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Worker Safety Plan

This worker safety plan summarizes the worker health and safety issues that may be encountered during construction and operation of the Soda Mountain Solar Project (Project). This section addresses California Energy Commission (CEC) requirements for Opt-In Applications, as specified in Title 20, California Code of Regulations, Section 1704, Appendix B for worker safety. Section 2.1 contains a brief description of the work environment and setting. Section 2.2 describes the analyses conducted to identify hazards for health and safety programs, as well as the safety compliance and training programs that would be established during Project construction and operation (including maintenance). Section 2.3 presents laws, ordinances, regulations, and standards (LORS) applicable to worker safety. Section 2.4 identifies regulatory agency contacts. Section 2.5 describes permits required for the Project related to worker safety. Section 2.6 provides references for this section.

1.1 Environmental Setting

The Soda Mountain Solar Project (Project) will consist of the construction and operation of a 300-megawatt photovoltaic solar facility, which will include a solar panel arrays, operation and maintenance buildings and infrastructure, stormwater infrastructure, a substation, a switchyard, and a battery energy storage system, disturbing approximately 2081 acres of the 2670-acre site. Project site is located in an unincorporated desert area of San Bernardino County south of the community of Baker, CA. San Bernardino County features a hot-summer Mediterranean climate (Csa Koppen climate classification) (Zimmerman, Berg, McVicar, Beck, 2018), with external working conditions in the summers being hot and arid with little to no cloud coverage and winter conditions being cool and generally partly cloudy. Typically, February is the month that experiences the highest average precipitation. According to the Applied Climate Information System, the highest normal daily temperature range for Baker, CA (15 miles from Project site) is 79 - 110°F, and occurs in late July, with a record maximum temperature of 124°F. The lowest normal daily temperature range for Baker, CA is 32 - 61°F, and occurs in late December, with a record minimum temperature of 13°F.

1.2 Hazards Analysis

1.2.1 Methodology

Project construction, operations and maintenance (O&M), and decommissioning activities have the potential to expose workers to safety hazards. A hazard analysis was conducted to determine impacts to worker health and safety from these Project activities. The analysis identifies the hazards anticipated during construction, O&M, and decommissioning activities and indicates which safety programs should be developed and implemented to avoid, mitigate, and/or appropriately manage such hazards.

1.2.2 Impact Evaluation Criteria

The following section provides a hazard analysis of construction and O&M activities to address CEC requirements for Opt-In Applications, as specified in Title 20, California Code of Regulations, Section 1704, Appendix B for worker safety. This hazard analysis was completed primarily via consultation of two resources which include 1) OSHA 3071 Job Hazard Analysis Guidance (OSHA, 2002) and 2) Cal/OSHA Guide to Developing Your Workplace Injury and Illness Prevention Program (Cal/OSHA, n.d.). The OSHA Job Hazard Analysis Guidance provides a number of general categories of hazards to consider, which were used as the impact evaluation criteria.

1.2.3 Hazard Analysis

Table A shows the results of the hazards analysis for Project construction activities and Table B shows the results for Project O&M activities. Outlines for the programs and plans described in Table A and Table B are included in Section 2.2.4.

Table A: Project Construction Hazard Analysis

Activity	Hazard	Control Program(s)
Motor vehicle and heavy equipment use	<ul style="list-style-type: none"> Personnel injury and/or property damage from collisions between people, motor vehicles, and/or equipment 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Forklift Operation	<ul style="list-style-type: none"> Personnel injury and/or property damage from collisions between people, forklifts, and/or equipment 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Trenching and excavation	<ul style="list-style-type: none"> Personnel injury and/or property damage from the collapse of trenches and excavations. Exposure to fumes or vapors that have collected in the trench/excavation. 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Working at elevation	<ul style="list-style-type: none"> Personnel injury and/or property damage resulting from falls from elevated areas Personnel injury resulting from overhead hazards. 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Crane/derrick operation	<ul style="list-style-type: none"> Personnel injury and/or property damage from falling loads. Injuries and property damage from contact with crane or derrick. 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Working with flammable and combustible liquids	<ul style="list-style-type: none"> Personnel injury and/or property damage resulting from fire, spills, or explosions 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program Construction FPP Plan
Hot work (e.g. cutting, welding)	<ul style="list-style-type: none"> Personnel injury and/or property damage from fire, explosion, or exposure to hot materials. Exposure to fumes during cutting and welding. Personnel injury resulting from ocular exposure to ultraviolet and infrared radiation during cutting and welding. 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program Construction FPP Plan
Inspection and maintenance of temporary systems	<ul style="list-style-type: none"> Personnel injury and/or property damage from contact with hazardous energy sources (electrical, thermal, and mechanical). 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Working on electrical equipment	<ul style="list-style-type: none"> Personnel injury resulting from contact with live electricity and energized equipment. Personnel injury resulting from arc flashes Fire hazard resulting from contact with live electricity and energized equipment. 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program Construction FPP Plan
Hazardous waste exposure	<ul style="list-style-type: none"> Personnel exposure to materials classified as hazardous waste under RCRA, which for this project would predominantly be waste oils (soil categorized as nonhazardous) 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program
Confined space entry	<ul style="list-style-type: none"> Personnel injury due to suffocation, or exposure to physical/chemical hazards while working in an area classified as a confined space 	<ul style="list-style-type: none"> Construction IIPP Construction PPE Program

Table A: Project Construction Hazard Analysis

Activity	Hazard	Control Program(s)
General construction activities	<ul style="list-style-type: none"> • Personnel injury from hand and portable power tools. • Personnel injury/property damage from inadequate walking and work surfaces and/or poor housekeeping. • Personnel exposure to occupational noise hazards (>85 dBA 8 hr time weighted average) • Personnel injury from improper lifting, carrying materials and equipment, and poor ergonomics. • Personnel exposure to hazardous gases, vapors, dusts, and fumes. • Personnel exposure to various hazards. • Heat and cold stress. • Personnel injury and property damage from unsafe driving. 	<ul style="list-style-type: none"> • Construction IIPP • Construction PPE Program
Grading or excavation activities	<ul style="list-style-type: none"> • Personnel exposure to potentially contaminated soil associated with abandoned oil wells • Personnel injury resulting from collapse in a trench or excavation as a result of improper or inadequate shoring. 	<ul style="list-style-type: none"> • Construction IIPP
Working outdoors/remote	<ul style="list-style-type: none"> • Personnel injury resulting from working alone and/or in a remote area. • Personnel injury and/or property damage resulting from lightning strikes during a storm. 	<ul style="list-style-type: none"> • Construction IIPP
Biological hazards	<ul style="list-style-type: none"> • Exposure to COVID-19 or other pathogens. • Exposure to unsanitary conditions as a result of insufficient sanitation of chemical toilets, lack of access to hand washing stations, insufficient sanitary supplies 	<ul style="list-style-type: none"> • Construction IIPP • Construction PPE Program
Work in weather extremes	<ul style="list-style-type: none"> • Personnel sickness or injury resulting from extreme heat 	<ul style="list-style-type: none"> • Construction IIPP • Emergency Action Plan
Fire/explosion hazards	<ul style="list-style-type: none"> • Personnel injury and/or property damage from contact with explosive energy sources. • Personnel exposure to post blast air quality. • Personnel injury and/or property due to improper storage and transport of explosives. • Theft of explosives. 	<ul style="list-style-type: none"> • Construction IIPP • Construction PPE Program • Construction FPP Plan
Working during a natural disaster	<ul style="list-style-type: none"> • Personnel injury and/or property damage resulting from wildfire hazards. • Personnel sickness of injury resulting from an earthquake 	<ul style="list-style-type: none"> • Emergency Action Plan

