

SECTION 4.10

HAZARDS AND HAZARDOUS MATERIALS

4.10 HAZARDS AND HAZARDOUS MATERIALS

This section describes federal, state and local regulations applicable to hazards and hazardous materials. It also describes the environmental setting with regard to potential hazards on the Project site and potential hazards created as a result of implementing the proposed Project. A Phase I Environmental Site Assessment was prepared for the Project site only. The area encompassed by the right-of-way for the Gen-Tie Line, Lot D on which the Seville 4 Substation and IID Switching Station are proposed, as well as the extension of the existing access road, were previously covered in the Seville Solar Farm Complex EIR.

This section discusses potential exposure to hazardous materials and/or creation of hazards that could result from implementation of the proposed Seville 4 Solar Project. It focuses on hazardous materials and hazards requiring remediation or mechanisms to prevent accidental release. Measures are identified to reduce or avoid adverse impacts anticipated from construction, operation and reclamation of the proposed Project. A discussion of cumulative impacts related to hazards and hazardous materials is also included in this section.

Various other hazards associated with the Project, such as: hazardous shocks; fire hazards (non-wildland/operational); and valley fever. These hazards are acknowledged as potential areas of concern, but no criteria are available for purposes of evaluation or comparison.

This analysis does not address the potential exposure of workers to hazardous materials during construction, operation or reclamation of the Project. Employers must inform employees of hazards associated with their work and provide those employees with special protective equipment and training to reduce the potential for health impacts from the handling of hazardous materials.

Other hazards are addressed in the following sections: compatibility with the Airport Land Use Plan (Section 4.2, Land Use); seismic hazards (Section 4.6, Geology and Soils); exposure to noise (Section 4.8, Noise); and, flood hazards (Section 4.11, Hydrology and Water Quality).

4.10.1 REGULATORY FRAMEWORK

A. FEDERAL

Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.)

The Resource Conservation and Recovery Act (RCRA) grants authority to the United States Environmental Protection Agency (EPA) to control hazardous waste from start to finish. This covers the production, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of non-hazardous solid waste. The 1986 amendments to the RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The Project site does not contain any structures or transite pipes (GS Lyon 2017, p. 20).

Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act, better known as the Clean Water Act (CWA), is a comprehensive statute focused on restoring and maintaining the chemical, physical and biological integrity of the nation's waters. Originally enacted in 1948, the CWA was amended numerous times until it was reorganized and expanded in 1972. It continues to be amended almost on an annual basis.

Primary authority for the implementation and enforcement of the CWA rests with the EPA. The CWA: authorizes water quality programs; requires federal effluent limitations and state water quality standards; requires permits for the discharge of pollutants into navigable waters; provides enforcement mechanisms; and authorizes funding for wastewater treatment work, construction grants, and state revolving loan programs; and authorizes funding to states and tribes for water quality programs. Provisions have also

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been added to address water quality problems in specific regions and specific waterways. The Project would be subject to the General Permit for Discharges of Storm Water Associated with Construction Activity (NPDES No. CAS000002) (Construction General Permit Order 2010-2014-DWQ, effective February 14, 2011) during construction. Operation of the Project would be covered under Industrial Storm Water General Permit Order 97-03-DWQ (General Industrial Permit) - NPDES permit (No. CAS000001).

Occupational Safety and Health Act (OSHA)

Congress passed the Occupational Safety and Health Act (OSHA) to assure safe and healthful working conditions for working men and women. OSHA assists States with ensuring safe and healthful working conditions and provides for research, information, education, and training in the field of occupational safety and health. The Project would be subject to OSHA requirements during construction, operation and maintenance, and reclamation.

Title 14, Part 77 of the Code of Federal Regulation, "Objects Affecting the Navigable Air Space"

Part 77 of the Code of Federal Regulation establishes standards and notification requirements for objects affecting navigable airspace. Part 77 describes the criteria used to determine the need for a Federal Aviation Administration (FAA) "Notice of Proposed Construction or Alteration" in cases of potential obstruction hazards. Notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing the adverse impacts to the safe and efficient use of navigable airspace. Any construction or alteration that is more than 200 feet above ground level (AGL) would be subject to review associated with Part 77. The height of the Gen-Tie Line would be approximately 45 feet. No component of the project would be 200 feet AGL.

B. STATE

Title 22 of the California Code of Regulations

Hazardous Materials Defined

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. According to Title 22, Section 66260.10, of the California Code of Regulations (CCR), a hazardous material is defined as:

...A substance or combination of substances which because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or, (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Chemical and physical properties that cause a substance to be considered hazardous include the properties of toxicity, ignitability, corrosivity, and reactivity (Title 22, Sections 66261.20 through 66261.24). Factors that influence the health effects of exposure to hazardous materials include dosage, frequency, the exposure pathway, and individual susceptibility. The proposed Project would require use of small amounts of hazardous materials (such as diesel fuel, oil and grease for heavy equipment) during construction, operation, and reclamation.

California Environmental Protection Agency

The California Environmental Protection Agency (Cal EPA) and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

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- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act
- Porter-Cologne Water Quality Control Act

Small quantities of hazardous materials will be used and stored on-site for miscellaneous, general maintenance activities that would be subject to state and local laws.

