry out many of the functions of the federal law through their own hazardous waste programs if such programs have been approved by the EPA.

Subtitle C directs the EPA to establish controls on the management of hazardous wastes from their point of generation through their transportation and treatment, storage, and/or disposal. Because RCRA requires controls on hazardous waste generators (i.e., sites that generate hazardous waste in the first place), transporters, and treatment, storage, and disposal facilities (i.e., facilities that ultimately treat and/or dispose of or recycle the hazardous waste) (40 CFR 260–264), the overall regulatory framework has become known as the *cradle-to-grave* system. The program exacts stringent recordkeeping and reporting requirements on generators, transporters, and operators of treatment, storage, and disposal facilities handling hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments, which affirmed and extended the cradle-to-grave system of regulating hazardous wastes.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT AND SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC 9601), also known as Superfund, created a tax on the chemical and petroleum industries to provide for response and cleanup of hazardous substances that may endanger public health or the environment. CERCLA established requirements for the treatment of abandoned hazardous waste sites and provided for liability of persons responsible for releases of hazardous waste at these sites. The Superfund Amendments and Reauthorization Act (SARA) (42 USC 103) amended CERCLA to increase state involvement and required Superfund actions to consider state environmental laws and regulations. The applicable part of SARA for the project is Title III, otherwise known as the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) (42 USC 11001–11050). EPCRA establishes requirements for federal, state, and local governments, as well as Native American Tribes and industry members, regarding emergency planning and reporting on hazardous and toxic chemicals. Key sections of the law include the following:

- **Section 304**: Requires immediate notification to the local emergency planning committee (LEPC) and the state emergency response commission (SERC) when a hazardous material is released in excess of its reportable quantity (RQ). If a CERCLA-listed hazardous substance RQ is released, notification must also be given to the National Response Center in Washington, D.C. (RQs are listed in 40 CFR 302, Table 302.4). These notifications are in addition to notifications given to the local emergency response team or fire personnel.
- **Section 311**: Requires that either material safety data sheets (MSDSs) for all hazardous materials or a list of all hazardous materials be submitted to the SERC, LEPC, and local fire department.

CLEAN AIR ACT

Regulations under the Clean Air Act (CAA) (42 USC 7401 et seq.; 49 CFR 68) are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store a threshold quantity (TQ) or greater of listed regulated substances to develop a risk management plan that includes hazard assessments and response programs to prevent accidental releases of listed chemicals.

TOXIC SUBSTANCES CONTROL ACT

The federal Toxic Substances Control Act of 1976 (15 USC 2601–2692) and RCRA established a program administered by the EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste.

HAZARDOUS MATERIALS TRANSPORT ACT

The U.S. Department of Transportation (DOT), in conjunction with the EPA, is responsible for enforcing and implementing federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 (49 USC 5101–5127) directs the DOT to establish criteria and regulations regarding the safe storage and transportation of hazardous materials. Title 49 CFR Parts 171–180 regulate the transportation of hazardous materials, the types of material that are defined as hazardous, and the marking of vehicles transporting hazardous materials.

FEDERAL AVIATION ADMINISTRATIVE REGULATIONS

The Federal Aviation Administration (FAA) regulates aviation at regional, public, private, and military airports and regulates objects affecting navigable airspace including structures taller than 200 feet. DOT and the California Department of Transportation (Caltrans) also require the applicant to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration. According to 14 CFR 77.17, notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing any adverse impacts on the safe and efficient use of navigable airspace. Any structure that would constitute a hazard to air navigation, as defined in 14 CFR 77, requires issuance of a permit from Caltrans's Division of Aeronautics. The permit is not required if the FAA aeronautical study determines that the structure has no impact on air navigation.

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

The Occupational Safety and Health Administration (OSHA) administers the Occupational Safety and Health Act (29 USC 651), which requires special training of handlers of hazardous materials, notification to employees who work in the vicinity of hazardous materials, and acquisition from the manufacturer of MSDSs. MSDSs provide workers and emergency response personnel with information about potentially harmful materials and procedures for safe handling of those materials in the workplace. The Occupational Safety and Health Act also requires the training of employees to remediate any hazardous material accidental releases.

NATIONAL FIRE PROTECTION ASSOCIATION 855

National Fire Protection Association (NFPA) 855 (Standard for the Installation of Stationary Energy Storage Systems) provides minimum requirements for mitigating hazards associated with energy storage systems (ESSs). The design, construction, and installation of ESSs and related equipment shall comply with NFPA 855 Chapter 4, as supplemented or modified by the technology-specific provisions in Chapters 9 through 13. Chapter 4 includes, but is not limited to, provisions regarding gas release, testing requirements, hazard mitigation analysis, availability of operation and maintenance (O&M) manuals, and staff training. ESS plans and specifications should be submitted to the jurisdictional agency. Underwriter's Laboratory (UL) 9540 falls under NFPA 855 and addresses key issues associated with energy storage including battery system safety, functional safety, environmental performance, containment, and fire detection and suppression. The UL 9540A test is a method to evaluate thermal runaway fire propagation in battery energy storage systems (BESS).

CALIFORNIA DESERT CONSERVATION AREA PLAN OF 1980, AS AMENDED

The Bureau of Land Management's (BLM's) California Desert Conservation Area (CDCA) Plan (BLM 1999) requires that in all areas designated Multiple Use Class L, M, or I, fire suppression measures be taken in accordance with specific fire management plans subject to such conditions as the authorized officer deems necessary, such as the use of motorized vehicles, aircraft, and fire-retardant chemicals.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1978

Under the Federal Land Policy and Management Act of 1978 (43 USC 1701–1785), the BLM is authorized and required to manage federal lands, which includes providing funding, resources, and regulations for the prevention of and protection from wildland fires. In California, the BLM establishes seasonal and year-round fire prevention orders and restrictions to assist with wildland fire prevention efforts throughout federal public lands within the California Desert District, which consists of Inyo, Imperial, Kern, Mono, Los Angeles, San Bernardino, San Diego, and Riverside Counties.

DESERT RENEWABLE ENERGY CONSERVATION PLAN

The Desert Renewable Energy Conservation Plan (DRECP) (BLM 2016) is an interagency plan developed by the BLM, the U.S. Fish and Wildlife Service, the California Energy Commission, and the California Department of Fish and Wildlife. This land use plan functions as an amendment put in place over the CDCA Plan, Bishop Resource Management Plan, and Bakersfield Resource Management Plan. This plan was developed to address the need for a landscape approach to renewable energy and conservation planning in the California desert.

The DRECP Land Use Plan Amendment includes land use allocations to replace the multiple-use classes established in the CDCA Plan. The project is within lands classified as General Public Land for management.

3.9.1.2 State

DEPARTMENT OF TOXIC SUBSTANCE CONTROL REGULATIONS

The Department of Toxic Substance Control (DTSC) is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. The DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Title 22, Division 20, Chapters 6.5–10.6; and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Government Code Section 65962.5 (commonly referred to as the Cortese List) includes the DTSC-listed hazardous waste facilities and sites, California Department of Public Health (CDPH) lists of contaminated drinking water wells, sites listed by the State Water Resources Control Board as having underground storage tank (UST) leaks and that have had a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites that have had a known migration of hazardous waste and/or material.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS

The 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 generally more stringent than federal regulations. An employer is required to monitor worker exposure to listed hazardous substances and notify workers of occurrences (8 California Code of Regulations [CCR] 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT

The Safe Drinking Water and Toxics Enforcement Act (Health and Safety Code 25249.5 et seq.) identifies chemicals that cause cancer and reproductive toxicity, provides information for the public, and prevents discharge of the chemicals into sources of drinking water. Lists of the chemicals of concern are published and updated periodically. The Safe Drinking Water and Toxics Enforcement Act is administered by California's Office of Environmental Health Hazard Assessment.

ABOVEGROUND PETROLEUM STORAGE ACT

Assembly Bill (AB) 1130 (2007) updated the Aboveground Petroleum Storage Act of 1990 (Health and Safety Code 25270–25270.13) and requires the owner or operator of a tank facility with an aggregate storage capacity greater than 1,320 gallons of petroleum to file an inventory statement with the local Certified Unified Program Agency (CUPA) and prepare a Spill Prevention, Control, and Countermeasure (SPCC) plan. An SPCC plan must identify appropriate spill containment or equipment for diverting spills from sensitive areas, as well as discuss facility-specific requirements for the storage system, inspections, recordkeeping, security, and personnel training. The CUPA in the vicinity of the project site is the Hazardous Materials Division of the San Bernardino County Fire Department.