Table B: Project O&M Hazard Analysis

Activity	Hazard	Control Program(s)
Motor vehicle and heavy equipment use	<ul style="list-style-type: none"> Personnel injury and/or property damage from collisions between people, motor vehicles, and/or equipment 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Forklift operation	<ul style="list-style-type: none"> Personnel injury and/or property damage from collisions between people, forklifts, and/or equipment 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Trenching and excavation	<ul style="list-style-type: none"> Personnel injury and/or property damage from the collapse of trenches and excavations. Exposure to fumes or vapors that have collected in the trench/excavation. 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Working at elevation	<ul style="list-style-type: none"> Personnel injury and/or property damage resulting from falls from elevated areas Personnel injury resulting from overhead hazards. 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Crane/derrick operation	<ul style="list-style-type: none"> Personnel injury and/or property damage from falling loads. Injuries and property damage from contact with crane or derrick. 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Working with flammable and combustible liquids	<ul style="list-style-type: none"> Personnel injury and/or property damage resulting from fire, spills, or explosions 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program O&M FPP Plan
Hot work (e.g. cutting, welding)	<ul style="list-style-type: none"> Personnel injury and/or property damage from fire, explosion, or exposure to hot materials. Exposure to fumes during cutting and welding. Personnel injury resulting from ocular exposure to ultraviolet and infrared radiation during cutting and welding. 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program O&M FPP Plan
Troubleshooting and maintenance of Project systems and general operational activities	<ul style="list-style-type: none"> Personnel injury and/or property damage from contact with hazardous energy sources (electrical, thermal, and mechanical). 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Working on electrical equipment	<ul style="list-style-type: none"> Personnel injury resulting from contact with live electricity and energized equipment. Personnel injury resulting from arc flashes Fire hazard resulting from contact with live electricity and energized equipment. 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program O&M FPP Plan
Hazardous materials/waste exposure	<ul style="list-style-type: none"> Personnel exposure to materials classified as hazardous waste under RCRA, which for this project would predominantly be waste oils (soil categorized as nonhazardous) 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program
Confined space entry	<ul style="list-style-type: none"> Personnel injury due to suffocation, or exposure to physical/chemical hazards while working in an area classified as a confined space 	<ul style="list-style-type: none"> O&M IIPP O&M PPE Program

Table B: Project O&M Hazard Analysis

Activity	Hazard	Control Program(s)
General O&M activities	<ul style="list-style-type: none"> • Personnel injury from hand and portable power tools. • Personnel injury/property damage from inadequate walking and work surfaces and/or poor housekeeping. • Personnel exposure to occupational noise hazards (>85 dBA 8 hr time weighted average) • Personnel injury from improper lifting, carrying materials and equipment, and poor ergonomics. • Personnel exposure to hazardous gases, vapors, dusts, and fumes. • Personnel exposure to various hazards. • Heat and cold stress. • Personnel injury and property damage from unsafe driving. 	<ul style="list-style-type: none"> • O&M IIPP • O&M PPE Program
Grading or excavation activities	<ul style="list-style-type: none"> • Personnel exposure to potentially contaminated soil associated with abandoned oil wells • Personnel injury resulting from collapse in a trench or excavation as a result of improper or inadequate shoring. 	<ul style="list-style-type: none"> • O&M IIPP
Working outdoors/remote	<ul style="list-style-type: none"> • Personnel injury resulting from working alone and/or in a remote area. • Personnel injury and/or property damage resulting from lightning strikes during a storm. 	<ul style="list-style-type: none"> • O&M IIPP
Biological hazards	<ul style="list-style-type: none"> • Exposure to COVID-19 or other pathogens. • Exposure to unsanitary conditions as a result of insufficient sanitation of chemical toilets, lack of access to hand washing stations, insufficient sanitary supplies 	<ul style="list-style-type: none"> • O&M IIPP • O&M PPE Program
Work in weather extremes	<ul style="list-style-type: none"> • Personnel sickness or injury resulting from extreme heat 	<ul style="list-style-type: none"> • O&M IIPP • Emergency Action Plan
Fire/explosion hazards	<ul style="list-style-type: none"> • Personnel injury and/or property damage from contact with explosive energy sources. • Personnel exposure to post blast air quality. • Personnel injury and/or property due to improper storage and transport of explosives. • Theft of explosives. 	<ul style="list-style-type: none"> • O&M IIPP • O&M PPE Program • O&M FPP Plan
Battery energy storage systems	<ul style="list-style-type: none"> • Personnel injury and/or property damage attributable to failure of battery energy storage system components. 	<ul style="list-style-type: none"> • O&M IIPP • O&M PPE Program • O&M FPP Plan • Emergency Action Plan
Working during a natural disaster	<ul style="list-style-type: none"> • Personnel injury and/or property damage resulting from wildfire hazards. • Personnel sickness of injury resulting from an earthquake 	<ul style="list-style-type: none"> • Emergency Action Plan

O&M: Operations and Maintenance

IIPP: Injury and Illness Prevention Program

PPE: Personal Protective Equipment

FPP: Fire Protection and Prevention

1.2.4 Training and Safety Programs

Health and safety programs identified in Table A and Table B would be developed to mitigate potential safety hazards from Project construction and O&M activities and to comply with applicable regulations. Each program and plan detailed in Table A and Table B would contain job-specific training requirements that would be translated into trainings for Project personnel, as applicable. For example, all Project O&M personnel would receive training in evacuation procedures under the Emergency Action Plan (EAP), but only those personnel working with flammables would receive training under the Fire Protection and Prevention (FPP) Program.

The following subsections contain information on the anticipated content of the respective health and safety programs.

1.2.4.1 Construction Health and Safety Programs

The following construction health and safety programs would be developed and implemented during Project construction. An outline of the key items to be included in each construction health and safety program is included below.

1.2.4.1.1 Construction Injury and Illness Prevention Program

In accordance with Title 8 of the California Code of Regulations (CCR), section (§) 1509, an Injury and Illness Prevention Program (IIPP) would be developed, implemented, and maintained during Project construction. The Construction IIPP would include the following elements:

- Identification of the various parties and personnel responsible for implementing the program during construction activities to ensure accountability with program.
- A framework for compliance of Project personnel with Project-specific (as well as general) safe and healthy work practices. This will include training and retraining programs, disciplinary actions, or other such means to promote Project personnel compliance with such practices.
- Establishment of a chain of command for communicating in a clear and concise manner for all affected personnel, including provisions designed to encourage Project personnel to communicate hazards at the Project site.
- Procedures for identifying and evaluating workplace hazards, including but not limited to the hazards associated with the following activities:
 - Physical Hazards
 - Use of motor vehicles, heavy equipment, forklifts, and cranes
 - Trenching, excavation, and confined space entry
 - Working at elevation and overhead hazards
 - Hot work and work with electrical equipment
 - Working outdoors or in remote locations
 - Chemical Hazards
 - Handling hazardous waste, flammable and/or combustible liquids, gaseous materials,

explosives, and batteries

- Biological Hazards
 - General construction hazards, including those encountered during inspections and/or maintenance activities.
- Procedures to investigate occupational injury or illness, which will include but not be limited to the following:
 - Interviews of injured workers and witnesses.
 - Examination of the workplace for factors contributing to the accident.
 - Corrective actions to prevent the accident/exposure from reoccurring.
 - Record of the findings and corrective actions taken.
- Procedures for correcting unsafe or unhealthy conditions, work practices and procedures, and an emergency response protocol, including:
 - Procedures for reporting fires and other emergencies
 - Evacuation procedures and emergency escape route assignments, including evacuation areas and/or muster locations.
 - Procedures for Project personnel who remain to operate critical plant operations before they evacuate.
 - Establishment of a means for accounting for all Project personnel after an emergency evacuation
 - Rescue and medical duties performed by Project personnel.
 - Identification of key persons to be contacted in the event of evacuation or other emergencies.
 - Description of alarm systems that would notify Project personnel to evacuate or take other actions.
 - Establishment of the site of an alternative communications center to be used in the event of a fire or explosion.
 - Identification of a secure location for storage of original or duplicate copies of important records.
- Identification of training and instruction required under the Construction IIPP, including framework for who receives training and when training is implemented.
- Outline of procedures to allow Project personnel access to the program.
- Establishment of procedures for recordkeeping and documentation, which will include the following in addition to aforementioned recordkeeping practices (e.g. injury and illness investigations):
 - Hazard assessment and correction form records, which will detail any hazard assessment inspections, including the person(s) conducting the inspection, the unsafe conditions and work practices that have been identified, and how those conditions/practices were corrected.

- Documentation of safety and health training for each employee, including employee name, personal identifier, training date, type(s) of training, and training providers.

1.2.4.1.2 Construction Heat Illness Prevention Plan

In accordance with Title 8 CCR, § 3395, a Heat Illness Prevention Program (HIPP) would be developed prior to construction beginning, implemented, and maintained during Project construction, either as its own individual program or as an addendum integrated into the Construction IIPP. Not excluding any of the requirements aforementioned for the construction IIPP, this construction HIPP would additionally include the following elements:

- Procedures for the provision of water and access to shade to all workers.
- High heat procedures referred to in subsection (e), including but not limited to:
 - Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary.
 - Observing employees for alertness and signs or symptoms of heat illness either via supervisory observation, a mandatory buddy system, regular communication by radio or cellular phone (in the case of a sole employee), or another equivalent effective means of observation.
 - Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
 - Regular reminders to employees throughout the work shift to drink plenty of water to keep hydrated.
 - Pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water to keep hydrated, and remind employees of their right to take a cool-down rest when necessary.
- Emergency Response Procedures in accordance with subsection (f), including but not limited to:
 - Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable. If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services.
 - Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.
 - Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.
 - Ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.
- Acclimatization methods and procedures in accordance with subsection (g), including:
 - Close observation of all employees by a supervisor or designee during a heat wave, to be

defined as any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

- An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.