Department of Toxic Substances Control

The Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). Enforcement is delegated to local jurisdictions that enter into agreements with DTSC.

California's Secretary of Environmental Protection established a unified hazardous waste and hazardous materials management regulatory program as required by Health and Safety Code Chapter 6.11. The unified program consolidates, coordinates, and makes consistent portions of the following six existing programs:

- Hazardous Waste Generations and Hazardous Waste On-site Treatment
- Underground Storage Tanks
- Hazardous Material Release Response Plans and Inventories
- California Accidental Release Prevention Program
- Aboveground Storage Tanks (spill control and countermeasure plan only)
- Uniform Fire Code Hazardous Material Management Plans and Inventories

The statute requires all counties to apply to the Cal EPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements within the county. Most CUPAs have been established as a function of a local environmental health or fire department.

The Office of the State Fire Marshal participates in all levels of the CUPA program including regulatory oversight, CUPA certifications, evaluations of the approved CUPAs, training, and education. The DTSC serves as the CUPA in Imperial County.

Small quantities of hazardous materials will be transported to and from the Project area and used and stored on-site for miscellaneous, general operations and maintenance activities.

California Public Utilities Commission (CPUC), General Order 95 (GO-95), "Rules for Overhead Electric Line Construction"

GO-95 governs clearance requirements to prevent hazardous shocks, grounding techniques to minimize nuisance shocks, and maintenance and inspection requirements. These standards ensure that the

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appropriate clearances would be reliably maintained between the transmission line and any existing electric line installations. The proposed Project will be designed to National Electric Safety Code (NESC) standards.

California Public Utilities Commission, General Order 52 (GO-52)

GO-52 governs the construction and operation of power and communication lines to prevent or mitigate interference resulting from such lines.

California Public Utilities Commission, General Order 131-D, “Rules for Planning and Construction of Electric Generation Line and Substation Facilities in California”

GO-131-D specifies application and noticing requirements for new line construction including electromagnetic field (EMF) reduction. The proposed Project would be subject to this order.

Title 8, California Code of Regulations (CCR) section 2700 et seq. “High Voltage Safety Orders”

Title 8 of the California Code of Regulations specifies requirements and minimum standards for safety when installing, operating, working around, and maintaining electrical installations and equipment. The proposed Project would be subject to Title 8.

National Electrical Safety Code

The National Electrical Safety Code specifies grounding procedures to limit nuisance shocks and specifies minimum conductor ground clearances. The proposed Project would be subject to this code and would be designed with a grounding system providing an adequate path-to-ground to permit the dissipation of current created by lightning and ground faults.

14 California Code of Regulations (CCR), Sections 1250 – 1258, “Fire Prevention Standards for Electric Utilities”

14 CCR provides specific exemptions from electric pole and tower firebreak. 14 CCR also provides conductor clearance standards and specifies when and where standards apply. These standards address hazards that could be caused by sparks from conductors of overhead lines, or that could result from direct contact between the line and combustible objects. The proposed Project would be subject to these standards.

C. LOCAL

County of Imperial General Plan

Both natural and man-made hazards are addressed in the County of Imperial General Plan. The Seismic and Public Safety Element (Imperial County n.d.) also contains a set of goals and objectives for land use planning and safety, emergency preparedness, and the control of hazardous materials. The goals and objectives, together with the implementation programs and policies, provide direction for development. **Table 4.10-1** analyzes the consistency of the proposed Project with the applicable goal and objectives of the County of Imperial General Plan Seismic and Public Safety Element. While this EIR analyzes the Project’s consistency with the General Plan pursuant to CEQA Guidelines Section 151250, the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

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**TABLE 4.10-1
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goal and Objectives	Consistent with General Plan?	Analysis
SEISMIC AND PUBLIC SAFETY ELEMENT		
Control Hazardous Materials		
Goal 3: Protect the public from exposure to hazardous materials and wastes.	Yes	The proposed Project does not involve exposure of the public to hazardous materials and wastes. The Project would not use nor store any appreciable quantities of hazardous chemicals on site during normal operations. Fuel that may be used on site during construction would be stored in secondary containment. Thus, the proposed Project is consistent with this goal.
Objective 3.1 Discourage the transporting of hazardous materials/waste near or through residential areas and critical facilities.	Yes	The Project site is in a remote area of Imperial County with no residential uses in the immediate vicinity. Likewise, no critical facilities such as a hospital or fire station are on or in the vicinity of the Project area. Large quantities of hazardous materials are not required as part of construction, operation and reclamation of the proposed Project. Therefore, the proposed Project is consistent with this objective.
Objective 3.2 Minimize the possibility of hazardous materials/waste spills.	Yes	Very little hazardous waste (waste oil, lubricants, spill clean-ups, etc.) is expected to be generated during construction, normal operations or reclamation activities. Fuel that may be used on site during construction would be required to be stored in secondary containment (refer to Table 2.0-6, in Chapter 2.0). Therefore, the proposed Project is consistent with this objective.
Objective 3.3 Discourage incompatible development adjacent to sites and facilities for the production, storage, disposal, and transport of hazardous materials/waste as identified in the County General Plan and other regulations.	Yes	The proposed Project site is surrounded by former agricultural land to the west (proposed to be developed with the Seville 3 Solar Project), Seville 2 Solar to the northwest and open desert to the north, east and south. The proposed Gen-Tie Line extends through the Seville 3 Solar site and the Seville 4 Substation and IID Switching Station are proposed on Lot D. The proposed Project is compatible with surrounding uses and the Project area is not adjacent to any hazardous facilities. Therefore, the proposed Project is consistent with this objective.