HAZARDOUS MATERIALS RELEASE RESPONSE PLANS AND INVENTORY ACT OF 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act (Health and Safety Code 25500 et seq.; 19 CCR 2620 et seq.), requires local governments to regulate local businesses using hazardous materials in excess of certain quantities to prepare a Hazardous Materials Business Plan (HMBP) that describes their facilities, inventories, emergency response plans, and training programs to their local CUPA and to report releases to their CUPA and the California Office of Emergency Services. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste. HMBPs shall include the following: 1) a hazardous material inventory in accordance with the minimum standards for business plans (19 CCR 2729.2–2729.7); 2) emergency response plans and procedures (19 CCR 2731); and 3) an appropriate training program (19 CCR 2732). Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state. Each business shall prepare a HMBP if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

1. 500 pounds of a solid substance
2. 55 gallons of a liquid
3. 200 cubic feet of compressed gas
4. A hazardous compressed gas in any amount
5. Hazardous waste in any quantity

CALIFORNIA ACCIDENTAL RELEASE PROGRAM

The California Accidental Release Program (CalARP) regulates the registration and handling of regulated substances (Health and Safety Code 25531–25543.3; 19 CCR 2735.1–2785.1). Regulated substances are any chemicals designated as an extremely hazardous substance by the EPA as part of its implementation of SARA Title III. Health and Safety Code Section 25531 overlaps or duplicates some of the

requirements of SARA and the CAA. Facilities handling or storing regulated substances at or above TQ must register with their local CUPA and prepare a resource management plan (RMP).

PROCESS SAFETY MANAGEMENT OF ACUTELY HAZARDOUS MATERIALS

The regulation governing process safety management of acutely hazardous materials (8 CCR 5189) requires facility owners that store a TQ of hazardous materials to develop and implement effective safety management plans that ensure that hazardous materials are handled safely. Acutely hazardous materials are substances that possess toxic, reactive, flammable, or explosive properties. While such requirements primarily provide for the protection of workers, they also indirectly improve public safety and are coordinated with the RMP process.

HEALTH AND SAFETY CODE SECTION 41700

This statute states, "No person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property."

HAZARDOUS WASTE CONTROL LAW

The Hazardous Waste Control Law (HWCL) (Health and Safety Code 25100–25249) created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The law is implemented by regulations (22 CCR 66250 et seq.) that describe the following requirements for the proper management of hazardous waste:

1. Identification and classification
2. Generation and transportation
3. Design and permitting of recycling, treatment, storage, and disposal facilities
4. Treatment standards
5. Operation of facilities and staff training
6. Closure of facilities and liability requirements

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the HWCL and its implementing regulations, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

UNIFORM HAZARDOUS WASTE AND HAZARDOUS MATERIALS MANAGEMENT REGULATORY PROGRAM

The California Environmental Protection Agency adopted regulations in 1996 to establish a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) and designated local CUPAs. This program requires the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, the locally designated CUPA. The Program Elements consolidated under the Unified Program are the following:

1. Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (i.e., Tiered Permitting),

2. Aboveground Petroleum Storage Tank SPCC,
3. Hazardous Materials Release Response Plans and Inventory Program (i.e., Hazardous Materials Disclosure or Community-Right-To-Know),
4. CalARP,
5. UST Program, and
6. Uniform Fire Code Plans and Inventory Requirements.

The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. It is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA. The Hazardous Materials Division of the San Bernardino County Fire Department is the CUPA for the project site.

ASSEMBLY BILL 341/SENATE BILL 1018 MANDATORY COMMERCIAL RECYCLING

Mandatory Commercial Recycling was one of the measures adopted in the AB 32 Scoping Plan by the California Air Resources Board pursuant to the California Global Warming Solutions Act (Chapter 488, Statutes of 2006). The Mandatory Commercial Recycling Measure focuses on increased commercial waste diversion as a method to reduce greenhouse gas emissions. The regulation was adopted at the California Department of Resources Recycling and Recovery (CalRecycle) January 17, 2012, monthly public meeting and reflects the statutory provisions of AB 341 (Chesbro, Chapter 476, Statutes of 2011). The regulation was approved by the Office of Administrative Law on May 7, 2012, and became effective immediately. On June 27, 2012, the governor signed Senate Bill 1018 which included an amendment that requires a business that generates 4 cubic yards or more of commercial solid waste per week to arrange for recycling services (CalRecycle2024).

CALIFORNIA HIGHWAY PATROL REGULATIONS

A valid Hazardous Materials Transportation License, issued by the California Highway Patrol, is required by the laws and regulations of Vehicle Code Section 3200.5 for transportation of either:

1. Hazardous materials shipments for which the display of placards is required by state regulations; or
2. Hazardous materials shipments of more than 500 pounds, which would require placards if shipping greater amounts in the same manner.

Additional requirements on the transportation of explosives, inhalation hazards, and radioactive materials are enforced by the California Highway Patrol under the authority of the Vehicle Code. Transportation of explosives generally requires consistency with additional rules and regulations for routing, safe stopping distances, and inspection stops (14 CCR 1150–1152.10). Inhalation hazards face similar, more restrictive rules and regulations (13 CCR 1157–1157.8). Radioactive materials are restricted to specific safe routes for transportation of such materials.

OTHER CALIFORNIA REGULATIONS

Other regulations applicable to the project include the following:

- High Voltage Electrical Safety Orders (8 CCR 2700 et seq.), which establish essential requirements and minimum standards for installation, operation, and maintenance of electrical equipment to provide practical safety and freedom from danger.
- Fire Prevention Standards for Electric Utilities (14 CCR 1250–1258), which provide specific exemptions from electric pole and tower firebreak and electric conductor clearance standards and specify when and where standards apply. These standards establish minimum clearance requirements for flammable vegetation and materials surrounding structures.
- The California Green Building Standards Code, also known as CALGreen, includes mandatory recycling. Code Section 5.408 requires that 65 percent of the nonhazardous waste be recycled or salvaged for reuse. Code Section 5.408.3 (excavated soil and land clearing debris) requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled.

3.9.1.3 Local

The project is located on federally owned land managed by the BLM. While it is not subject to County of San Bernardino land use plans and ordinances, local plans were reviewed for informational purposes.

SAN BERNARDINO COUNTY HAZARDOUS WASTE MANAGEMENT PLAN

AB 2948, commonly known as the Tanner Bill, authorizes counties to prepare Hazardous Waste Management Plans (HWMPs) in response to the need for safe management of hazardous wastes (California Health and Safety Code 25135–25135.9). The HWMP was adopted by the County of San Bernardino Board of Supervisors and approved by the former California Department of Health Services in February 1990. The HWMP serves as the primary planning document for the management of hazardous waste in San Bernardino County. The HWMP identifies the types and amounts of waste generated in the county; establishes programs for managing these wastes; identifies an application review process for the siting of specified hazardous waste facilities; identifies mechanisms for reducing the amount of waste generated in the county; and identifies goals, policies, and actions for achieving effective hazardous waste management.

SAN BERNARDINO COUNTY DIVISION OF ENVIRONMENTAL HEALTH SERVICES, SOLID WASTE LOCAL ENFORCEMENT AGENCY

San Bernardino County Environmental Health Services, Solid Waste Local Enforcement Agency (LEA) inspects and permits refuse vehicles and solid waste facilities (e.g., landfills, transfer stations, and composting facilities) (San Bernardino County 2024). State waste management programs are primarily conducted through county local enforcement agencies. Local enforcement agencies have the primary responsibility for ensuring the correct operation and closure of solid waste facilities in the state, and for guaranteeing proper storage and transportation of solid wastes (CalRecycle 2024).

SAN BERNARDINO COUNTY EMERGENCY RESPONSE PLAN

The goal of hazard mitigation is to minimize or prevent the loss of life and damage to property. According to the Federal Emergency Management Agency (FEMA), hazard mitigation is defined as “any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards.” FEMA defines a hazard as “any event or condition with the potential to cause fatalities, injuries, property

damage, infrastructure damage, agricultural loss, environmental damage, business interruption, or other loss."

The objective of the County of San Bernardino's Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) is to illustrate the strategies for minimizing or preventing hazard risks in the unincorporated area of the county and the five special districts (San Bernardino County 2017). The MJHMP approach incentivizes communities to establish objectives and develop projects aimed at diminishing risk and fostering more disaster-resilient communities through the analysis of potential hazards.

SAN BERNARDINO COUNTY FIRE DEPARTMENT—HAZARDOUS MATERIALS DIVISION

The Hazardous Materials Division of the San Bernardino County Fire Department is the local agency responsible for the enforcement of a variety of hazardous materials management requirements. It is the state-designated CUPA for San Bernardino County. The purpose of the CUPA program is to provide a comprehensive approach to reduce the overlapping and sometimes conflicting requirements of different governmental agencies. The CUPA provides consolidation and consistency in reporting requirements, permit formats, inspection criteria, enforcement standards, and fees for various hazardous materials programs. The CUPA is required by state law to maintain a list of facilities within the county that are known to use, store, and/or generate hazardous materials or wastes. Facilities that handle hazardous materials or generate hazardous waste must obtain a permit from the CUPA. The San Bernardino County Fire Department manages the hazardous material and hazardous waste programs noted above.

SAN BERNARDINO COUNTY FIRE DEPARTMENT FIRE PREVENTION STANDARDS

In accordance with the California Fire Code, the San Bernardino County Fire Department incorporated the Fire Apparatus Access Roads standard (No. 503.1) and Fire Personnel Key Boxes (Knox Box) standard (No. 506) into its operational standards. Under these standards, all required building plans must be submitted to the Fire Department for review and approval of access roads and points and Knox Box mounting location, position, and operating standards prior to installation (San Bernardino County Fire Department 2023).

BAKER AIRPORT COMPREHENSIVE LAND USE PLAN

The Airport Comprehensive Land Use Plan (ACLUP) for Baker Airport defines the planning boundary for the airport as the Federal Aviation Regulation (FAR) Part 77 horizontal surface. Within this boundary, the area is designated into three Safety Review Areas—Areas 1, 2, and 3—that reflect a particular level and type of aviation-related hazard or risk within each safety area. No portion of the project would be located within any of the three Safety Review Areas for the airport (San Bernardino County 1992).