1.2.4.1.3 Construction Fire Protection and Prevention Program

In accordance with Title 8 CCR, § 1920, a Fire Protection and Prevention (FPP) Program would be developed and implemented during Project construction. The Construction FPP Program would include the following elements:

- A list of applicable standards and publications.
- A map showing the Project site, including layout, ingress, egress, drainage and grading, potential ignition sources during various phases of construction, and evacuation areas and/or muster locations.
- A description of fire protection administrative and engineering controls that would be implemented during construction activities. These will include, but not be limited to:
 - At minimum fire extinguishers, as well as water or gaseous fire suppressing engineering controls.
 - Designated SMOKING and NO SMOKING zones with clear signage or clear designation of Project site as a smoke free work zone.
 - Regular inspection of motor vehicles undercarriage to ensure electric wires, exhaust systems, and fuel lines have not been ruptured or damaged.
 - Limits on vehicle/equipment run times to prevent over-heating.
 - Regular checks to ensure fire roads are not blocked.
 - Clear labeling of storage containers with flammable/combustible materials, with limits on volume of materials transported at any time on site.
 - Designated service and refueling areas.
 - Any special provisions required by the San Bernardino County Fire Protection District related to interstate fire prevention and emergency response.
- A description of detection and alarm systems that would be implemented during construction activities.
- A list of all major fire hazards, including but not limited to:
 - Chemical fire hazards such as oxygen, nitrogen, and diesel
 - Physical fire hazards such as electrical equipment, heavy equipment and motorvehicles, and wildfire
- Procedures to control accumulation of flammable and combustible waste materials, including but not limited to:
 - Disposal of oily or paint-soaked rags, waste, or clothing in appropriate closed metal

containers that are emptied frequently and destroyed, hauled, or otherwise disposed of in an approved manner.

- Storage of paints, thinners, oil, grease, and any other similar combustible or flammable materials in well-ventilated places away from sources of heat, open flame, sparks, or other sources of ignition.
- Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent or control sources of ignition or fires.
- Identification of Project personnel responsible for implementation of the FPP, including the personnel titles (e.g. Safety Manager, Site Manager, Project Manager) and descriptions of the responsibilities of each of the personnel.
- Training of responsible parties and applicable staff on types of fire hazards, fire hazard prevention, classes of fires and appropriate response actions for the different classes, including identification of the appropriate extinguisher and proper handling of the extinguisher.

1.2.4.1.4 Construction Personal Protective Equipment Program

In accordance with Title 8 CCR, § 1514 - 1522, a Personal Protective Equipment (PPE) Program would be developed and implemented during Project construction. The Construction PPE Program would include the following elements:

- Identification of physical and health hazards specific to Project construction.
- Complete descriptions of appropriate and adequate PPE for Project personnel, including but not limited to:
 - The minimum PPE requirements for all employees on Project site.
 - PPE requirements for specific job tasks and hazards, along with the process of determination of the inclusion (where certain PPE would not typically be needed) or exclusion (where certain PPE would typically be required) of PPE.
 - A PPE Assessment Guideline to help personnel to more easily identify the specific PPE required for each task.
- Training on the use, inspection, storage, maintenance, cleaning, ordering, reimbursement, replacement, and limitations of the PPE, including documentation of personnel training requirements, and completion and expiration dates.
- Establishment of periodic reviews to evaluate the effectiveness of the PPE Program and update it where necessary, which shall include records of descriptions of amendments made, date of amendments, authors, reviewers, and approving body/personnel.

1.2.4.1.5 Construction Hazardous Materials Business Plan

A Hazardous Materials Business Plan (HMBP) would be prepared for submittal to San Bernardino County Fire Protection District CUPA/Hazardous Materials Compliance Program in accordance with the conditions of the CUPA. The HMBP would contain detailed information pertaining to the inventory of hazardous materials at the Project site, emergency response plans and procedures to be followed in the event of a reportable release during construction activities, and training requirements.

1.2.4.2 O&M Health and Safety Programs

Upon completion of construction and commencement of Operation and Maintenance (O&M) activities at Project facilities, the construction health and safety programs would transition into an operation-oriented program reflecting the hazards and controls necessary during O&M activities. An outline of the key items to be included in each operations health and safety program is included below.

1.2.4.2.1 O&M Injury and Illness Prevention Program

In accordance with Title 8 CCR, § 3203, an IIPP would be developed, implemented, and maintained during Project O&M activities. The O&M IIPP would include the following elements:

- Identification of the various parties and personnel responsible for implementing the program during O&M activities to ensure accountability with program.
- A framework for compliance of Project personnel with Project-specific (as well as general) safe and healthy work practices. This will include training and retraining programs, disciplinary actions, or other such means to promote Project personnel compliance with such practices.
- Establishment of a chain of command for communicating in a clear and concise manner for all affected personnel, including provisions designed to encourage Project personnel to communicate hazards at the Project site.
- Procedures for identifying and evaluating workplace hazards, including but not limited to the hazards associated with the following activities:
 - Physical Hazards
 - Use of motor vehicles, heavy equipment, forklifts, and cranes
 - Trenching, excavation, and confined space entry
 - Working at elevation and overhead hazards
 - Hot work and work with electrical equipment
 - Working outdoors or in remote locations
 - Chemical Hazards
 - Handling hazardous waste, flammable and/or combustible liquids, gaseous materials, explosives, and batteries
 - Biological Hazards
- Procedures to investigate occupational injury or illness, which will include but not be limited to the following:
 - Interviews of injured workers and witnesses.
 - Examination of the workplace for factors contributing to the accident.
 - Corrective actions to prevent the accident/exposure from reoccurring.
 - Record of the findings and corrective actions taken.

- Procedures for correcting unsafe or unhealthy conditions, work practices and procedures, and an emergency response protocol, including:
 - Procedures for reporting fires and other emergencies
 - Evacuation procedures and emergency escape route assignments, including evacuation areas and/or muster locations.
 - Procedures for Project personnel who remain to operate critical plant operations before they evacuate.
 - Establishment of a means for accounting for all Project personnel after an emergency evacuation
 - Rescue and medical duties performed by Project personnel.
 - Identification of key persons to be contacted in the event of evacuation or other emergencies.
 - Description of alarm systems that would notify Project personnel to evacuate or take other actions.
 - Establishment of the site of an alternative communications center to be used in the event of a fire or explosion.
 - Identification of a secure location for storage of original or duplicate copies of important records.
- Identification of training and instruction required under the O&M IIPP, including framework for who receives training and when training is implemented.
- Outline of procedures to allow Project personnel access to the program.
- Establishment of procedures for recordkeeping and documentation, which will include the following in addition to aforementioned recordkeeping practices (e.g. injury and illness investigations):
 - Hazard assessment and correction form records, which will detail any hazard assessment inspections, including the person(s) conducting the inspection, the unsafe conditions and work practices that have been identified, and how those conditions/practices were corrected.
 - Documentation of safety and health training for each employee, including employee name, personal identifier, training date, type(s) of training, and training providers.

1.2.4.2.2 O&M Fire Protection and Prevention Program

In accordance with Title 8 CCR, § 3221, a FPP Program would be developed and implemented during Project O&M activities. The O&M FPP Program would include the following elements:

- A list of applicable standards and publications.
- A map showing the Project site, including layout, ingress, egress, drainage and grading, potential ignition sources, and evacuation areas and/or muster locations.
- A description of fire protection administrative and engineering controls that would be implemented during O&M activities. These will include, but not be limited to:

- At minimum fire extinguishers, as well as water or gaseous fire suppressing engineering controls (e.g. sprinklers throughout administration buildings)
- Designated SMOKING and NO SMOKING zones with clear signage or clear designation of Project site as a smoke free work zone.
- Regular inspection of motor vehicles undercarriage to ensure electric wires, exhaust systems, and fuel lines have not been ruptured or damaged.
- Limits on vehicle/equipment run times to prevent over-heating.
- Regular checks to ensure fire roads are not blocked.
- Clear labeling of storage containers with flammable/combustible materials, with limits on volume of materials transported at any time on site.
- Designated service and refueling areas.
- Any special provisions required by the San Bernardino County Fire Protection District related to interstate fire prevention and emergency response.
- A description of detection and alarm systems that would be implemented during construction activities.
- A list of all major fire hazards, including but not limited to:
 - Chemical fire hazards such as oxygen, nitrogen, and diesel
 - Physical fire hazards such as electrical equipment, heavy equipment and motorvehicles, and wildfire.
- Procedures to control accumulation of flammable and combustible waste materials, including but not limited to:
 - Disposal of oily or paint-soaked rags, waste, or clothing in appropriate closed metal containers that are emptied frequently and destroyed, hauled, or otherwise disposed of in an approved manner.
 - Storage of paints, thinners, oil, grease, and any other similar combustible or flammable materials in well-ventilated places away from sources of heat, open flame, sparks, or other sources of ignition.
- Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent or control sources of ignition or fires.
- Identification of Project personnel responsible for implementation of the FPP, including the personnel titles (e.g. Safety Manager, Site Manager, Project Manager) and descriptions of the responsibilities of each of the personnel.
- Training of responsible parties and applicable staff on types of fire hazards, fire hazard prevention, classes of fires and appropriate response actions for the different classes, including identification of the appropriate extinguisher and proper handling of the extinguisher.