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Imperial County Office of Emergency Services – Emergency Operations Plan

The Imperial County Fire Department (ICFD) is the local Office of Emergency Services (OES) in Imperial County. The County Fire Chief is the OES Coordinator. An Assistant OES Coordinator maintains the OES program for the County of Imperial. ICFD acts as the lead agency for the Imperial County Operational Area (OA) and provides leadership in all phases of developing the emergency management organization, including public education, training, emergency operations center operations, interagency coordination, and plan development (Imperial County OES 2007).

The County of Imperial has adopted the “Imperial County Operational Area - Emergency Operations Plan,” (EOP) which addresses the County’s planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. The EOP provides a comprehensive, single source of guidance and procedures for the County to prepare for and respond to significant or catastrophic natural, environmental, or conflict-related risks that produce situations requiring coordinated response. It further provides guidance regarding management concepts relating to response and abatement of various emergency situations, identifies organizational structures and relationships, and describes responsibilities and functions necessary to protect life and property. The EOP is consistent with the requirements of the Standardized Emergency Management System (SEMS) as defined in Government Code Section 8607(a) and the U.S. Department of Homeland Security National Incident Management System (NIMS) for managing response to multi-agency and multi-jurisdictional emergencies. SEMS/NIMS incorporates the use of the Incident Command System (ICS), mutual aid, the operational area concept, and multi/interagency coordination (Imperial County OES 2007).

The EOP identifies certain open space areas and public buildings to serve as emergency shelters when residents must be relocated. The Project area is approximately 12 miles west of the southern tip of the Salton Sea in Zone 5 as depicted on the “Fire/Emergency Management/Staging and Shelter Zone Map” of the EOP (Imperial County OES 2007, p. 73). No portion of the proposed Project area is designated as an emergency shelter area on the “Fire/Emergency Management/Staging and Shelter Zone Map” of the EOP (Imperial County OES 2007).

County of Imperial Fire Prevention and Explosives Ordinance

The County of Imperial Fire Prevention and Explosives Ordinance, Section 53101-53300, contains provisions for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion. Such measures in this Ordinance include the following:

- Storage of flammable materials
- Storage of radioactive materials
- Permit required for sale and use of fireworks
- Abatement of weeds and other vegetation

Weed and vegetation control would be enforced as part of operations and maintenance of the proposed Project to minimize potential fire fuel.

4.10.2 ENVIRONMENTAL SETTING

A. PROJECT SITE

The proposed Project site is located on a portion of the 572.10 acres comprising Lot 8 of Tract Map 00988, Section 25, T12S, R9E. Approximately 60 acres in the northwest portion of the proposed Project site (under either the HSAT or Fixed-Frame Configuration) was previously farmed.

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Phase I Environmental Site Assessment

Information contained in this section is summarized from the “Phase I ESA Report Seville 4 Solar Farm 1798 W. Hwy 78, Imperial, California” prepared by GS Lyon (GS Lyon 2017). This Phase I ESA covered the 572-acres encompassed by Lot 88 (APN #018-010-025-000) including the Project site (174-acre HSAT Configuration which is the larger than, and inclusive of, the 146-acre Fixed-Frame Configuration). The Phase I ESA is provided in **Appendix J** on the attached CD of Technical Appendices of this EIR.

The purpose of a Phase I ESA is to identify, to the extent feasible, recognized environmental conditions (RECs) associated with past and present activities on Lot 8 or in the immediate vicinity in general conformance to ASTM Standard E-1527-13 “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” that may affect future uses of the subject property. The American Society for Testing and Materials (ASTM) defines “recognized environmental conditions” as “any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water at the subject site.”

A Phase I ESA includes the results of a site reconnaissance to identify current conditions of Lot 8 and adjoining properties, a review of various readily available federal, state, and local government agency records, and review of available historical site and site vicinity information.

The Phase I ESA focused on the historical use and existing conditions of Lot 8 and the Project site. Approximately 96 acres of the western quarter of Lot 8 were used for farming (approximately 60 acres are within the Project site). The Gen-Tie Line extending east through the Seville 3 Solar Project and north along the west side of the access road, the extension of the existing access road, and construction of the Seville 4 Substation and IID Switching Station proposed to be located on Lot D, would occur within areas previously covered as part of the Seville Solar Farm Complex EIR. Because these areas were previously analyzed and are within the footprint of the Seville Solar Farm Complex, they were not considered as part of this Phase I ESA.