SAN BERNARDINO COUNTYWIDE PLAN

The San Bernardino Countywide Plan (San Bernardino County 2024a), adopted by the Board of Supervisors in 2020, updates and expands the County's General Plan by addressing the physical, social, and economic issues facing the unincorporated portions of the county. The Countywide Plan consists of the Policy Plan, the Business Plan, and a communities plan. The Policy Plan, based on the former General Plan, consists of 11 elements: Land Use, Housing, Infrastructure and Utilities, Transportation and Mobility, Natural Resources, Renewable Energy and Conservation, Cultural Resources, Hazards, Personal and Property Protection, Economic Development, and Health and Wellness. The Business Plan consists of a policy-based governance element along with an implementation plan. The communities plan

consists of 35 Community Action Guides that provide a framework for communities to create future character and independent identity through community actions.

The following policies in the Hazards Element and Infrastructure and Utilities Element of the Countywide Plan are relevant to this analysis (San Bernardino County 2024b).

Goal HZ-1 Natural Environmental Hazards. Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by natural environmental hazards and adaptation to potential changes in climate.

- **Policy HZ-1.2 New development in environmental hazard areas**. We require all new development to be located outside of the environmental hazard areas listed below. For any lot or parcel that does not have sufficient buildable area outside of such hazard areas, we require adequate mitigation, including designs that allow occupants to shelter in place and to have sufficient time to evacuate during times of extreme weather and natural disasters.
    1. Flood: 100-year flood zone, dam/basin inundation area
    2. Geologic: Alquist Priolo earthquake fault zone; County-identified fault zone; rockfall/debris-flow hazard area, medium or high liquefaction area (low to high and localized), existing and County-identified landslide area, moderate to high landslide susceptibility area)
    3. Fire: high or very high fire hazard severity zone

Goal HZ-2 Human-generated Hazards. People and the natural environment protected from exposure to hazardous waste facilities to protect public health and avoid impacts on the natural environment.

- **Policy HZ-2.1 Hazardous waste facilities.** We regulate and buffer hazardous waste facilities to protect public health and avoid impacts on the natural environment.
- **Policy HZ-2.2 Database of hazardous materials**. We maintain up-to-date databases of the storage, use, and production of hazardous materials, based on federally- and state-required disclosure and notification, to appropriately respond to potential emergencies.
- **Policy HZ-2.3 Safer alternatives**. We minimize the use of hazardous materials by choosing and by encouraging others to use non-toxic alternatives that do not pose a threat to the environment.
- **Policy HZ-2.4 Truck routes for hazardous materials**. We designate truck routes for the transportation of hazardous materials through unincorporated areas and prohibit routes that pass through residential neighborhoods to the maximum extent feasible.
- **Policy HZ-2.5 Community education**. We engage with residents and businesses to promote safe practices related to the use, storage, transportation, and disposal of hazardous materials.
- **Policy HZ-2.6: Coordination with transportation authorities**. We collaborate with airport owners, FAA, Caltrans, SBCTA, SCAG, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of, and updates to transportation-related plans and projects to minimize noise impacts and provide appropriate mitigation measures.
- **Policy HZ-2.7**: **Truck delivery areas**. We encourage truck delivery areas to be located away from residential properties and require associated noise impacts to be mitigated.

Goal IU-4 Solid Waste. Adequate regional landfill capacity that provides for the safe disposal of solid waste, and efficient waste diversion and collection for unincorporated areas.

- **Policy IU-4.1**: Landfill capacity. We maintain a minimum ongoing landfill capacity of 15 years to serve unincorporated waste disposal needs.
- **Policy IU-4.2**: Transfer stations. We locate and operate transfer stations based on overall system efficiency.
- **Policy IU-4.3**: Waste diversion. We shall meet or exceed state waste diversion requirements, augment future landfill capacity, and reduce greenhouse gas emissions and use of natural resources through the reduction, reuse, or recycling of solid waste.
- **Policy IU-4.4:** Landfill funding. We require sufficient fees for use of County landfills to cover capital costs; ongoing operation, maintenance, and closure costs of existing landfills; and the costs and liabilities associated with closed landfills.

3.9.2 Environmental Setting

3.9.2.1 Hazardous Materials and Waste

The term *hazardous materials* refers to both hazardous substances and hazardous wastes. Under federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). According to California Health and Safety Code Section 25501, *hazardous material* means 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. In some cases, past industrial, military, or commercial activities on a site could have resulted in spills or leaks of hazardous materials to the ground, resulting in soil or groundwater contamination, or both. Hazardous materials may also be present in building materials and construction equipment and released during construction or demolition activities. If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. The four basic exposure pathways through which an individual can be exposed to a chemical agent are inhalation, ingestion, bodily contact, and injection. Exposure can come as a result of an accidental release during transportation, storage, or handling of hazardous materials. Disturbance of subsurface soil during construction also can lead to exposure of workers or the public from stockpiling, handling, or transportation of soils contaminated by hazardous materials from previous spills or leaks.

PHASE 1 ENVIRONMENTAL ASSESSMENT RESULTS

A Phase 1 Environmental Site Assessment (ESA) is a report prepared for a project site that identifies existing and potential environmental contamination liabilities. The Phase 1 ESA is generally considered the first step in the process of environmental due diligence and does not include sampling of soil, air, groundwater, or building materials.

A Phase 1 ESA was completed in 2022 by SWCA (SWCA 2022) and a Phase 1 ESA update was prepared in 2023 and 2024 (SWCA 2024) (Appendix I). As part of these reports, a standard radius database search was conducted of 60 federal, state, local, and proprietary records. The objective of the Phase 1 ESA was to identify Recognized Environmental Conditions (RECs), Historical RECs (HRECs), and Controlled RECs (CRECs) that affect the project site. RECs are defined by ASTM International (ASTM) as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment;

or (3) under conditions that pose a material threat of a future release to the environment" (ASTM 2021). According to the ASTM Phase 1 ESA standard, the term *recognized environmental condition* is not intended to include de minimis conditions (minor things) that generally do not present a material risk or harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government authorities.

Neither the Phase 1 ESA report completed in September 2022, nor the Phase 1 ESA update report completed in June 2023 identified any RECs, HRECs, or CRECs in connection with the project site. Both reports indicated that since 1933 there are and have been no known hazardous materials uses at the site or known environmental contamination (Appendix I).

The Shell Oil gas station on Rasor Road, located on the southwestern boundary of the project site, is listed on various DTSC databases. The facility contains an unspecified number of USTs associated with a gasoline service station, but no leaking USTs have been reported. Multiple environmental reporting violations are noted at this facility; all violations except one are noted as returned to compliance. The most recent violation was issued on March 4, 2022, during secondary containment certification for fill sump failure during testing. Given the location with respect to the project site and the status of the listings, and because testing as recently as March 2022 would have likely identified potential leaks, this is not considered a REC for the project site.

HAZARDOUS WASTE

The project would generate both hazardous and nonhazardous solid waste during construction and operation. Hazardous waste generated at the project site would be stored on-site in accordance with the accumulation limits detailed in 22 CCR 66262.34 and would be transported to a treatment, storage, and disposal facility (TSDF) by a licensed hazardous waste transporter. According to DTSC, 101 facilities in California accept wastes such as batteries, used oil, solvents, and other hazardous wastes for treatment, recycling, or disposal (DTSC 2024). California has two active hazardous waste (Class I) landfills for permanent disposal.

Waste Management, Inc., Kettleman Hills Facility is an approximately 1,600-acre hazardous waste TSDF that accepts Class I and II waste, with the exception of radioactive materials, medical waste, compressed gas cylinders, and explosives. Currently, 695 acres of land are available and permitted for waste management activities (Waste Management, Inc. 2024). The B-18 hazardous waste landfill is planned for expansion. A new hazardous waste landfill (B-20) is planned to open after B-18 reaches capacity and will operate for approximately 24 years. As of May 20, 2024, B-18 (Class I/II) has a permitted capacity of 10.7 million cubic yards and a total remaining capacity of 15.6 million cubic yards (CalRecycle 2024). It is anticipated that hazardous waste generated at the project site would be accepted at the Kettleman facility.

Clean Harbors Buttonwillow is a 320-acre facility with an operating area of 160 acres and is permitted to accept waste until 2040 (CalRecycle 2024). The Buttonwillow facility has a permitted capacity of 13.25 million cubic yards and can accept up to 10,500 tons per day (CalRecycle 2024). The remaining capacity at the Buttonwillow facility is not publicly available. Buttonwillow is permitted to manage RCRA hazardous waste, California hazardous waste, and nonhazardous waste for stabilization treatment, solidification, and landfill. The landfill accepts waste in bulk (solids and liquids) and in containers.

Typical waste streams include nonhazardous soil, California hazardous soil, hazardous soil for direct landfill, hazardous waste for treatment of metals, plating waste, hazardous and nonhazardous liquid, and debris for microencapsulation. It is anticipated that hazardous waste generated at the project site would be accepted at the Buttonwillow facility.