1.2.4.2.3 O&M Personal Protective Equipment Program

In accordance with Title 8 CCR, § 3401 - 3411, a PPE Program would be developed and implemented during Project O&M activities. The O&M PPE Program would include the following elements:

- Identification of physical and health hazards specific to Project O&M activities.
- Complete descriptions of appropriate and adequate PPE for Project personnel, including but not limited to:
 - The minimum PPE requirements for all employees on Project site.
 - PPE requirements for specific job tasks and hazards, along with the process of determination of the inclusion (where certain PPE would not typically be needed) or exclusion (where certain PPE would typically be required) of PPE.
 - A PPE Assessment Guideline to help personnel to more easily identify the specific PPE required for each task.
- Training on the use, inspection, storage, maintenance, cleaning, ordering, reimbursement, replacement, and limitations of the PPE, including documentation of personnel training requirements, and completion and expiration dates.
- Establishment of periodic reviews to evaluate the effectiveness of the PPE Program and update it where necessary, which shall include records of descriptions of amendments made, date of amendments, authors, reviewers, and approving body/personnel.

1.2.4.2.4 O&M Emergency Action Plan

In accordance with Title 8 CCR, § 3220, an Emergency Action Plan (EAP) would be developed prior to and implemented during Project O&M activities. The O&M EAP would include the following elements:

- Procedures for reporting of and proper responses to all foreseeable emergencies, including but not limited to:
 - Fire, including special provisions for interstate fire prevention, reporting, and response
 - Explosion
 - Aviation disaster
 - Active shooter
 - Earthquake
 - Wildfire
 - Bomb threats
 - Power outage
 - Suspicious smell
- Establishment of procedures for emergency evacuation, including evacuation type and exit routes.
- Procedures for the training/informing of employees on:
 - Preferred means of reporting.
 - Emergency escape/shelter procedures and route assignments.
 - The procedures are employed to account for all employees after an emergency.

- The alarm systems used, what each means and how to recognize them.
- An outline of procedures for Project personnel who remain to operate critical plant operations prior to evacuation.
- Establishment of a means for accounting for all Project personnel after an emergency evacuation.
- Descriptions of rescue and medical duties, if performed by Project personnel.
- Identification of an Emergency Response Coordinator, who will be responsible for at minimum:
 - Obtaining and posting floor plans with evacuation routes.
 - Overseeing the development, communication, implementation, and maintenance of the EAP.
 - Ensuring the training of the building occupants and Department Managers and notifying all personnel of changes to the plan.
 - Maintaining up to date lists of personnel with assigned duties under the plan.
 - In the event of a fire or other emergency, relaying applicable information to the emergency personnel, occupants, and floor.
 - Establishing the designated meeting sites.
 - Maintaining a list of assigned employees in the building.
 - Maintaining a list of Special Needs Employees (SNEs) who have willingly identified their disability and who will require assistance in the event of an emergency, ensuring that any structures or materials necessary for swift and safe evacuation of SNEs have been established or provided, respectively, and that any primary or secondary personnel necessary to assist SNEs have been appointed and their duties clearly described to them.
 - Training new employees and employees who miss evacuation drills on emergency procedures.
- Identification of Department Managers and their respective responsibilities with respect to the EAP, which will include at minimum:
 - Understanding primary and alternative escape routes for their assigned area.
 - Understanding shelter process and designated location for assigned area.
 - Reporting to coordinator at assigned location immediately after their group has reached the safe area to verify their designated area is clear.
- Descriptions of alarm systems intended to notify Project personnel to evacuate or take other actions.
- Description of the site of an alternative communications center to be used in the event of a fire, explosion, or other emergency.
- Identification of a secure location for storage of original or duplicate copies of important records.

In addition to all the aforementioned requirements, as is required by California Senate Bill 38 (CA SB38), the EAP must do all of the following:

- Establish response procedures for an equipment malfunction or failure.
- Include procedures that provide for the safety of surrounding residents, neighboring properties,

emergency responders, and the environment.

- Establish notification and communication procedures between the facility and local emergency management agencies.

The Project must coordinate with local emergency management agencies, unified program agencies, and local first response agencies while developing EAP. The EAP must be consistent with Sections 142.3 and 6401 of the Labor Code and any related regulations, including the applicable parts of Section 3220 of Title 8 of the CA Code of Regulations. The EAP must be submitted to San Bernardino County for approval.

CA SB38 also recommends that all battery energy storage facility EAPs additionally do the following:

- Consider responses to potential offsite impacts, such as poor air quality, threats to municipal water supplies, water runoff, and threats to natural waterways.
- Include procedures for the local emergency response agency to establish shelter-in-place orders and road closure notifications when appropriate.

1.2.4.2.5 O&M Hazardous Materials Business Plan

An HMBP would be prepared for submittal to San Bernardino County Fire Protection District CUPA/Hazardous Materials Compliance Program in accordance with the conditions of the CUPA. The HMBP would contain detailed information pertaining to the inventory of hazardous materials at the Project site, emergency response plans and procedures to be followed in the event of a reportable release during O&M activities, and training requirements.

1.2.4.3 *Decommissioning Health and Safety Programs*

At the time of decommissioning, all decommissioning related activities would follow the then- applicable LORS. Decommissioning activities would require similar equipment and workforce as construction; therefore, the construction health and safety programs outlined above would be updated as needed and implemented.

1.2.4.4 *Safety Training*

Comprehensive safety training programs for Project construction and O&M activities would be required for Project personnel. Each of the safety procedures developed to control and mitigate potential site hazards would require training through a variety of methods, consistent with the requirements of California Division of Occupational Safety and Health (Cal/OSHA) standards, the complexity of the topic, the characteristics of the workforce, and the degree of risk associated with each of the identified hazards. Table C summarizes the safety training programs that would be provided to Project construction personnel. Table D summarizes the safety training programs that would be provided to Project O&M personnel.

Table C: Project Construction Training Program Requirements

Training Course	Target Project Personnel
Injury and Illness Prevention Training	All personnel
Heat Illness Prevention Program Training	All personnel
PPE Program Training	All personnel
Fire Protection and Prevention Training	Project personnel responsible for the handling and storage of flammable or combustible liquids or gases, performing hot work, operating heavy machinery, or maintaining battery energy storage systems
Hazardous Materials Business Plan	Project personnel responsible for the handling, storage, and disposal of hazardous materials

Table D: Project O&M Training Program Requirements

Training Course	Target Project Personnel
Injury and Illness Prevention Training	All personnel
PPE Program Training	All personnel
Fire Protection and Prevention Training	Project personnel responsible for the handling and storage of flammable or combustible liquids or gases, performing hot work, operating heavy machinery, or maintaining battery energy storage systems
Emergency Action Plan	All personnel
Hazardous Materials Business Plan	Project personnel responsible for the handling, storage, and disposal of hazardous materials

1.2.4.5 *Miscellaneous Fire Prevention and Suppression*

This subsection describes the Project's fuel handling and fire detection and suppression systems for both the BESS yard and for the general facility (administrative/operational buildings).

The Project would conform with any requirements set forth in San Bernardino County Code of Ordinances Title 2 Division 3 Chapters 2 – 8, which establishes policies, procedures, and the authority of county organizations (including the San Bernardino County Fire Protection District) to regulate items related to Fire Protection and Explosives and Hazardous Materials, which includes the design and operation of the fire suppression system.

The Project will complete a Plan Review with the San Bernardino County Fire Protection District (SBCFPD), which will include (but not be limited to) the submission and review of technical materials and design specifications for any and all fire suppression systems on Site, including the BESS fire suppression systems. No construction or installation of any buildings or systems required for Plan Review by the San Bernardino Fire Protection District will commence until approval of plans is given by the SBCFPD.