Background Review

A review of historic aerial photographs (provided in Appendix C of the Phase I ESA Report prepared by GS Lyon included as **Appendix J** of this EIR) and historic topographic maps (provided in Appendix D of the Phase I ESA Report prepared by GS Lyon included as **Appendix J** of this EIR), was performed to evaluate potentially adverse environmental conditions resulting from previous ownership and uses of the site (GS Lyon 2017, p. 2). The 1954 aerial photograph shows Lot 8 and the Project site as undeveloped desert land. The 1978, 1984, 1992, 2005, 2009, 2010 and 2012 aerial photographs show Lot 8 and the entire Project area as vacant desert land with 96-acres of agricultural lands in the northwest corner of the Lot 8 (GS Lyon 2017, p. 18). Approximately 60 acres of agricultural lands were within the boundary of the Project site.

Regulatory Review

GS Lyon contracted Environmental Data Resources, Inc. (EDR) to generate a compilation of State and Federal and Tribal regulatory lists consisting of information regarding hazardous material occurrence on or within a one-mile radius of Lot 8. The records search is compiled to obtain and review reasonably ascertainable records that will help identify RECs or historical RECs in connection with the Project site. The EDR report is provided in Appendix F of the Phase I ESA Report prepared by GS Lyon included as **Appendix J** of this EIR.

Site Reconnaissance

A site reconnaissance was performed by GS Lyon staff on July 18, 2017. The reconnaissance included visual observation of surficial conditions at Lot 8 (which includes the Project site) and observation of adjoining properties to the extent that they were visible. The reconnaissance also included: evaluating the

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Project site for potential hazardous materials/waste and petroleum product use, storage, disposal, or accidental release, including the following: presence of tank and drum storage; mechanical or electrical equipment likely to contain liquid; evidence of soil or pavement staining or stressed vegetation; ponds, pits lagoons, or sumps; suspicious odors; fill and depressions; or any other conditions indicative of potential contamination (GS Lyon 2017, p. 20).

General Site Setting

The majority of Lot 8 site is vacant desert land. A small portion (approximately 60 acres) at the northwest corner of the Project site is comprised of agricultural fields that are currently fallowed with dried crops or weeds covering the fields (GS Lyon 2017, p. 18). Fish Creek (desert ephemeral stream) bounds the south side of the Lot 8 (refer to Figure 4.11-4 in Section 4.11 Hydrology and Water Quality). Tarantula Wash bounds the northeast side of the Project site and San Felipe Creek (desert ephemeral stream) bounds the southwest side of the Project site (GS Lyon 2017, p. 9) (refer to Figure 2.0-3 in Chapter 2.0, Project Description).

Adjacent Properties

Historically, the properties located immediately adjacent to the north, east and south of Lot 8 have been comprised of vacant desert land with open space recreational uses. Properties to the west and northwest were part of the Allegretti Ranch, an agricultural development. At the height of agricultural use, approximately 1,700 acres were farmed. In the past decade, approximately 80 to 100 acres along the western boundary of the Allegretti Ranch were farmed. When the Ranch was in production, a series of transite pipes (asbestos concrete pipe and PVC) were used to distribute irrigation water from five water wells, none of the wells or transite pipes are on the Project site (GS Lyon 2017, pp. 18-19).

The northeast portion of the Allegretti Ranch is now occupied by Seville 1 Solar and Seville 2 Solar. The Allegretti Ranch property to the west of the Lot 8 and the Project site is proposed to be developed with the Seville 3 Solar project (GS Lyon 2017, p. 18).

Site Observations

Hazardous Substances and Petroleum Products

No operations that use and store petroleum products were identified on Lot 8 or anywhere within the boundaries of the Project site (GS Lyon 2017, p. 19).

Underground Storage Tanks (USTs)

No obvious visual evidence indicating the current presence of USTs (i.e. vent pipes, fill ports, etc.) was noted on Lot 8 or anywhere within the boundaries of the Project site (GS Lyon 2017, p. 19).

Aboveground Storage Tanks (ASTs)

No obvious visual evidence indicating the current presence of ASTs was noted on Lot 8 or anywhere within the boundaries of the Project site (GS Lyon 2017, p. 19).

Odors

No obvious strong, pungent, or noxious odors were noted on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 19).

Pools of Liquid

Pools of liquid were not observed on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 19).

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Drums and Containers

No drums or storage containers were observed on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 19).

Unidentified Substance Containers

No open or damaged containers containing unidentified substances were observed on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 19).

Suspect Polychlorinated Biphenyl (PCB) Containing Equipment

No PCB containing equipment was observed on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 19).

Pits, Ponds, and Lagoons

No evidence of pits and/or lagoons was evident on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 20).

Stained Soils or Pavement

No evidence of significantly stained soil or pavement was evident on Lot 8 or anywhere within the boundaries of the Project site during the site reconnaissance (GS Lyon 2017, p. 20).

Stressed Vegetation

Neither Lot 8 or any portion of the Project site had any evidence of stressed vegetation attributed to potential contamination during the site reconnaissance (GS Lyon 2017, p. 20).

Solid Waste

The Project site had a few piles of vegetation cleared from Lot 8. No trash on the Project site during the site reconnaissance (GS Lyon 2017, p. 20).