3.9.2.2 Schools and Sensitive Receptors

The project site is within the Baker Valley Unified School District. The nearest schools, Baker Elementary, Middle, and High Schools, are over 8 miles away in the northeastern part of Baker (Figure 3.9-1).

The Desert Studies Center of California State University Fullerton is approximately 3.5 miles east of the project site, on Zzyzx Road. This center serves as a hub for research and education, capable of hosting up to 75 people in dormitory-style rooms designed for two to 12 occupants.

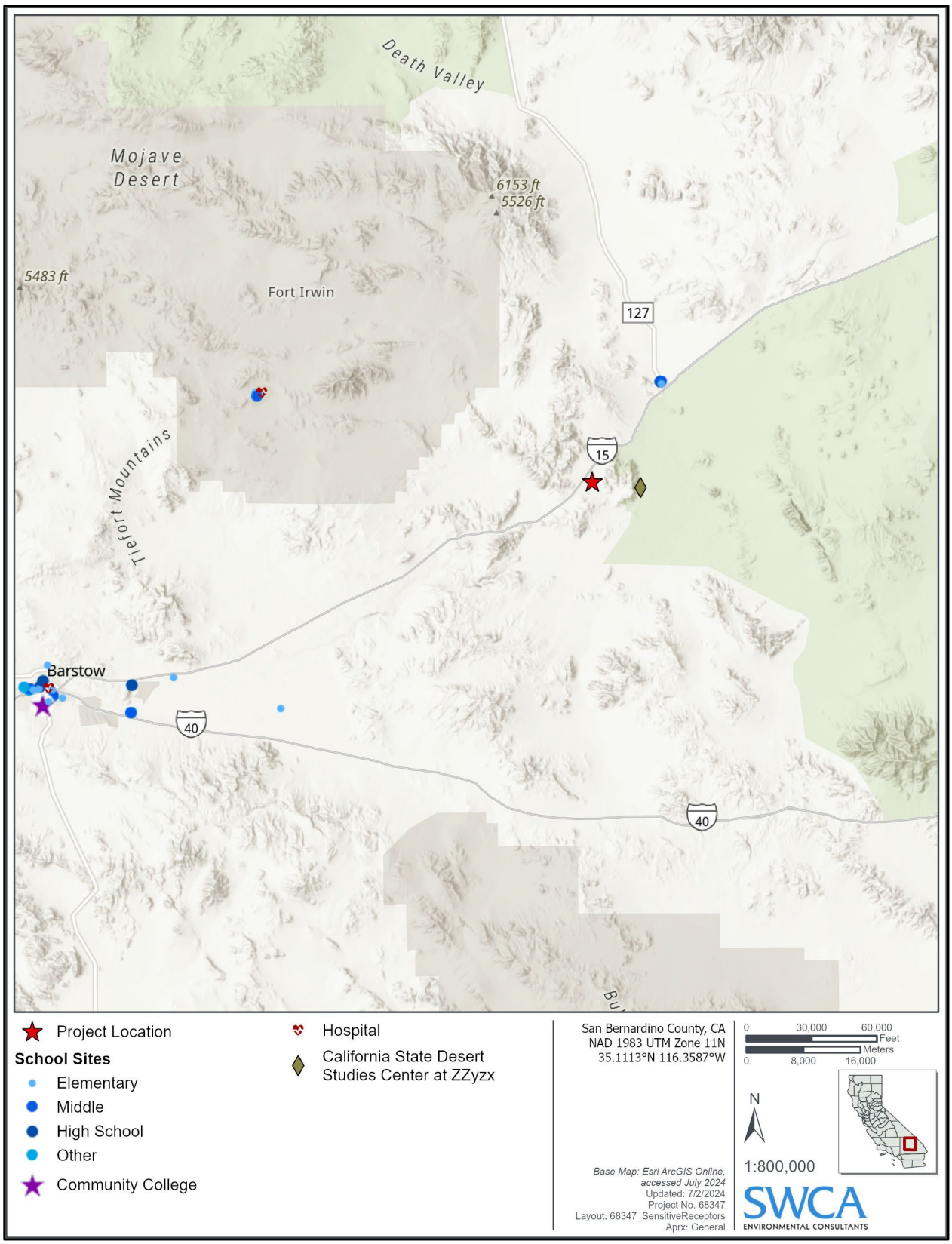

Figure 3.9-1. Schools and sensitive receptors.

3.9.2.3 Airports and Airstrips

Potential hazards to aviation from solar energy projects in the vicinity of airports include electromagnetic interference from the solar facility and transmission lines, glare from the photovoltaic panels, and the risk of birds perceiving the solar arrays as water features and interfering with aviation.

Baker Airport is approximately 9 miles northeast of the project site. It has one runway and is used for general aviation (i.e., flights other than military and regularly scheduled airline service and cargo flights). No aircraft are based at the airport. The airport averaged 42 aircraft operations per month for the 12-month period ending December 31, 2021 (AirNav 2023).

San Bernardino County prepared the Baker ACLUP to promote the development of compatible land uses in the area influenced by airport operations, minimize exposure of local residents and businesses to excessive noise levels, minimize exposure to hazards associated with aircraft operations, and impose height restrictions for the protection of aircraft operations (San Bernardino County 1992).

The project site is not within the FAR Part 77 imaginary surface area that would restrict development height within the airport approach and departure areas and is not within any of the hazard zones of the airport (Runway Protection Zone, Runway Object Free Area, or Obstacle Free Zone), which are designated by the ACLUP.

3.9.2.4 Wildland Fires

The project is located on federally owned land managed by the BLM in the Mojave Desert and is bisected by Interstate 15 (I-15). The project site contains sparse vegetation and is not adjacent to developed areas. Fire response in the project site and vicinity is provided by mutual aid agreements among the BLM California Desert District, counties, and local fire departments (National Interagency Fire Center 2023). The capabilities and availability of these local resources to respond to wildfires vary due to staffing levels and availability, access to appropriate equipment, and response times and distances to fire ignitions.

The project site is in an area designated as a Federal Responsibility Area (FRA); FRAs are the primary responsibility of the local government and the federal government (San Bernardino County 2020a). As the project is not in a State Responsibility Area, the California Department of Forestry and Fire Protection (CAL FIRE) would not be responsible for fire management or suppression activities in this area (San Bernardino County 2023). Agencies that are likely to provide wildfire protection to the project would be the San Bernardino County Fire Department and the BLM Fire and Aviation Program. The project is within Division 5 of the San Bernardino County Fire Department, North Desert Service Zone (San Bernardino County Fire Department 2024).

San Bernardino County Fire Department Station 53 is approximately 9 miles away with a 10- to 15-minute response time. The San Bernardino County Fire Department station in Harvard and the Newberry Springs Volunteer Fire Department both have 30- to 35-minute response times. They are approximately 30 and 33 miles from the project, respectively (San Bernardino County Fire Department 2024). The BLM also has a variety of fire resources and apparatus that can respond to emerging incidents; the closest station is approximately 50 miles from the project in Barstow, California.

CAL FIRE is responsible for classifying Fire Hazard Severity Zones (FHSZs) as Moderate, High, or Very High fire hazard based on statewide criteria and makes the information available for public review. The primary factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. The project site would be in a Moderate FHSZ (San Bernardino

County 2020b). Very High and FHSZs s in Local Responsibility Areas and State Responsibility Areas are concentrated in the southwestern portion of San Bernardino County.

3.9.2.5 Valley Fever

Valley fever (coccidioidomycosis) is an illness caused by the inhalation of soil dwelling Coccidioides (*Coccidioides* sp.) fungus spores, which live in the top 2 to 12 inches of soil in many parts of California, most prevalently in the Central Valley and in desert/dry areas (CDPH 2013). When soil containing this fungus is disturbed by activities such as digging or vehicular driving, or by the wind, the fungal spores become airborne and can be inhaled. Valley fever is not transmitted directly from person to person.

Valley fever can be serious and even fatal. In California, more than 1,000 people are hospitalized every year, of which about 1 in 10 have died in the hospital (CDPH 2023a). Many people who are exposed to the Coccidioides fungus spores never have symptoms, while others may have cold or flu-like symptoms that usually go away on their own after several weeks to months. Numerous mild cases of valley fever likely go undiagnosed. Valley fever usually infects the lungs and can cause flu-like symptoms or pneumonia. Some people with valley fever may develop severe disease, which may require hospitalization. In rare cases, the infection can spread beyond the lungs to other parts of the body (this is called disseminated valley fever) or be fatal (CDPH 2022).

Valley fever is considered endemic in California, with cases in California tripling from 2014 through 2018. From 2018 through 2022, between 7,000 and 9,000 cases were reported each year (CDPH 2023a). According to the CDPH, the number of reported incidences of valley fever in California in 2019 was the highest annual incidence reported in California since coccidioidomycosis became individually reportable in 1995. There were 9,090 cases reported in 2019, with an incidence rate of 22.9 cases per 100,000 population. This is a 159% increase of incidence of coccidioidomycosis since 2013 (3,329 cases, or 8.7 per 100,000 population) (CDPH 2023b). Valley fever is considered highly endemic in counties where incidence rates are greater than 20 per 100,000 population. The number of incidences has also significantly increased in San Bernardino County, from 29 cases and an incidence rate of 1.4 per 100,000 in 2015 to 250 cases and an incidence rate of 11.4 per 100,000 in 2021 (CDPH 2023b).