In the event of a fire, the nearest fire station to Project site is San Bernardino County Fire Station 53, which is located approximately 11 miles north-east of Project site just off of I-15.

1.2.4.5.1 *Fuel Handling*

Most of the fuel, including gasoline and diesel fuel, will be procured at commercial gas stations in the local area during construction and operations staff vehicles and engines. To fuel construction equipment, a mobile fueling and maintenance vehicle will be brought in daily, as needed. A limited amount of #2 diesel and gasoline petroleum fuels (approximately 500 gallons each) will be stored in staging areas in temporary above ground steel tanks with secondary containment during construction only.

1.2.4.5.2 *BESS Hazard Mitigation Analysis and Fire Suppression*

Fire detection measures are intrinsically incorporated in the Project design in accordance with National Fire Protection Association (NFPA) safety standards. Should a thermal event occur, the battery energy storage system (BESS) units would be designed and certified so that fire would not propagate from one cabinet to the neighboring cabinet. Exhaust created by a thermal event would be considered a Class B Fire, which is a fire that involves flammable liquids, gases, or greases.

The Project intends to install either Tesla Megapack 2XL or similar tier-1 technology units for the purposes of energy storage (Units). Summaries on the hazard mitigation and fire suppression technologies for both the Tesla Megapack 2XL and one alternative BESS module (CATL EnerC) are provided below.

Tesla Megapack 2XL BESS Hazard Mitigation and Fire Suppression

The operating rack-level DC voltage currently ranges between 700 and 1,500 volts. The BESS enclosure would house the batteries described above, as well as the BESS controller. The controller is a multilevel control system designed to provide a hierarchical system of controls for the battery modules, power conversion system (PCS), medium voltage system, and up to the point of connection with the electrical grid. The controllers ensure that the battery storage system effectively mimics conventional turbine generators when responding to grid emergency conditions. The BESS enclosure would also house required heating, ventilation, air conditioning (HVAC), and fire protection systems.

The enclosure would be built using standard International Organization for Standardization (ISO)

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. Units will be installed with minimum setback distances of 28' from roads within the BESS yard. Roads in the BESS yard will be 20' in width.

The configuration of the safety system would be determined based on site-specific environmental factors and associated fire response strategy. The safety system would be based on the most advanced technology approximately 18 months from now and would include a fire detection and suppression control system that would be triggered automatically when the system senses imminent fire danger. All battery packs come with an integrated thermal management system that actively cools and heats the inside components. The coolant would be circulated through the battery by radiators, pumps, and an in-line heater that could warm the coolant as part of the thermal system. The BESS would be equipped with a fire detection system that would include thermal imaging cameras, a hydrogen detection system, and a smoke detection system. In the event of fire detection, an alarm system would be sent to the fire department and the Plant SCADA through a direct dispatch from a direct fiberoptic or copper dry contact connection. Explosion protection would be provided by an internal sparker system and overpressure vents that automatically combust flammable gases released during thermal runaway events and direct pressure upwards and safely from enclosures. The safety system would operate in three phases: Pre-alarm, Stage 1, and Stage 2. If the safety system detects a potential issue, the Pre-alarm phase would be initiated and would shut down the HVAC units and fans to help contain the potential fire. The control system would then wait approximately 5 minutes to determine if the initiation of Stage 1, which would shut down the HVAC and fans indefinitely, is warranted. If reached, Stage 2 would then result in the fire panel discharging the suppression agent onto the fire. The safety system would either use a waterless evaporating fluid, a sustainable clean agent (not a hydrofluorocarbon clean agent), or an alternative suppression agent, such as an inert gas.

The BESS enclosures are only accessible for maintenance purposes via cabinet-style enclosure doors and cannot be physically entered by personnel at any time. Each Tesla Megapack enclosure is equipped with explosion protection via an internal sparker system and overpressure vents to manage a potential deflagration vent. The sparker system is designed to ignite flammable gases before an explosive atmosphere is allowed to develop within the enclosure. Following combustion of the gases by the sparker system, the passive over-pressure vents allow flames and smoke to safely exit via the top of the Megapack enclosure. The sparker system is always on and is powered by internal battery power, and thus will remain operational even during loss of grid power or if an external shutdown is triggered for the battery equipment. If an event were to occur under these conditions, the sparker system and corresponding overpressure vents would still operate as described.

An integrated Battery Management System (BMS) monitors key datapoints such as voltage, current, and state of charge (SOC) of battery cells, in addition to providing control of corrective and protective actions in response to any abnormal conditions. Each battery module is equipped with a dedicated BMS, with a Megapack-level bus controller supervising output of all modules at the AC bus level. In the event of any abnormal conditions, the BMS will generally first raise an information warning and then trigger a corresponding corrective action should certain levels be reached. Critical BMS sensing parameters include:

- Over/under temperature limits
- Over/under voltage limits
- Over/under current limits

- Communications loss

The BESS would be equipped with multiple thermal imaging cameras; a hydrogen detection system and a smoke detection system. The thermal imaging cameras have the functionality of rotating 360 degrees and have full coverage of the facility. In the event of a fire or thermal event emanating from the Megapack units, the detectors shall issue the following actions:

Actions Triggered Upon Flame Detection:

- Display and sound event at the Fire Alarm Control Panel
- Display and sound event at Annunciator
- Activate horn strobe
- Send alarm signal to Central Station
- Send trouble signal to Central Station
- Send alarm signal to BMS

In addition to monitoring by the central controller, remote monitoring of operations would be provided by the BESS manufacturer. The phone number for the 24/7 Tesla Operations Center is 650-681-6060. If the project uses a different BESS manufacturer, the applicant will notify the local BLM office of the phone number for the manufacturers' 24/7 remote monitoring operations center prior to commencement of operations. In the event of a battery-related failure, alarm notifications and other pertinent information on the state of the BESS shall be sent to the System Owner to inform potential emergency response procedures as needed.

Pursuant to manufacturer specifications, the BESS units are fully certified to the most rigorous international safety standards. This includes the following select certifications:

- UL 1642 – Standard for Lithium Batteries (cell level certification)
- UL 1973 – Standard for Batteries for Use in Stationary Applications (module level certification)
- UL 9540A – Standard Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems ▪ IEC 62619 – Standard for Battery Safety in Stationary Applications
- IEC 62477-1 - Safety Requirements for Power Electronic Converter Systems and Equipment
- IEC 61000-6-2 - Electromagnetic compatibility (EMC) Immunity Standard for Industrial Environment.
- IEC 61000-6-4 - Electromagnetic compatibility (EMC) Emission standard for industrial environments
- IEC 62933-5-2 - Safety Requirements for Grid-integrated Electrical Energy Storage (EES) Systems - Electrochemical-Based Systems
- NFPA 855 - Standard for the Installation of Stationary Energy Storage Systems
- UN 38.3 – Transportation Testing for Lithium Batteries

CATL EnerC Plus BESS Hazard Mitigation and Fire Suppression (Similar Tier-1 Alternative)

The Units are sold as singular modular self-containments that can easily be combined in parallel with one another to meet the energy storage needs for each project. An individual Unit is packaged in a 20' x 8' x 9.5' metal housing. Units will be installed with minimum setback distances of 28' from roads within

the BESS yard. Roads in the BESS yard will be 20' in width.

Each unit comes installed with a BESS controller. The BESS controller is a multilevel control system for the battery modules, power conversion system, medium-voltage system, and up to the point of connection with the electrical grid. The controllers ensure that the BESS effectively mimics conventional turbine generators when responding to grid emergency conditions. The BESS enclosure would also house required heating, ventilation, and air conditioning (HVAC) and fire protection systems.

With respect to fire detection systems, the battery compartment of each Unit comes standard equipped with 2 hydrogen gas detectors, 2 smoke detectors, and 2 heat detectors, and the electrical compartment of each unit has 1 smoke detector. All detection signals are received and processed by a fire control panel that also comes standard with each unit.

With respect to fire alarm systems, each unit comes standard equipped with a Horn-Strobe alarm. Additionally, the fire control panel (FCP) comes designed with a first-class and second-class fire alarm system which can be connected to a building management system (BMS) or emergency management system (EMS).

With respect to fire suppression systems, each unit comes standard equipped with a ventilation fan (for removal of hydrogen gas and/or smoke) and an aerosol system (for active fire suppression). The units will additionally have a dry pipe fire suppression system for fire cessation via displacement of oxygen with an inert gas.

The hydrogen gas detectors go into alarm when a concentration of 10% of the lower explosive limit (LEL) for hydrogen gas in air is detected. When the FCP receives an alarm signal from one or both of the hydrogen gas detectors, it will activate the ventilation fan.