Wastewater

Wastewater is not generated on the Project site. Storm water flows across the Project site and Lot 8 into natural washes (GS Lyon 2017, p. 22).

Wells

No evidence of wells was found on the Project site or within Lot 8 during the site reconnaissance (GS Lyon 2017, p. 20).

Septic System

No evidence of septic systems was found on the Project site or within Lot 8 during the site reconnaissance (GS Lyon 2017, p. 20).

Pesticide Residue

Based on review of environmental records, historical documents, and site conditions, approximately 96-acres in the northwest corner of Lot 8 (approximately 60 acres in the Project site) have been in agricultural use and/or vacant desert lands from the late 1950's until approximately 2009. Residues of currently available pesticides and currently banned pesticides such as Dichlorodiphenyldichloroethylene (DDE) and Dichlorodiphenyltrichloroethane (DDT) may be present in near surface soils in limited concentrations.

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Asbestos-Containing Materials

During development of the Allegretti Farms property, a series of transite pipes (asbestos concrete pipe) were used to distribute irrigation water from the wells within the Property. No transite pipelines were found to be located on Lot 8 or the Project site during the site reconnaissance (GS Lyon 2017, p. 21).

Lead-based Paint

The risk of lead based paint being present on the Project site is low due to the site being vacant and void of buildings during the site reconnaissance (GS Lyon 2017, p. 21).

Radon

The Project site is located in Zone 3 as shown on EPA Map of Radon Zones indicating a predicted average indoor radon screening level of less than 2 picocuries per liter (pCi/L). Therefore, radon gas is not believed to be a potential hazard at the Project site (GS Lyon 2017, p. 21).

Flood Zones

The Lot 8 and the Project site are located in Federal Emergency Management Agency (FEMA) Flood Zone X with two areas of FEMA Flood Zone A aligning through the Project site. FEMA Flood Zone X, an area determined to be outside the 0.2% annual chance floodplain (Federal Insurance Rate Map [FIRM] Panel 06025C0950C and 060250925C). The two separate FEMA Flood Zone A portions, which are subject to inundation by the 1% annual chance flood, include the San Felipe ephemeral stream and the Tarantula Wash (GS Lyon 2017, p. 21). These are discussed further in Section 4.11, Hydrology and Water Quality.

Fire Hazard/Smoke

According to the Imperial County Multi-Jurisdictional Hazard Mitigation Plan Update, “the potential for a major fire in the unincorporated areas of the County is generally low (Imperial County 2013a). According to the Imperial County Natural Hazard Disclosure (Fire) Map prepared by the California Department of Forestry and Fire Protection (CDF 2000), the Project area is not located in an area characterized as either: (1) a wildland area that may contain substantial forest fire risk and hazard; or (2) very high fire hazard severity zone. The closest wildland area prone to forest fire is located approximately 30 miles southwest of the Project area near Interstate 8 and State Route 98 west of Ocotillo.

Valley Fever

Valley Fever is an illness caused by a fungus (*Coccidioides immitis* and *C. posadasii*) that grows in soils under certain conditions. Favorable conditions for the Valley Fever fungus include low rainfall, high summer temperatures, and moderate winter temperatures. Soils within the Imperial Valley, including the Project area, fit the profile to harbor Valley Fever spores. When soils are disturbed by the wind or other activities such as construction and farming, Valley Fever fungal spores become airborne. The spores present a potential health hazard when inhaled. Individuals in occupations such as construction, agriculture, and archaeology have a higher risk of exposure due to working in areas of disturbed soils which may have the Valley Fever fungus. Infection risk is highest in California during a six-month period from June to November. Animals are also susceptible to the disease. In extreme cases, the disease can be fatal, though the majority of Valley Fever cases are very mild with over 60 percent or more of infected people having no symptoms or flu-like symptoms (BLM 2010).

Valley Fever is not transmitted directly from person to person. Of those infected with *coccidioidomycosis*, approximately 60 percent may be asymptomatic. Following an incubation period of 1 to 3 weeks, clinical manifestations occur in 40 percent of infected persons and range from influenza-like illness, such as cough, fever, or difficulty breathing, to severe pneumonia, and rarely, disseminated disease. Disseminated

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infection, which can be fatal, most commonly involves skin and soft tissues, bones, and the central nervous system (CDPH 2017, p. 4).

Imperial County has a relatively low Valley Fever incidence rate. Data as of September 10, 2017 indicated that there were 5 cases in 2011; 12 cases in 2012; 5 cases in 2013; 0 cases in 2014; 2 cases in 2015; and 9 cases in 2017 (CDPH 2017, p. 7).

4.10.3 IMPACTS AND MITIGATION MEASURES

A. STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines, as listed in Appendix G. The project would result in a significant impact to hazards and hazardous materials if it would result in any of the following:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- b) 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.
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d) 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.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

B. ISSUES SCOPED OUT AS PART OF THE INITIAL STUDY

Several criteria were eliminated from further evaluation as part of the Initial Study. Criterion “c” was eliminated because the Project is not located within one-quarter mile of an existing school. Criterion “d” was eliminated because the Project site did not appear in an Agency Database Record Search of a list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5. Criteria “e” and “f” were eliminated because the Project is not located within two miles of a public airport or a private airstrip. The Salton Sea Airport is approximately 9 miles northeast of the Project site; the Ocotillo Airport is approximately 6.75 miles to the northwest. Thus, no impact is identified for these issue areas.