Several notable incidences of construction workers contracting valley fever have occurred during construction of solar farms in San Luis Obispo and Monterey Counties. Between October 2011 and April 2014, 44 cases of valley fever were identified among the 3,572 employees at two solar farm construction sites in San Luis Obispo County (an incidence rate of 1.2 cases per 100 workers). Although most workers indicated they received valley fever safety training, their descriptions of the training varied widely (Wilken et al. 2015). Nine confirmed cases of valley fever were identified from 2,410 construction workers who worked on a solar farm project in southeastern Monterey County in 2016. This number of cases corresponded to an annualized rate of valley fever among workers of 1,095 per 100,000 population, whereas the 2016 rate for the entire county was 17.5 per 100,000 population in July 2017. At the Monterey solar site, the workers reported frequent high dust levels that were unable to be controlled by the water trucks, infrequent use of respirators or dust masks, and inadequate valley fever symptom and prevention training.

In both cases, the CDPH conducted investigations and provided similar recommendations that included improved worksite dust-control measures; using earth-moving equipment and trucks with high-efficiency particulate air filtered enclosed cabs to protect the operator; implementing and enforcing criteria for suspending work on the basis of wind and dust conditions; providing all outdoor workers access to National Institute for Occupational Safety and Health–approved respiratory protection when conducting or in close proximity to soil-disturbing work, for exposure to excessive wind-blown dust; providing clean coveralls daily to employees; encouraging workers to remove coveralls and work shoes before entering

vehicles to leave the worksite; developing effective valley fever training for all employees that includes ways to reduce exposure, how to recognize symptoms, and where to seek care; and improving compliance by employers and their designated health care providers with reporting cases to local health jurisdictions, workers' compensation carriers, and Cal OSHA.

3.9.3 Impact Analysis

3.9.3.1 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by the California Environmental Quality Act and San Bernardino County. Specifically, the project would be considered to have a significant effect on hazards and hazardous materials if the effects exceed the significance criteria described below:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. 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.
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4. Be located on a site which 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.
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would result in a safety hazard or excessive noise for people residing or working in the project area.
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Each of these thresholds is discussed under Section 3.9.3.4 Impact Assessment, below.

3.9.3.2 Methodology

The hazardous materials analyzed include those potentially existing on the project site and those that would be used as part of construction, operations and maintenance, and future decommissioning. Potential existing hazards were assessed based on review of state hazard databases and maps for the parcels composing the area.

Some hazardous materials would be used on a short-term basis during construction and future decommissioning, whereas other hazardous materials would be stored on-site for use during operations and maintenance. Therefore, this analysis was conducted by evaluating the proposed chemical types, quantities, transport, storage, use, and disposal.

3.9.3.3 Applicant-Proposed Measures

The applicant has identified and committed to implement the following APMs as part of the proposed project to avoid or substantially lessen potentially significant impacts to hazards and hazardous materials, to the extent feasible. The APMs, where applicable, are discussed in the impact analysis section below.

APM AIR-1 Fugitive Dust Control Plan. The applicant shall prepare and implement a Fugitive Dust Control Plan to address fugitive dust emissions during project construction, operation, maintenance, and future decommissioning. The plan shall include measures to minimize fugitive dust emissions from development of laydown and staging areas, site grading, vegetation management, and installation of all project facilities through postconstruction cleanup. The applicant shall take every reasonable precaution to prevent all airborne fugitive dust plumes from leaving the project and to prevent visible particulate matter from being deposited upon public roadways. The applicant shall submit the plan to Mojave Desert Air Quality Management District for review and approval no less than 60 days prior to the start of construction. The applicant shall incorporate the plan into all contracts and contract specifications for construction work. The Fugitive Dust Control Plan shall identify a Dust Control Supervisor that shall have the authority to expeditiously employ sufficient dust mitigation measures. The Dust Control Supervisor shall be on the site or available on-site within 30 minutes during working hours and shall have the authority to implement enhanced (contingency) measures if dust plumes are visible beyond the property line, which indicates that existing mitigation measures are not resulting in effective mitigation.

The following measures would be included within the plan:

- During construction, all unpaved roads, disturbed areas (e.g., areas of scraping, excavation, backfilling, grading, and compacting), and loose materials generated during construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent or watered two times daily or as frequently as necessary to minimize fugitive dust generation. Non-water-based soil stabilizers shall be as efficient as or more efficient for fugitive dust control than California Air Resources Board-approved soil stabilizers and shall not increase any other environmental impacts, including loss of vegetation, adverse odors, or emissions of ozone precursor reactive organic gases or volatile organic compounds.
- For long-term site operations, the applicant shall establish a Site Operations Dust Control Plan, which includes all applicable fugitive dust control measures identified for operations activities. The Site Operations Dust Control Plan shall include the use of durable non-toxic soil stabilizers on all regularly used unpaved roads, shall restrict vehicular access to established unpaved travel paths within the project boundaries, and shall include the long-term inspection and maintenance procedures that will be undertaken to ensure that the unpaved roads remain stabilized.
- The main access roads through the site shall be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction. Delivery, laydown, and staging areas for construction or O&M supplies shall be paved or treated prior to taking initial deliveries.
- Grading and earthwork activities, including vegetation removal, cut and fill movement, and soil compacting, shall be phased across the site to minimize the amount of exposed or disturbed area on any single day.
- No vehicle shall exceed 15 miles per hour on unpaved areas within the construction site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
- Visible speed limit signs shall be posted at the construction site entrances.

- All construction equipment vehicle tires shall be cleaned free of dirt prior to entering paved roadways to prevent track-out from extending 25 feet or more in cumulative length from the point of origin from an active operation. Actions, including but not limited to sweeping sealed roads, use of stabilized construction/facility entrances, and, if needed, using one or more entrance/exit vehicle tire wash apparatuses, shall be taken to prevent project-related track-out.
- All unpaved exits from the construction site shall be graveled or treated to prevent track-out onto public roadways.
- All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads to access the construction site or staging areas shall be swept as needed when dirt or runoff resulting from the construction activities is visible on the paved public roadway.

APM BIO-12. No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.

APM BIO-21. Use of chemicals, fuels, lubricants, or biocides will comply with all local, state, and federal regulations. This is necessary to minimize the possibility of contamination of habitat or primary or secondary poisoning of badgers and other predators utilizing adjacent habitats, and the depletion of American badger prey. All uses of such compounds should observe label and other restrictions mandated by the EPA, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, the use should be restricted to interiors of buildings and zinc phosphide should be used because of the lower risk of poisoning burrowing mammals.

APM FIRE-1 Fire Management and Prevention Plan. The applicant shall prepare and implement a Fire Management and Prevention Plan to ensure the safety of workers and the public during construction, O&M, and future decommissioning activities for the project. The owner must provide the Fire Management and Prevention Plan to the BLM for review and approval and to the San Bernardino County Fire Department for review and comment before construction. The Fire Management and Prevention Plan shall include, but not be limited to, the following elements:

- Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, and hot work restrictions.
- Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days.
- All internal combustion engines used at the project site shall be equipped with spark arrestors. Spark arrestors shall be in good working order.
- Once initial two-track roads have been cut and initial fencing completed, light trucks and cars shall be used only on roads where the roadway is cleared of vegetation.
- Mufflers on all cars and light trucks shall be maintained in good working order.
- Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees.
- Equipment parking areas and small stationary engine sites shall be cleared of all flammable materials.

- Smoking shall be prohibited in all vegetated areas and within 50 feet of combustible materials storage and shall be limited to paved areas or areas cleared of all vegetation.
- The construction site (if construction occurs simultaneously at various locations) shall be equipped with fire extinguishers and fire-fighting equipment sufficient to extinguish small fires.
- The applicant shall coordinate with the BLM and the San Bernardino County Fire Department to create a training component for emergency first responders to prepare for specialized emergency incidents that may occur at the project site.
- All construction workers, plant personnel, and maintenance workers visiting the plant and/or transmission lines to perform maintenance activities shall receive training on fire prevention procedures, the proper use of fire-fighting equipment, and procedures to be followed in the event of a fire. Training records shall be maintained and be available for review by the BLM and the San Bernardino County Fire Department. Fire prevention procedures shall be included in the project's Worker Environmental Awareness Program (Mitigation Measure BIO-2).
- Vegetation near all solar panel arrays, ancillary equipment, and access roads shall be controlled through periodic cutting and spraying of weeds, in accordance with the Weed Management Plan.
- The BLM and the San Bernardino County Fire Department shall be consulted during plan preparation and fire safety measures recommended by these agencies included in the plan.
- The plan shall list fire prevention procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations.
- All on-site employees shall participate in annual fire prevention and response training exercises with the BLM and the San Bernardino County Fire Department.
- The plan shall list all applicable wildland fire management plans and policies established by state and local agencies and demonstrate how the project will comply with these requirements.
- The applicant shall designate an emergency services coordinator from among the fulltime on-site employees who shall perform routine patrols of the site during the fire season equipped with a portable fire extinguisher and communications equipment. The applicant shall notify the BLM and the San Bernardino County Fire Department of the name and contact information of the current emergency services coordinator in the event of any change.
- Remote monitoring of all major electrical equipment (transformers and inverters) will screen for unusual operating conditions. Higher than nominal temperatures, for example, can 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 curtailed remotely until corrective actions are taken.
- Fires ignited on-site shall be immediately reported to the BLM and the San Bernardino County Fire Department.
- The engineering, procurement, and construction contract(s) for the project shall provide reference to or clearly state the requirements of this measure.