Any singular activation of a smoke or heat detector alarm will trigger a first-class alarm signal from the FCP, which in turn will trigger the Horn-Strobe alarm, activate the ventilation fan, and alert the BMS and/or EMS system. In the event of A) simultaneous activation of 1 heat detector and 1 smoke detector alarm or B) simultaneous activation of 2 heat detectors alarms, a second-class alarm signal will be sent from the FCP, which in turn will trigger the Horn-Strobe alarm, activate the ventilation fan, alert the BMS and/or EMS systems, and enable the aerosol fire suppression systems. A second-class fire alarm signal will also enable the optional dry pipe fire suppression system if installed.

Pursuant to manufacturer specifications, the BESS units are fully certified to the most rigorous international safety standards. This includes the following select certifications:

- UL 1642 – Standard for Lithium Batteries (cell level certification)
- UL 1973 – Standard for Batteries for Use in Stationary Applications (module level certification)
- UL 9540A – Standard Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems
- IEC 62619 – Standard for Battery Safety in Stationary Applications
- IEC 62477-1 - Safety Requirements for Power Electronic Converter Systems and Equipment
- IEC 61000-6-2 - Electromagnetic compatibility (EMC) Immunity Standard for Industrial Environment.
- IEC 61000-6-4 - Electromagnetic compatibility (EMC) Emission standard for industrial environments
- IEC 62933-5-2 - Safety Requirements for Grid-integrated Electrical Energy Storage (EES) Systems - Electrochemical-Based Systems

- NFPA 855 - Standard for the Installation of Stationary Energy Storage Systems
- UN 38.3 – Transportation Testing for Lithium Batteries

As required by NFPA 855, the Project will generate and maintain a Hazard Mitigation Analysis (HMA). The purpose of an HMA generally is to provide a record of the iterative process of determining fire and explosion hazards, as well as the appropriate fire prevention, fire protection, and explosion prevention policies and procedures to mitigate those hazards. The scope of the HMA for this Project will be to establish the fire and explosion protection design criteria for the BESS yard/Units.

In support of an effective HMA, the following documentation will always be kept, regularly updated, and easily available:

- Location and layout diagram of the BESS yard with all relevant dimensions noted (e.g. road width, setback distances, distances between Units)
- Details on any fire-resistant-rated assemblies provided or relied upon for BESS yard fire suppression
- The quantity, manufacturer, and model of the Units, including mention of any optional features installed, manufacturer specifications and ratings
- Description of Unit storage management systems and operations, including routine inspection activities and frequency
- Location and content of required signage
- Details on fire suppression/protection, smoke or fire detection, gas detection, thermal management, ventilation, and exhaust systems provided by manufacturer
- Support arrangement associated with the installation, including any required seismic support

The HMA will include, incorporate, or consider any and all relevant General and Project-Specific inputs, including but not limited to:

- State and local building and fire codes pertaining to general surrounding infrastructure or specific to energy storage systems.
- Industry and utility company standards relevant to battery energy storage systems.
- Environmental or worker safety regulations (OSHA, CalOSHA, USEPA, CalEPA).
- Specific energy capacity and power delivery for the BESS yard as they relate to fire risk.
- The number and general locations of personnel on Site, both in and around the BESS yard.
- The proximity of the BESS yard to administrative and operations buildings, access roads, and major surrounding infrastructure (e.g. I-15).
- Availability of water supply to facility (groundwater wells).
- The capabilities and proximity of emergency responders/services like San Bernardino County Emergency Services and Fire Protection District.
- Storage configuration for the Units as it relates to fire and explosion risks.
- Historical loss information and fire reports for comparable facilities under comparable

conditions (e.g. lithium-ion battery-based ESS, high ambient heat and low precipitation/humidity).

Of particular concern are those hazards associated with the gaseous products of thermal runaway (i.e. self-heating of an electrochemical system in an uncontrollable manner), which include fire, explosions, and acute toxicity via inhalation or dermal absorption. The HMA will include considerations for the potential of thermal runaway fault conditions occurring within a single battery storage rack, cell module, or cell array. The analysis shall include mitigations to prevent flammable gases released during fire, battery overcharge, and any other abnormal operating conditions within the BESS yard from generating a fire, explosion, or toxic exposure hazard that could injure personnel or emergency responders.

1.2.4.5.3 General Fire Safety and Suppression - Construction

Water would be needed primarily for dust control and soil compaction during the first 90 days of grading activities. With small amounts during Stage 1 and Stage 2 of construction, which includes the 90-day grading period, the project would require approximately 196,500 gpd, or approximately 220 acre-feet per year (af/yr). Water requirements in the second year of construction are expected to be less than 110 af/yr, or half of the requirement of the first year of construction.

Five temporary water tanks of 100,000 gallons would be brought on-site by truck to store water in anticipation of construction water needs. The tanks would be housed on trailers located along access roads or within areas that have been cleared for installation of project components. The tanks may be moved around the site as construction progresses and would be used to fill on-site water trucks. The temporary water storage tanks would be removed after construction. Water used for construction would be supplied by two existing private groundwater wells in Newbury Springs, San Bernardino County.

1.2.4.5.4 General Facility Fire Safety and Suppression – O&M Building

An approximately 22,500-gallon tank would be located near the operation and maintenance 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 National Fire Protection Association (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).

1.3 Laws, Ordinances, Regulations, and Standards

The LORS that may apply to the Project related to worker safety are summarized in Table E on the following page. Table E also provides a summary of the applicable national consensus standards. used for sanitary and other purposes.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
Federal	29 CFR Part 1910	Contains the minimum occupational safety and health standards for general industry in the United States	The Project would implement occupational safety and health protocols during construction, operation, and decommissioning activities in compliance with 29 CFR Part 1910
Federal	29 CFR Part 1926	Contains the minimum occupational safety and health standards for the construction industry in the United States	The Project would implement occupational safety and health protocols during construction, operation, and decommissioning activities in compliance with 29 CFR Part 1926
Federal	National Institute for Occupational Safety and Health (NIOSH)	Conducts research and makes recommendations for prevention of work-related injury and illness	The Project would comply with the health and safety requirements set forth by NIOSH
Federal	American National Standards Institute (ANSI) / American Society of Mechanical Engineers (ASME), Boiler and Pressure Vessel Code	Specifications and requirements for pressure vessels	The use of pressure vessels associated with the Project would comply with the requirements set forth in the Boiler and Pressure Vessel Code
Federal	ANSI/ASME, B31.2	Specifications and requirements for fuel gas piping	The Project would comply with the requirements for fuel gas piping set forth in American National Standards Institute, B31.2

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
Federal	29 CFR Part 1910.38	Outlines procedures for employees in the event of an emergency	The Project would comply with the requirements set forth in 29 CFR Part 1910 to prepare an Emergency Action Plan
State	California HSC § 25500, et seq. And the related regulations of 19 CCR 2620 et seq.	Outlines identified hazardous materials, emergency response procedures for releases of hazardous materials, and training requirements	The Project would implement a Hazardous Materials Business Plan to comply with California HSC 25500
State	California Occupational Safety and Health Act of 1973	Establishes minimum safety and health standards for construction and general industry operations in California	The Project would implement occupational safety and health protocols during construction, operation, and decommissioning activities in compliance with the California Occupational Safety and Health Act of 1973
State	8 CCR § 339	Requires list of hazardous chemicals relating to the Hazardous Substance Information and Training Act	Hazardous chemicals stored at the facility would be reported in accordance with the requirements set forth in 8 CCR § 339