Criterion “g” was eliminated because the proposed circulation plan for the Project site will be required to provide emergency access points and safe vehicular travel. In addition, local building codes would be followed to minimize flood, seismic, and fire hazard. Thus, the proposed Project would not impair the

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implementation of, or physically interfere with, any adopted emergency response plans or emergency evacuation plans.

Criterion “h” was eliminated because the Project area is not characterized as an area of urban/wildland interface. According to the Imperial County Natural Hazard Disclosure (Fire) Map prepared by the California Department of Forestry and Fire Protection (2000), the Project area does not fall into an area characterized as either: 1) a wildland area that may contain substantial forest fire risk and hazard; or 2) a very high fire hazard severity zone. Thus, the Project would not expose people or structures to significant risk of loss injury or death involving wildland fire.

C. ISSUES OF CONCERN WITH NO APPLICABLE CRITERIA

Several hazards of potential concern to the public with no corresponding criteria are briefly discussed below. These hazards are acknowledged and discussed to the extent that they would result from the proposed Project.

Hazardous Shocks

Hazardous shocks are those that could result from direct or indirect contact between an individual and an energized line. No design-specific federal regulations have been established to prevent hazardous shocks from overhead power lines (BLM/CEC 2010). Safety is assured within the industry from compliance with the requirements specifying the minimum national safe operating clearances applicable in areas where the line might be accessible to the public. The proposed Gen-Tie Line would be located in rural and uninhabited area within the fenced boundaries of the Seville Solar Farm Complex making it highly unlikely that the public would come in contact with the line.

Fire Hazard (Non-Wildland/Operational)

Portable fire extinguishers of appropriate sizes and types would be throughout the Project area during construction. PV modules are typically Class C fire-rated (Canadian Solar n.d.). The remainder of the equipment is of nonflammable material (aluminum, steel, and glass). Tank(s) capable of storing up to 20,000 gallons of fire water will be on-site for fire protection.

All applicable fire laws and regulations will be observed during the Gen-Tie Line operation and maintenance period. All on-site personnel would be advised of their responsibilities under the applicable fire laws and regulations, including taking practical measures to report and suppress fires.

Valley Fever

Construction of the proposed Project would occur in an area favorable to the growth of Valley Fever (*Coccidioides immitis*), a fungus that grows in soils in areas of low rainfall, high summer temperatures, and moderate winter temperatures. Project construction would disturb the soil and cause the fungal spores to become airborne, potentially putting construction personnel and wildlife at risk of contracting Valley Fever. However, Imperial County does not have a high incidence of Valley Fever as shown in recent statistics (CDPH 2017, p. 7). While the potential exposure of workers to Valley Fever spores could occur during construction, implementation of mitigation measures identified to reduce PM₁₀ in Section 4.4, Air Quality (e.g. watering disturbed areas three times per day) would be effective in reducing airborne dust. Implementation of these mitigation measures, as well as a dust control plan as required by the Imperial County Air Pollution Control District, would minimize the spread of fungal spores thereby reducing potential for contracting Valley Fever during construction and reclamation activities. Exposure to Valley Fever during operations and maintenance would be greatly reduced as the Applicant intends to periodically apply chemical stabilization agents (soil binders) to exposed soil surfaces to control dust.

4.10 HAZARDS AND HAZARDOUS MATERIALS

D. METHODOLOGY

The analysis of hazardous materials is twofold: those potentially existing on the site and those that would be used as part of project construction, operations and maintenance, and reclamation.

Potential existing hazards were assessed based on information contained in the “Phase I ESA Report Seville Solar Farm 4, 1798 W. Hwy 78, Imperial County, California” prepared by GS Lyon (GS Lyon 2017). This Phase I ESA covered the 572-acre Lot 8 which includes the Project site. This document is provided on the attached CD of Technical Appendices as **Appendix J** of this EIR.

Some hazardous materials would be used on a short-term basis during construction. Others would be stored on-site for use during operations and maintenance. Therefore, this analysis was conducted by examining the choice and amount of chemicals to be used; the manner in which the chemicals would be used; the manner by which any hazardous materials would be transported to the Project area; and the way in which the materials would be stored on the Project site.

E. PROJECT IMPACTS AND MITIGATION MEASURES

Hazardous Materials Transport, Use, Disposal and Accidental Release

Impact 4.10.1 The proposed Project does not involve the use of large quantities of hazardous materials that would present a risk to the public or the environment through transport, use, or disposal. This is considered a **less than significant impact**.

Construction

Transport

Some hazardous materials would be required during construction of the proposed Project. These include diesel fuel, oil and grease for heavy equipment. Large quantities of these materials are not anticipated to be necessary but the amount needed would require transport to the Project area. All hazardous materials (such as diesel fuel, gasoline, oil, and grease for heavy equipment) transported to the Project area during construction would occur in compliance with Department of Toxic Substances Control (DTSC) regulations. Therefore, the likelihood of an accidental release during transport, or residual contamination following accidental release, is not anticipated and **less than significant impacts** are anticipated in association with use, transport, and disposal of hazardous materials during construction of the proposed Project.