APM HAZ-1: An Environmental Inspection and Compliance Monitoring program and plan for construction and operation will be developed and implemented to ensure that hazardous materials are properly stored and potentially hazardous waste is properly disposed of. A Project Environmental Manager will be designated to oversee the program and plan. All contractors and employees will be educated about hazardous materials storage, waste sorting, appropriate recycling storage areas, and

reduction of landfill waste. The Environmental Inspection and Compliance Monitoring program and plan shall include, but not be limited to, the following elements:

- On-site fueling specifications. On-site fueling of equipment and vehicles shall be completed in areas at least 100 feet away from drainages or in designated fueling areas. Fuel stored on-site will be in areas with secondary containment, unless secondary containment is built into the tank.
- Conductor installation guidance. During conductor installation, guard structures consisting of temporary H-frame poles shall be erected over any natural or human-made obstacles to shield them from falling objects.
- Transformer inspection. Transformers shall be inspected for oil leakage on a regular basis, and diversionary structures shall be provided for all oil-containing equipment, including transformers, at the project site.

APM HAZ-2: A Hazardous Materials Management Plan will be prepared, and all construction crews, contractors, and operations crews will be briefed on the plan prior to starting work on the project. All fuels, fluids, and components with hazardous materials/wastes will be handled in accordance with applicable regulations. All such materials shall be kept in segregated storage with secondary containment as necessary. MSDSs for all hazardous materials stored on-site shall be retained on-site during project construction and operation. The project will maintain all records of storage and inspection and will provide for proper off-site disposal.

APM HAZ-3 Health, Safety, and Noise Plan. A Health, Safety, and Noise Plan shall be prepared in compliance with all OSHA and Cal OSHA guidelines. Prior to start of construction, all construction crews and contractors shall be briefed on the plan prior to starting work on the project. The plan shall address health and safety issues associated with normal and unusual (emergency) conditions and shall include a respiratory protection program. The plan shall include, but not be limited, to the following information and guidance:

- Environmental health and safety protocol (including, but not limited to, hazards of valley fever, including the symptoms, proper work procedures, when and how to use personal protective equipment, and informing supervisors of suspected symptoms of work-related valley fever)
- An emergency response plan
- Worker Education and Awareness Program training, which would include environmental, cultural, health, and safety training.
- Noise/ear protection protocol
- First aid training
- Fire protection and extinguisher maintenance, guidance, and documentation

Disposal of hazardous materials and waste guidance in accordance with local, state, and federal regulations.

APM USS-1 Waste Recycling Plan (WRP). Prior to issuance of a notice to proceed, the project applicant shall submit a WRP to the California Department of Fish and Wildlife and the BLM. At a minimum, the WRP must identify the materials (e.g., solar panels, cardboard, concrete, asphalt, wood) that will be generated by construction and development; the projected amounts of each; the applicable state and local laws and regulations governing waste disposal and recycling (e.g., Department of Toxic Substances Control regulations regarding photovoltaic modules); the measures/methods that will be taken to recycle, reuse, and/or reduce the amount of materials; the facilities and/or haulers that will be utilized;

and the targeted project-specific recycling or reduction rate. During construction, the project site shall have, at a minimum, two bins: one for waste disposal and the other for the recycling of Construction and Demolition (C&D) materials. Additional bins are encouraged to be used for further source separation of C&D recyclable materials and shall be provided if required by applicable state and local laws. The project applicant shall maintain accurate records (receipts or other types of verification) for recycling of C&D recyclable materials and solid waste disposal; arrangements for such receipts can be made through the franchise hauler. These receipts will be retained to demonstrate compliance with the approved WRP if requested by the agencies and must clearly identify the amount of waste disposal and C&D materials recycled.

3.9.3.4 Impact Assessment

Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less than Significant)

The use, storage, transport, and disposal of hazardous materials used in the construction of the facilities will be carried out in accordance with federal, state, and county regulations. No extremely hazardous substances (i.e., those governed pursuant to 40 CFR 335) are anticipated to be produced, used, stored, transported, or disposed of as a result of the project's construction. Hazardous materials that may be used and stored during construction and/or operations and maintenance could include paints, thinners, solvents, sealants, lubricants, and drilling mud (for drilling cable conduits under I-15). To fuel construction equipment, mobile fueling and maintenance vehicles would be brought daily as needed. A limited amount of No. 2 diesel and gasoline petroleum fuels (approximately 500 gallons each) would be stored in the staging areas in above-grade steel tanks with secondary containment. Table 3.9-1 identifies possible hazardous materials present on-site during project construction and operation. MSDSs for all applicable materials present on-site would be made readily available to on-site personnel, in accordance with APM HAZ-2. In addition, a site-specific EPA identification number and hazardous waste generator classification would be obtained for the project. Hazardous waste generated at the project site would be stored on-site for less than 90 days in accordance with accumulation time limits detailed in 22 CCR 66262.34. It would be stored and transported by a licensed hazardous waste transporter. Hazardous construction waste is anticipated to be accepted by Waste Management, Inc., Kettleman Hills Facility, and/or Clean Harbors Buttonwillow Landfill.

Table 3.9-1. Hazardous Materials Use during Construction and Operation

Material	Uses	Toxicity
Gasoline and diesel fuel	Both would be used as fuel for construction and transportation equipment during construction and decommissioning. Diesel would also be used to power an emergency generator during operation, if needed.	Fuel oils are liquid mixtures produced from petroleum, and their use mostly involves burning them as fuels. Drinking or breathing fuel oils may cause nausea or nervous system effects, including long-term health effects. However, exposure under normal use conditions is not likely to be harmful (U.S. Department of Veterans Affairs 2023).
Lubricating oils, grease, hydraulic fluids, gear oils	Lubricating oil would be present in the diesel engine of the emergency generator, and in engines of construction and transportation equipment.	Exposure to hydraulic fluids occurs mainly in the workplace (Agency for Toxic Substances and Disease Registry [ATSDR] 1997).
Glycol-based antifreeze	Used in the diesel engine for the emergency generator.	Ethylene glycol is a clear liquid used in antifreeze and de-icing solutions. Exposure to large amounts of ethylene glycol can damage the kidneys, nervous system, lungs, and heart (ATSDR 2013).

Material	Uses	Toxicity
Lead-acid storage batteries and electrolyte solution	Present in construction and transportation equipment. Backup power source for control equipment.	The electrolyte solution in lead acid batteries contains sulfuric acid, which is highly corrosive and can cause severe chemical burns to the skin and can damage the eyes. The solution is also poisonous if ingested. In addition, overcharging a lead acid battery can produce hydrogen sulfide gas. The gas is heavier than air and will accumulate at the bottom of poorly ventilated spaces (University of Massachusetts, Amherst 2023).
Lithium-ion batteries	Used for project operations	Under normal usage conditions, the materials do not exhaust vapors. Cell electrolyte should not be encountered by anyone handling a battery, making the risk of a spill of electrolyte from any commercial battery pack very remote. Furthermore, in most commercial cells, the electrolyte is largely absorbed in electrodes, such that there is no free or "spillable" electrolyte within individual sealed cells. In those instances, severe mechanical damage (e.g., severe crushing) can cause a small fraction of total electrolyte quantity to leak out of a single cell; however, any released electrolyte is likely to evaporate rapidly (NFPA 2016).
Cleaning solvents	Organic solvents would be used for equipment cleaning and maintenance when water-based cleaning and degreasing solvents cannot be used.	Exposure to solvents and other organic liquids is one of the most common chemical health risk at places of work. Most of the organic solvents are combustible, often highly volatile, and extremely flammable, and they should always be handled with care. Some solvents produce vapors which are heavier than air. These may move on the floor or ground to a distant ignition source, such as a spark from welding or static electricity. The vapors may also explode from smoking. Vapors of solvents can also accumulate in confined places and stay there for a long time, presenting risks for health and property. Solvents enter the body by inhalation, by swallowing, and through the skin. The effect depends on several factors (International Labour Organization 2004).
Dielectric fluids	Used in electrical transformers and other electric power management devices as an electrical insulator.	Mineral oil may cause allergic reactions. Primary routes of entry: Eye and skin contact, inhalation; Target organs: Eyes, skin, respiratory tract. Persons with preexisting skin and respiratory conditions may be more susceptible to the effects of this product. Mineral oil is not listed in the National Toxicology Program Annual Report on Carcinogens and not listed as an OSHA carcinogen (U.S. Department of Health and Human Services 2021).
Herbicides	May be used for vegetation control around facilities for fire safety.	If a large amount is swallowed, glyphosate can cause nausea and vomiting. It can be very irritating if it is left on skin or eyes. Glyphosate has been associated with respiratory effects (lung and nose), such as irritation in the nose or asthma in people using glyphosate products. Workers that use large amounts of glyphosate products for long periods of time may be more likely to develop respiratory effects. Studies in animals have shown that glyphosate can cause developmental effects (such as lower body weight and problems with bone and organ growth) when the pregnant animals were given very large amounts of glyphosate (ATSDR 2020).