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR § 450	Addresses hazards associated with pressurized vessels	Design, construction, installation, inspection, operation, and repair activities applying to compressed and liquefied natural gas or air tanks would be conducted in compliance with the requirements set forth in 8 CCR § 450
State	8 CCR § 750	Addresses hazards associated with high-pressure steam	Design, construction, installation, inspection, operation, and repair activities applying to pressurized vessels would be conducted in compliance with the requirements set forth in 8 CCR § 750
State	8 CCR, Construction Safety Orders, § 1500	Establishes safety orders for construction work	Construction activities would comply with the applicable requirements set forth in 8 CCR § 1500
State	8 CCR § 1509	Addresses requirements for construction, accident, and prevention plans	An IIPP would be prepared and implemented for Project construction activities in compliance with 8 CCR § 1509
State	8 CCR § 1528, et seq., and § 3380, et seq.	Requirements for PPE	Respiratory protection would be required under circumstances defined in 8 CCR § 1528, et seq., and § 3380, et seq. When required, respiratory protection would comply with 8 CCR § 1528, et seq., and § 3380, et seq.
State	8 CCR § 1597, et seq., and § 1590, et seq.	Requirements addressing the hazards associated with traffic accidents and earthmoving	Vehicle usage during construction, operation, and decommissioning activities associated with the Project would comply with the requirements set forth in 8 CCR § 1597, et seq., and § 1590, et seq.
State	8 CCR § 1604, et seq.	Requirements for construction hoist equipment	The use of personnel hoists during construction and maintenance activities associated with the Project would comply with the requirements set forth in 8 CCR § 1604, et seq.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR § 1620, et seq., and § 1723, et seq.	Addresses miscellaneous hazards	Construction of roofing and railings associated with temporary and permanent structures at the Project site would comply with the requirements set forth in 8 CCR § 1620, et seq., and § 1723, et seq.
State	8 CCR § 1709, et seq.	Requirements for steel reinforcing, concrete pouring, and structural steel erection operations	Construction of facilities associated with the Project would comply with the requirements set forth in 8 CCR § 1709, et seq.
State	8 CCR § 1900, et seq.	Requirements for use of helicopters	Helicopter usage associated with construction activities at the Project site would comply with the requirements set forth in 8 CCR § 1900, et seq.
State	8 CCR § 1920, et seq.	Requirements for fire protection systems	A Fire Protection and Prevention Plan would be prepared for both construction and O&M activities associated with the Project that would comply with the requirements set forth in 8 CCR § 1920, et seq.
State	8 CCR, Electrical Safety Orders § 2300, et seq., and § 2320, et seq.	Requirements for addressing low-voltage electrical hazards	Electrical equipment used during construction, operation, and decommissioning activities would be operated in compliance with the requirements set forth in 8 CCR § 2300, et seq., and § 2320, et seq.
State	8 CCR § 2395, et seq.	Addresses electrical installation requirements	Electrical equipment connected by cord and plug used during construction, operation, and decommissioning activities would be operated in compliance with the requirements set forth in 8 CCR § 2395, et seq.
State	8 CCR § 2700, et seq.	Addresses high-voltage electrical hazards	High voltage electrical equipment used during construction, operation, and decommissioning activities would be operated in compliance with the requirements set forth in 8 CCR § 2700, et seq.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR, § 5139, et seq.	Requirements for control of hazardous substances	Handling of hazardous substances during construction, operation, and decommissioning of the Project would comply with the requirements set forth in 8 CCR § 5139, et seq.
State	8 CCR, General Industry Safety Orders § 3200, et seq.	Requirements for control of hazardous substances	Handling of hazardous substances during construction, operation, and decommissioning of the Project would comply with the requirements set forth in 8 CCR § 3200, et seq.
State	8 CCR § 3203, et seq.	Requirements for operational accident prevention programs	An IIPP would be prepared and implemented for O&M activities associated with the Project in compliance with 8 CCR § 3203
State	8 CCR § 3270, et seq.	Requirements for the use of compressed air or gases	The use of compressed air or gases during construction, operation, or decommissioning of the Project would comply with the requirements set forth in 8 CCR § 3270, et seq.
State	8 CCR § 3209, et seq.	Requirements for evacuation plans and procedures	Evacuation procedures associated with Project activities would comply with the requirements set forth in 8 CCR § 3209, et seq.
State	8 CCR § 3301, et seq.	Requirements for addressing miscellaneous hazards, including hot pipes, hot surfaces, compressed air systems, relief valves, enclosed areas containing flammable or hazardous materials, rotation equipment, pipelines, and vehicle-loading dock operations	The use of compressed air or gases during construction, operation, or decommissioning of the Project would comply with the requirements set forth in 8 CCR § 3301, et seq.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR § 3360, et seq.	Addresses requirements for sanitary conditions	Access to sanitary facilities would be provided during construction, operation, and decommissioning of the Project and facilities would comply with the requirements set forth in 8 CCR § 3360, et seq.
State	8 CCR § 3511, et seq., and § 3555, et seq.	Requirements for addressing hazards associated with stationary engines and compressors, as well as portable, pneumatic, and electrically powered tools	The usage of stationary engines and compressors associated with the Project would comply with the requirements set forth in 8 CCR § 3511, et seq., and § 3555, et seq.
State	8 CCR § 3649, et seq., and § 3700, et seq.	Requirements for addressing hazards associated with field vehicles	The Project would comply with the requirements set forth in 8 CCR § 3649, et seq., and § 3700, et seq.
State	8 CCR § 3940, et seq.	Requirements for addressing hazards associated with power transmission, compressed air, and gas equipment	Power transmission associated with the Project would comply with the requirements set forth in 8 CCR § 3940, et seq.
State	8 CCR § 5095, et seq.	Requirements for controlling noise exposure	Noise exposure would be controlled in compliance with the requirements set forth in 8 CCR § 5095, et seq.
State	8 CCR § 5109, et seq.	Requirements for addressing construction accident and prevention programs	The IIPP prepared for the Project would include provisions related to construction accident and prevention programs and would comply with the requirements set forth in 8 CCR § 5109, et seq.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR § 5110, et seq.	Requirements for the implementation of an ergonomics program	The IIPP prepared for the Project would include provisions related to ergonomics and would comply with the requirements set forth in 8 CCR § 5110, et seq.
State	8 CCR § 5139, et seq.	Requirements for employee exposure to dusts, fumes, mists, vapors, and gases	The IIPP prepared for the Project would include provisions related to dust, fumes, mists, vapors, and gases and would comply with the requirements set forth in 8 CCR § 5139, et seq.
State	8 CCR § 5139, et seq.	Requirements for addressing hazards associated with welding, sandblasting, grinding, and spray-coating	Welding, sandblasting, grinding, and spray-coating activities associated with the Project would comply with the requirements set forth in 8 CCR § 5139, et seq.
State	8 CCR § 5156, et seq.	Requirements for confined space entry	Confined space entry that would occur in association with the Project would comply with the requirements set forth in 8 CCR § 5156, et seq.
State	8 CCR § 5155, et seq.	Requirements for use of respirators and for controlling employee exposure to airborne contaminants	Employee exposure to airborne contaminants would be minimized through the use of respirators in compliance with the requirements set forth in 8 CCR § 5155, et seq.
State	8 CCR § 5160, et seq.	Requirements for addressing hot, flammable, poisonous, corrosive, and irritant substances	Hot, flammable, poisonous, corrosive, and/or irritant substances used during construction, operation, maintenance, or decommissioning activities associated with the Project would comply with the requirements set forth in 8 CCR § 5160, et seq.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR § 5184 and § 5185	Requirements for storage battery systems and charging storage batteries	Storage battery systems associated with the Project would comply with the requirements set forth in 8 CCR § 5184 and § 5185
State	8 CCR § 5192, et seq.	Requirements for conducting emergency response procedures	Emergency response procedures would be included in the IIPP prepared for the Project and would be developed and implemented in compliance with the requirements set forth in 8 CCR § 5192, et seq.
State	8 CCR § 5193, et seq.	Requirements for controlling employee exposure to bloodborne pathogens associated with exposure to raw sewage water and bodily fluids associated with first aid/cardiopulmonary resuscitation (CPR) duties	Exposure to bloodborne pathogens would be controlled through implementation of requirements set forth in 8 CCR § 5193, et seq.
State	8 CCR § 5405, et seq.; § 5426, et seq.; § 5465 et seq.; § 5500, et seq.; § 5530, et seq.; § 5531, et seq.; § 5545, et seq.; § 5554, et seq.; § 5565, et seq.; § 5583, et seq.; § 5606, et seq.	Requirements for flammable liquids, gases, and vapors	Use of flammable liquids, gases, and vapors associated with the Project would comply with the requirements set forth in 8 CCR § 5405, et seq., § 5426, et seq., § 5465, et seq., § 5500, et seq., § 5530, et seq., § 5531, et seq., § 5545, et seq., § 5554, et seq., § 5565, et seq., § 5583, et seq., § 5606, et seq.
State	8 CCR § 5583, et seq.	Requirements for design, construction, and installation of venting, diking, valving, and supports	Design, construction, and installation of venting, diking, valving, and supports associated with flammable liquids, gases, and vapors would comply with the requirements set forth in 8 CCR § 5583, et seq.