Use and Storage

A variety of hazardous materials would be used during construction of the proposed Project. However, no acutely toxic hazardous materials would be used and none of the materials are anticipated to pose a significant potential for off-site impacts such as contamination through a large release of chemicals. The Applicant has indicated the fuel that may be used on site during construction and would be stored within secondary containment (refer to Table 2.0-4 in Chapter 2.0). The Project will also be required to comply with State laws and County Ordinance restrictions, which regulate and control hazardous materials handled on site. Therefore, potential for accident conditions involving the release of hazardous materials used or stored during construction is considered a **less than significant**.

Disposal

Very little hazardous waste (waste oil and lubricants, spill clean-ups, etc.) is expected to be generated during Project construction. Hazardous waste generated during construction will be disposed of in accordance with local, State and federal regulations. Therefore, hazardous waste disposal impacts are considered **less than significant** during Project construction.

4.10 HAZARDS AND HAZARDOUS MATERIALS

Operation

Transport

A limited quantity of hazardous materials may be required during operation the proposed Project. All hazardous materials transported to the Project area during operation would occur in compliance with DTSC regulations. Therefore, the likelihood of an accidental release during transport, or residual contamination following accidental release, is not anticipated throughout Project operation and impacts are considered **less than significant**.

Use and Storage

Hazardous materials are not anticipated to be stored within the Project area during operation. If any hazardous substances are needed for operational maintenance activities, these materials would be used in accordance with required practices. Therefore, potential for accident conditions involving the release of hazardous materials used or stored during Project operation is considered a **less than significant**.

Disposal

Very little hazardous waste (waste oil and lubricants, spill clean-ups, etc.) is expected to be generated during Project operation. Wastes generated during operation (such as mineral oil used to electrically insulate the transformers) will be disposed of in accordance with local, State and federal regulations. According to the DTSC, "Solar panel wastes include heavy metals such as silver, copper, lead, arsenic, cadmium, selenium that at certain levels may be classified as hazardous wastes)...The electronic components associated with the solar panels (e.g. drivers, inverters, circuit boards) contain all of the common electronic device hazardous constituents such as lead, arsenic, cadmium, selenium, and chromium" (DTSC n.d.). Some replacement of broken or damaged solar panels may be required during Project operation. Disposal of broken or inoperable solar panels that are hazardous (e.g., cadmium, selenium, etc.) are fully regulated hazardous wastes. Hazardous waste solar panels are required to be managed according to all applicable hazardous waste laws and regulations, including obtaining an authorization for conducting treatment (DTSC n.d.). Components such as glass, copper wire and aluminum framing from non-hazardous solar panels can be taken to a non-hazardous landfill or to recycling centers to be disassembled and reclaimed for value through recycling activities (DTSC n.d.). Alternatively, the panels will be recycled if possible. Therefore, hazardous waste disposal impacts are considered **less than significant** during Project operation.

Reclamation

Transport

As with construction, some hazardous materials would be required during Project reclamation activities. All hazardous materials (such as diesel fuel, oil and grease for heavy equipment) transported to the Project area during reclamation would occur in compliance with DTSC regulations. As a result, the likelihood of an accidental release during transport, or residual contamination following accidental release is not anticipated during reclamation. Therefore, hazardous waste disposal impacts are considered **less than significant** during Project reclamation.

Disposal

Some hazardous waste (waste oil and lubricants, spill clean-ups, etc.) is expected to be generated during Project reclamation. The PV panels would most likely be recycled at the end of the Project's useful life. If disposal is required, the panels would be handled as described above under "Operation." All wastes generated during reclamation will be disposed of in accordance with all local, State (e.g. DTSC) and federal regulations. Therefore, hazardous waste disposal impacts are considered **less than significant** during

4.10 HAZARDS AND HAZARDOUS MATERIALS

Project reclamation. Reclamation of the Project site to its end state of approximate existing desert land or idle farmland is not anticipated to require hazardous materials transport, use, or disposal or present the potential for accidental release.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

Create a Hazard Through Reasonably Foreseeable Upset/Release of Hazardous Materials

Impact 4.10.2 A portion of the Project site was historically used for agricultural production. Based on prior uses, on-site soils may contain low levels of residual pesticide residue which would be below regulatory threshold limits. Therefore, the potential for the Project site to create a hazard through reasonably foreseeable upset or release of hazardous materials is considered a **less than significant impact**.

Concentrations of currently banned pesticides (e.g. DDT/DDE) found on other Imperial Valley agricultural sites are typically less than 25% of the current regulatory threshold limits and, at those levels, are not considered a significant environmental hazard. While the presence and concentration of near surface pesticides at the Project site can be accurately characterized only thru site-specific sampling and testing (GS Lyon 2017, p. 21), given that the Project site has not been farmed in approximately a decade, the likelihood of dangerous levels of pesticides is considered low.