According to AB 1130 (2007), if the owner or operator of a tank facility has an aggregate storage capacity greater than 1,320 gallons of petroleum, they must file an inventory statement with the local CUPA and prepare an SPCC plan. If quantities exceed regulatory thresholds, an SPCC plan would be developed prior to project construction in accordance with applicable regulations and would include a facility diagram that would identify the location and contents of hazardous materials containers; potential equipment failures; containment and diversionary structures; facility drainage; personnel, training, and spill prevention procedures; and emergency contact information. Diversionary structures meeting the requirements of the SPCC plan would be provided for oil-containing equipment, including transformers, at the project site. Transformers would be inspected regularly to detect and respond to any leakage in accordance with APM HAZ-1. All contractors and workers would be educated about waste sorting, appropriate recycling storage areas, and how to reduce landfill waste (APM USS-1 requires preparation of a WRP). In accordance with APM HAZ-1, the applicant would develop an Environmental Inspection and Compliance Monitoring program and plan for construction and operation of the project and designate a Project Environmental

Manager to oversee the plan. Additionally, the site would be supplied with adequate spill containment kits and personal protective equipment in case of a release.

The project may use a variety of photovoltaic (PV) technologies including, but not limited to, cadmium telluride panels, crystalline silicon panels, and copper indium gallium diselenide panels. None of the panels being considered contain materials that are classified as hazardous wastes because the chemicals within PV modules are highly stable and would not be available for release to and interaction with the environment. During O&M, some PV panels would require replacement due to breakage or other damage or to take advantage of new technologies. Removed PV panels would be recycled or disposed of in accordance with applicable local, state, and federal standards and regulations. During future decommissioning, the solar panels would be removed, placed in secure transport containers for storage, and transported to another facility for reuse, material recycling, or disposal in accordance with regulations in effect at the time of closure.

Decommissioning impacts are anticipated to be similar to those determined for construction. Construction, operation, and decommissioning of the project would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences; therefore, no protocol for modeling of hazardous materials releases is included and no modeling is proposed. Implementation of APM HAZ-1, APM HAZ-2, APM USS-1, and APM BIO-21 and compliance with applicable local, state, and federal regulations would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material, and the impact is considered **less than significant**.

Impact HAZ-2: Would the project 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? (Less than Significant)

As noted above, construction and future decommissioning of the project would involve the use of small amounts of hazardous materials, such as fuels and greases to fuel and service construction equipment. Improper handling and storage of these hazardous materials could result in accidental release if not managed appropriately. APM HAZ-2 specifies that all hazardous materials will be kept in segregated storage with secondary containment as necessary. Additionally, APM HAZ-1 and APM BIO-12 require that no vehicle or equipment refueling occur within 100 feet of an ephemeral drainage or wetland.

The required Stormwater Pollution Prevention Plan (SWPPP) must include a list of potential pollutants (i.e., hazardous materials, fugitive dust, sediment, concrete waste), identify fueling areas, and include best management practices (BMPs) to prevent and limit these pollutants from reaching stormwater runoff. Spill response plans would be developed prior to project construction, operation, and future decommissioning, and personnel would be made aware of the procedures for spill cleanup and reporting. Spill cleanup materials and equipment appropriate to the type and quantity of chemicals and petroleum products expected would be on-site, and personnel would be made aware of their location. The project would incorporate APM HAZ-1, APM HAZ-2, APM BIO-12, the SWPPP, and spill response plans and would comply with all applicable local, state, and federal regulations to reduce the potential that spills or leaks of hazardous materials would occur. In addition, if quantities exceed regulatory thresholds outlined in Section 3.9.1.2, an SPCC plan and an HMBP, which will include additional hazardous material requirements, would be developed for the project. The implementation of APM HAZ-3 (Health, Safety, and Noise Plan) into the project would further ensure that any impact from accidental releases of hazardous materials into the environment would be less than significant by providing further detail regarding worker training, ensuring that workers would be trained on site-specific spill prevention, emergency response, and safe material handling.

Valley fever (coccidioidomycosis) is considered endemic in California and is present in the arid desert regions of California, including San Bernardino County. Although the numbers of reported valley fever cases in San Bernardino County are a fraction of those reported statewide in 2021 (8,030 cases reported statewide versus 250 cases in San Bernardino County), the number of cases in San Bernardino County has increased considerably since 2013 (29 cases). Solar farm construction workers have a history of contracting valley fever at a greater rate than average due to inadequate dust control, respirator or dust mask use, training, and enforcement of dust control and valley fever reduction measures. Although valley fever is not considered highly endemic (greater than 20 cases per 100,000 population) in San Bernardino County, there has been a steady and marked increase in the number of cases reported over the last several years. Therefore, there is a potential that construction activities such as grading, excavation, and construction vehicle traffic could loosen and stir up soil containing *Coccidioides* fungus spores, indirectly exposing workers and the public to contracting valley fever. Ways to reduce the risk of valley fever include avoiding exposure to dusty air or dust storms, preventing dirt or dust from becoming airborne by wetting or use of palliatives, and, if working at a dusty site, use of an N95 or equivalent mask or respirator. Construction activities for the project would be subject to stringent dust control requirements (including Mojave Desert Air Quality Management District Rules 402 and 403) and APM AIR-1. Implementation of APM AIR-1 (Fugitive Dust Control Plan) and APM HAZ-3 (Health, Safety, and Noise Plan) into the project would reduce the potential for workers and the public to contract valley fever due to exposure to substantial concentrations of dust, which may contain *Coccidioides* fungus spores.

The project will include operation of an approximately 300-megawatt BESS that would consist of batteries housed in storage containers. Potential hazards related to the BESS could include fire, gaseous build-up, explosion, and hazardous materials. The BESS would consist of batteries housed in storage containers that would be built using standard International Organization for Standardization shipping containers, and each would measure approximately 20 feet in length, 6 feet in width, and 8 feet in height, although other smaller form-factor structures exist that may be used. Up to 18 acres may be used for the BESS throughout the project site at full buildout. Components of the battery system include the inverter, cells, modules, enclosure, and safety system. The configuration of the safety system would be determined based on site-specific environmental factors and associated fire response strategy and would contain a safety system that would be triggered automatically when the system senses imminent fire danger. A fire safety system would be provided within each on-site battery enclosure. Components of the system could include a fire panel, aspirating hazard detection system, smoke/heat detector, strobes/sirens, and suppression tanks. If applicable, the system would use a chemical agent suppressant-based system to detect and suppress fires. If smoke or heat were detected, or if the system were manually triggered, an alarm would sound, horn strobes would flash, and the system would release suppressants from pressurized storage cylinders. However, final safety design would follow applicable standards and would be specific to the battery technology chosen. The battery cell and modules for the project would use lithium-ion technology, which would be housed in an enclosure that contains integrated fire suppression technology and controls.

Emissions from a generating facility could adversely affect soil vegetation systems. However, operation of a solar facility and BESS does not generate harmful emissions. No impacts are expected to occur. Additional discussion regarding air quality impacts can be found in Section 3.3, Air Quality.

In summary, as a result of conformance with applicable regulations, implementation of applicable BMPs, and APM AIR-1 and APM HAZ-3, the proposed project would not directly or indirectly 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. Implementation of and compliance with these design and safety regulations would ensure the impact would be **less than significant**.

Impact HAZ-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (No Impact)

As previously indicated, the nearest schools in the area are over 8 miles from the project site. Therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. **No impacts** would result from the proposed project.

Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (No Impact)

There are no recorded hazardous material sites on the project site (DTSC 2023). The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project site does not contain any identified RECs, HRECs, or CRECs in connection with the site. There have been no known hazardous materials uses or known environmental contamination at the site since 1933 (Appendix I). Therefore, the proposed project would not create a significant hazard to the public or the environment and **no impacts** would occur.

Impact HAZ-5: Would the project be 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (No Impact)

The nearest airport to the project site is the Baker Airport, approximately 9 miles northwest of the project site. The ACLUP for Baker Airport defines the planning boundary for the airport as the FAR Part 77 horizontal surface. Within this boundary, the area is designated into three Safety Review Areas—Areas 1, 2, and 3—that reflect a particular level and type of aviation related hazard or risk within each safety area. No portion of the project would be located within any of the three Safety Review Areas for the airport (San Bernardino County 1992). Therefore, the proposed project would not create impacts related to a safety hazard or excessive noise regarding an airport and no impacts would occur.

Impact HAZ-6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less than Significant)

Primary operational access to the project site would be provided via a gated entrance off Rasor Road, which would be accessed approximately 250 feet south from the I-15 northbound off-ramp. The project would maintain and improve the existing Rasor Road that runs from I-15 eastward to the Rasor off-highway vehicle recreation area. The primary access road within the site would be 20 feet wide and run north-south, providing access from the site entrance to the substation. Internal access roads between the arrays would be 16 feet wide and include a 35-foot turning radius at the project boundary.

North of I-15, the existing Los Angeles Department of Water and Power/Southern California Edison transmission maintenance road would be upgraded for access to the switchyard. A Caltrans access road may also be used for construction of the generation-tie (gen-tie) line. These maintenance roads would consist of compacted native material according to San Bernardino County Fire Department requirements and would be graded as necessary but would generally follow the existing terrain. Larger boulders that could impede vehicle access would be removed. These permanent access roads would be compacted to meet load requirements for vehicle traffic over the life of the project.

Construction and future decommissioning of the solar facilities are not expected to require any temporary lane closures that could restrict the movements of emergency vehicles or impair an emergency evacuation. The sites would have controlled access points for ingress and egress only into the solar farms. These access points would allow for emergency vehicle access into and through the sites. Once constructed, maintenance activities would occur as needed at the solar facilities but are not expected to require any temporary travel lane closures that could restrict emergency vehicle movements.

The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would considered be **less than significant.**

Impact HAZ-7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Less than Significant)

The project site is in a Moderate Fire Hazard Severity Zone due to sparse vegetation. The project site consists of mostly undeveloped open space with minimal native or ruderal vegetation. The solar facility would be designed and constructed to industry safety design standards (i.e., Institute of Electrical and Electronic Engineers, National Electric Code) and San Bernardino County Building and Safety Department requirements to reduce the risk of electrical fires at the site. Solar arrays are fire-resistant, as they are constructed largely out of steel, glass, aluminum, or components housed within steel enclosures. Substation equipment and inverters would be sited on concrete foundations, and inverters would be housed in steel and concrete equipment enclosures, minimizing the risk of electrical sparks that could ignite during equipment failure. In the event of a fire or accident, the complete facility alternating current power system could be shut down, and each power block could be isolated and shut down individually. The inverters automatically shut down when they no longer sense voltage from the grid.

The BESS would be designed and constructed in accordance with all applicable design, safety, and fires standards for the installation of energy storage systems, including, but not limited to, NFPA 855 (Standard for the Installation of Stationary Energy Storage Systems) and Section 1206 of the California Fire Code. These standards would require installation of fire suppression systems in the BESS.
The proposed gen-tie line would connect the collector lines from the substation to the project switchyard by boring under I-15. The gen-tie line would be within an existing Caltrans culvert and would not introduce a new obstruction that would adversely impact fire suppression efforts. Compliance with all applicable wildland fire management plans and policies established by CAL FIRE and the San Bernardino County Fire Department, as well as creation of a project-specific Fire Management and Prevention Plan, as required under APM FIRE-1, would further reduce wildfire risks during construction, operation, and future decommissioning.

Project operation would require water for potable use, dust control, panel washing, and fire protection. An approximately 22,500-gallon tank would be located near the O&M building to provide storage of fire suppression water. The tank would not require a regular supply of water because the water would be withdrawn only in the event of a fire. The tank would be monitored periodically and refilled as needed to replace evaporative losses. For fire suppression water supply, the project would conform to county requirements, which incorporate NFPA Standards 1142 and 13 by reference and provide minimum requirements for fire suppression water supply where no public water supply is available (Standard 1142) and sprinkler systems (Standard 13). The project would be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health, and safety requirements. Effective maintenance and monitoring programs are vital to productivity as well as to fire protection, environmental protection, and worker protection. The project would have a Project Fire Plan in place for construction, O&M, and future decommissioning. This plan would comply with applicable BLM and

county regulations and would be coordinated with the San Bernardino County Fire Department. Additionally, APM FIRE-1 specifies information and training required by the Fire Management and Prevention Plan.

Overall, the construction, O&M, and future decommissioning of the proposed project would result in a minimal increased risk of wildfires in the area. The proposed project would comply with all applicable wildland fire management plans and policies established by CAL FIRE and the San Bernardino County Fire Department, as specified in APM FIRE-1. Comprehensive safety measures that comply with federal, state, and local worker safety and fire protection codes and regulations would be implemented for the proposed project and would minimize the occurrences of fire due to project activities during construction and for the life of the project. Accordingly, the proposed project is not expected to expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Therefore, with APM FIRE-1 and the implementation of fire suppression technology and adherence with applicable industry best practices and regulatory fire standards, the proposed project would result in **less than significant impacts.**

3.9.4 Mitigation Measures

No mitigation measures are required.

3.9.5 Cumulative Impacts

Impact C-HAZ-1: Would the impacts of the proposed project, in combination with other past, present, and reasonably foreseeable future projects, contribute to a cumulative impact related to hazards and hazardous materials? (Less than Significant)

The geographic scope considered for cumulative impacts to health and safety from hazardous materials and fire/fuels management is the area extending 1 mile from the boundary of the project site. One mile is the ASTM standard search distance for hazardous materials. In the Cumulative Impact Analysis, discussed in Chapter 3, Environmental Impacts Analysis, a 50-mile radius was evaluated. See Table 3-1 and Figure 3.4-1 in Chapter 3 for the list of existing and reasonably foreseeable projects in the region. Several other utility-scale solar development projects are proposed within 50 miles of the proposed project.

3.9.5.1 Hazardous Materials

The transport, use, and disposal of hazardous materials during cumulative project construction would be limited to the areas where concurrent construction is occurring or where roads are being used for construction traffic from multiple projects. O&M of the proposed project, including the proposed substations, shared switchyard, and O&M building, would involve periodic and routine transport, use, and disposal of minor amounts of hazardous materials, primarily petroleum products (fuels and lubricating oils) and motor vehicle fuel. Incorporating APM HAZ-1 (Environmental Inspection and Compliance Monitoring Program and Plan), APM HAZ-2 (Hazardous Materials Management Plan), APM HAZ-3 (Health, Safety, and Noise Plan), and agency regulations that address the handling of hazardous materials would ensure that the project would not create a significant hazard to the public or the environment related to the handling or accidental release of hazardous materials. Past, present, and reasonably foreseeable future projects would also be subject to existing agency regulations that address the handling and accidental release of hazardous materials and would include project-specific Worker Education and Awareness Programs for construction and O&M. Therefore, existing regulations would ensure that the combined effects related to hazards and hazardous materials from the cumulative projects within the

geographic scope of analysis would not be cumulatively considerable. Accordingly, the project's incremental contribution to the cumulative handling of hazardous materials in combination with other past, present, and probable future projects **would not be cumulatively considerable**.

3.9.5.2 Listed Hazardous Materials Sites

Previously documented and undocumented hazardous materials sites could be encountered during cumulative project grading and construction. No such hazardous materials sites are known at the project site. Any contaminated soil and/or groundwater at the project sites listed in the cumulative project list would be assessed and remediated, as applicable, in compliance with federal, state, and local regulations. The project **would not contribute to a cumulatively considerable impact** associated with hazardous materials sites.

3.9.5.3 Schools

Cumulative projects would be required to ensure that school safety is provided. As previously indicated, the nearest schools in the area are over 8 miles from the project site. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, nor would the project combine with any reasonably foreseeable future projects that could adversely affect schools. The project **would not contribute to a cumulatively considerable impact** associated with schools.

3.9.5.4 Airports and Airstrips

Cumulative projects would be required to ensure that airport and aircraft safety is provided, with FAA notifications as necessary. Where potential hazards are identified, projects would be modified or required to include markings and/or lighting. The nearest airport to the project site is the Baker Airport, approximately 9 miles northwest of the project site. The project is not located within the ACLUP for Baker Airport, and no portion of the project would be located within any of the three Safety Review Areas for the airport (San Bernardino County 1992). With compliance with FAA regulations through Form 7460-1, the cumulative projects would not result in any safety hazard impact associated with air traffic in the area and would not result in excessive noise for people working in the area; therefore, the project **would not contribute to a cumulatively considerable impact** associated with airport hazards.

3.9.5.5 Valley Fever

Construction of the proposed project could result in mobilization of Coccidioides fungus spores in airborne dust, incrementally contributing to cumulative fungus spores in airborne dust in the area in combination with ground-disturbing activities associated with other past, present, and probable future projects. If inhaled, mobilized spores could expose workers and the public to contracting valley fever. Incorporating stringent dust control regulations, APM AIR-1 (Fugitive Dust Control Plan), APM AIR-3 (Construction Activity Management Plan), and APM HAZ-3 (Health, Safety, and Noise Plan) into the project would minimize the risk of workers or the public contracting valley fever. Past, present, and reasonably foreseeable future projects would also be subject to existing agency regulations that address fugitive dust and would likely have similar mitigation to prepare dust control and air quality plans. Therefore, existing regulations and mitigation measures would minimize the combined effects related to contracting valley fever from the cumulative projects. Accordingly, the project's incremental contribution to the cumulative valley fever risk in combination with other past, present, and probable future projects **would not be cumulatively considerable.**

3.9.5.6 Wildland Fire

Construction, operation, and future decommissioning of the project could introduce a risk of wildland fire through accidental ignition of the sparse native vegetation. The proposed project would be required to comply with applicable federal, state, and county requirements relating to fire safety and fire hazards and APM FIRE-1, thus minimizing the risk of wildland fire occurring. Similarly, cumulative projects would be required to comply with fire safety and fire hazard guidelines and policies. Accordingly, the project's incremental contribution to the wildland fire risk in combination with other past, present, and probable future projects **would not be cumulatively considerable**.

3.9.5.7 Emergency Response

The proposed project would not contribute to potential cumulatively considerable or significant impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan because no aspect of the project would interfere with emergency response (e.g., construction is not expected to require any temporary lane closures that could restrict the movements of emergency vehicles). The project's impacts associated with potential interference of an emergency response plan or emergency evacuation plan, in combination with other past, present, and probable future projects, **would not be cumulatively considerable**.

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