Construction

Herbicides/Pesticides

Approximately 60 acres of the Project site has historically been farmed leading to the presence of pesticides and herbicides as a historical REC (GS Lyon 2017, p. 23). Pesticides and herbicides typically used for farming in the Imperial Valley are likely to have been used on the western quarter of Lot 8 (GS Lyon 2017, p. 24). Typical concentrations of DDT and DDE pesticides in the soil are about 25% of the USEPA preliminary remediation goals (GS Lyon 2017, p. 24). At these levels, the residue of pesticides is not considered a significant environmental hazard (GS Lyon 2017, p. 21). The presence and concentration of near surface pesticides on the Project site can be accurately characterized only by site-specific sampling and testing. However, no hydrocarbon stains were found on the Project site surface soils. Therefore, no further action is recommended regarding herbicides and pesticides and this impact is considered **less than significant**.

Operation

Following construction, the potential for on-site hazardous materials as described above would become a non-issue. Therefore, impacts associated with creating a hazard through reasonably foreseeable upset or release of hazardous materials is considered **less than significant** during Project operation

Reclamation

Reclamation activities would include dismantling and demolition of above-ground structures; concrete removal; removal and dismantling of underground utilities; excavation and removal of soil; and final site contour. Any potential hazards present during reclamation (e.g. heavy metals such as silver, copper, lead, arsenic, cadmium, selenium) would be required to be handled in accordance with all local, State (i.e. DTSC) and federal regulations. Therefore, impacts associated with creating a hazard through reasonably

4.10 HAZARDS AND HAZARDOUS MATERIALS

foreseeable upset or release of hazardous materials is considered **less than significant** during reclamation activities. Reclamation of the Project site to its end state of approximate existing desert land or idle farmland is not anticipated to create a hazard through reasonably foreseeable upset or release of hazardous materials.

Mitigation Measures

None required.

Significance After Mitigation

Note applicable.

4.10.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES

A. CUMULATIVE SETTING

The geographic scope of the cumulative setting for hazards and hazardous materials is a one-mile radius around Lot 8. One mile is the standard ASTM standard search distance for hazardous materials. This geographic scope encompasses an area larger than the Project site and provides a reasonable context wherein cumulative projects in the vicinity of the proposed Project could affect hazards and hazardous materials. Based on Table 3.0-1 (Large Scale Proposed, Approved and Reasonably Foreseeable Renewable Energy Projects) in Chapter 3.0, Introduction to the Analysis and Assumptions Used, there are no other projects from the list of cumulative projects within the geographic scope.

B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Hazards and Hazardous Materials Impact

Impact 4.10.3 The proposed Project, in combination with other reasonably foreseeable projects in the vicinity of Lot 8, would increase the density of development in the area, thus potentially increasing the potential for the presence hazards and use of hazardous materials. However, this is considered to be a **less than cumulatively considerable impact**.

Construction

None of the cumulative projects listed in Table 3.0-1 are within a one-mile radius of the proposed Project. Thus, these projects are considered outside of the geographic scope for the consideration of cumulative effects from hazardous materials sites.

The proposed Project would involve the storage, use, disposal, and transport of hazardous materials to varying degrees during construction. Accidental release of hazardous materials can be mitigated to less than significant levels through compliance with various federal, State, and local laws, regulations, and policies regarding transport and use of hazardous materials. It is reasonable to expect that the proposed Project would implement and comply with these existing hazardous materials RECs warranting further environmental study or remediation (GS Lyon 2017, p. 24). Therefore, the proposed Project's contribution to cumulative hazardous materials impacts is **considered less than cumulatively considerable**. Likewise, the proposed Project would have a **less than cumulatively considerable impact** related to use or routine transport of hazardous materials during construction.

Operation

The proposed Project may involve the storage, use, disposal, and transport of hazardous materials to varying degrees during operation in association with maintenance activities. Based on the nature of the proposed Project as a solar generation facility, and its remote location removed from other development, it would not result in the generation or transport of substantial quantities of hazardous materials or

4.10 HAZARDS AND HAZARDOUS MATERIALS

present the potential for release of hazardous materials. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to a cumulative impact related to use or routine transport of hazardous materials during operation. Likewise, the proposed Project would have a **less than cumulatively considerable impact** related to use or routine transport of hazardous materials during operation.

Reclamation

Reclamation activities would be specific to each individual large scale renewable energy project identified in Table 3.0-1, in Chapter 3.0 Introduction to the Analysis and Assumptions Used. Typical reclamation activities include dismantling and demolition of above-ground structures; concrete removal; removal and dismantling of underground utilities; excavation and removal of soil; and final site contour. Any potential hazards present during reclamation of each cumulative solar project (e.g. heavy metals such as silver, copper, lead, arsenic, cadmium, selenium) would be addressed through compliance with all federal, State (i.e. DTSC) and local regulations. Therefore, the proposed Project would result in a **less than cumulatively considerable contribution** to cumulative hazardous materials impacts during reclamation. Reclamation of the Project site to its end state of approximate existing desert land or idle farmland would have a **less than cumulatively considerable impact** with regard to creating cumulative hazards and hazardous materials impacts.

Mitigation Measures

None required.

Significance After Mitigation

Not applicable.

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