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
State	8 CCR § 6150, et seq.; § 6151, et seq.; § 6165, et seq.; § 6170, et seq.; § 6175, et seq.; § 6183, et seq.; § 6184, et seq.	Requirements for fire protection	A Fire Prevention and Protection Plan would be developed in compliance with the requirements set forth in 8 CCR § 6150, et seq.; § 6151, et seq.; § 6165, et seq.; § 6170, et seq.; § 6175, et seq.; § 6183, et seq.; § 6184, et seq.
State	24, Part 3, California Electrical Code	Requirements for electrical safety, which include the Uniform Electrical Code, Title 24, Part 3	Electrical work associated with the Project would comply with the requirements set forth in the California Electrical Code, Title 24, Part 3
State	24, Part 9, California Fire Code, Chapter 12, § 1205 through § 1207	Requirements for solar photovoltaic power systems, stationary fuel cell power systems, and electrical energy storage systems (ESS)	The Project would comply with the requirements for photovoltaic power systems and energy storage systems set forth in the California Fire Code, Title 24, Part 9, Chapter 12, Sections § 1205 through § 1207
State	California Health and Safety Code (HSC) § 25500 through § 25541	Requirements for the preparation of a HMBP that details emergency response plans for a hazardous materials emergency at the facility	An HMBP would be prepared in accordance with HSC Sections § 25500 through § 25541
Local	San Bernardino County General Policy Plan Safety & Security Section	Sets forth goals and policies related to the safety and security of residents, businesses, workers, and visitors	The Project would conform with any requirements set forth in San Bernardino County Code General Policy Plan Goal Safety & Security section
Local	San Bernardino County General Policy Plan Goal HZ-2, Policies HZ-2.1 - HZ-2.11	Outlines policies related to Human-generated Hazards, including hazardous materials, noise, safer materials alternatives	The Project would conform with any requirements set forth in San Bernardino County Code General Policy Plan Goal HZ-2 and associated policies

Table E: LORS Applicable to Worker Health and Safety

Jurisdiction	LORS	Applicability	Project Conformity
Local	San Bernardino County Code of Ordinances, Title 2, Division 1, Chapter 1	Establishes authority of miscellaneous Emergency Services Organizations, which includes the authority to regulate Emergency programs in for private corporations	The Project would conform with the health and safety requirements set forth by any regulatory county body noted in the San Bernardino County Code of Ordinances Title 2 Division 1 Chapter 1
Local	San Bernardino County Code of Ordinances, Title 2, Division 3, Chapters 2 - 8	Establishes policies, procedures, and authority of county organizations to regulate items related to Fire Protection and Explosives and Hazardous Materials	The Project would conform with any requirements set forth in San Bernardino County Code of Ordinances Title 2 Division 3 Chapters 2 - 8
Local	San Bernardino County Code of Ordinances, Title 6, Division 3, Chapters 1 - 5	Establishes minimum building and construction standards for San Bernardino County	The Project would conform with the requirements set forth in the San Bernardino County Code of Ordinances

Source: Code of Federal Regulations, California Occupational Safety and Health Act of 1973, CCR, California Health and Safety Code, American National Standards Institute/American Society of Mechanical Engineers, San Bernardino County Code of Ordinances, San Bernardino County General Plan

1.3.1 Federal LORS

Title 29 CFR Sections 1910 and 1926

These sections contain requirements to protect worker health and safety in the general industry and construction industry. These regulations also address requirements to protect workers in emergency situations. They are designed primarily to protect worker health, but also contain requirements that affect general workplace safety. The regulations contained in CCR Title 8 (California equivalent of 29 CFR) are generally more stringent than those contained in CFR Title 29. The administering agencies for the above are OSHA for CFR and Cal/OSHA for CCR.

NIOSH

The National Institute for Occupational Safety and Health (NIOSH) was established by the Occupational Safety and Health Act of 1970. NIOSH aims to study worker health and safety to continually improve workplace practices.

ANSI/ASME Boiler and Pressure Vessel Code

The Boiler and Pressure Vessel Code was established as a result of boiler and pressure vessel failures, causing injury and loss of life to employees in the workplace. This code regulates the manufacturing, construction, and operation of boilers and pressure vessels in order to protect worker health and safety.

ANSI B31.2 Fuel Gas Piping

This Code regulates the design, fabrication, installation, and testing of piping for fuel gases such as natural gas, manufactured cured gas, liquefied petroleum gas (LPG)-air mixtures above the upper combustible limit, LPG in the gaseous phase, or mixtures of these gases. This Code applies to fuel gas piping systems both in buildings and between buildings.

Emergency Action Plan

As required by 29 CFR 1910, an employer must have an Emergency Action Plan whenever an OSHA standard in Part 1910 requires one. The Emergency Action Plan must be in writing, kept in the workplace, and available to employees for review, unless there are 10 or fewer employees. The Emergency Action Plan must contain procedures for reporting, procedures for emergency evacuation, procedures for employees who remain for critical plant operations, procedures to account for employees following evacuation, procedures if rescue and medical duties are required, and identified persons who can provide more information to employees.

1.3.2 State LORS

California Occupational Safety and Health Act of 1973

The California Occupational Safety and Health Act of 1973 was enacted by California legislature to assure safe and healthy working conditions for all California employees. This Act created Cal/OSHA to enforce standards and provide education, training, and research in occupational safety and health.

California Code of Regulations

The California Code of Regulations (CCR) contains applicable worker health and safety regulations. Sections of the CCR address hazards including, but not limited to hazardous materials, pressure vessels, construction work, helicopters, electrical systems, equipment, noise, ergonomics, and fires. These sections also outline requirements for programs, procedures, and plans to mitigate injury and/or property damage that can result from these hazards. The relevant sections of the CCR include, but are not limited to:

- Title 8 – Industrial Relations
- Title 24 Part 3 – California Electrical Code
- Title 24 Part 9 – California Fire Code

California Health and Safety Code, Sections 25500 – 25541

The California Health and Safety Code, Sections 25500 through 25541 requires local governments to regulate local business storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials be prepared to response to releases. Those using and storing hazardous materials are required to submit an HMBP to their local CUPA and to report releases to their CUPA and the State Office of Emergency Services (OES).

Hazardous Materials Business Plan

The designated CUPA for the Project is the San Bernardino County Fire Protection District. The Hazardous Materials Compliance Program oversees the state-mandated programs in San Bernardino County. The Hazardous Materials Business Plan fulfills the requirements of the California Health and Safety Code, Sections 25500, et seq., and the related regulations of 19 CCR 2620 et seq.

CalARP and Risk Management Plan

The California Accidental Release Program (CalARP) is equivalent to the Federal Risk Management Program established by the USEPA (CFR, Title 40, Part 68), but includes additional requirements specific to the state of California. The CalARP Program was established to prevent accidental releases of substances that pose the greatest risk of immediate harm to both the public and the environment. Facilities subject to the program (referred to as “stationary sources”) which handle specified chemicals (termed “regulated substances”) are required to take specified actions to proactively prevent and prepare for chemical accidents and releases, including development of a Risk Management Plan (RMP). Under 19 CCR § 5050.4, stationary sources are those facilities with more than the threshold quantity of a regulated substance as specified in Tables 1-3 under 19 CCR § 5130.6. The Project does not anticipate handling of any of the materials listed in quantities above the threshold quantities that would require conformance with the CalARP Program, and subsequently, should not be required to develop a Risk Management Plan.

1.3.3 Local LORS

San Bernardino County General Plan

California Senate Bill 271 Assembly Bill 2038 required that counties and cities adopt General Plan policies regarding natural hazards. The San Bernardino County General Plan provides direction and resources intended to mitigate death, injuries, and environmental and economic damage. The San Bernardino County General Policy Plan contains several policies that are applicable to worker health and safety, including, but not limited to:

- **Policies HZ-2.1 through HZ-2.11 – Human-generated Hazards:** People and the natural environment protected from exposure to hazardous materials, excessive noise, and other human-generated hazards.
- **Policies PP-3.1 through PP-3.14 – Fire and Emergency Medical:** Reduced risk of death, injury, property damage, and economic loss due to fires, and other natural disasters, accidents, and medical incidents through prompt and capable emergency response.
- **Policies PP-4.1 through PP-4.7 – Emergency Preparedness and Recovery:** A reduced risk of and impact from injury, loss of life, property damage, and economic and social disruption resulting from emergencies, natural disasters, and potential changes in climate.

San Bernardino County Code of Ordinances

The San Bernardino County Code of Ordinances includes requirements related to worker health and safety. These include but are not limited to:

- **Title 2 Division 1 Chapter 1 - Emergency Services Organizations:** The declared purposes of this Chapter are to provide for the preparation and execution of plans for the protection of life and property within this County in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of this County with all other public agencies, corporations, organizations and affected private persons.
- **Title 2 Division 3 Chapters 2 through 8:** Division 3, Fire Protection and Explosives and Hazardous Materials, has a number of chapters that would be applicable to the Project, which include chapters 2) Fire Regulations, 3) Abatement of Fire Hazards and Hazardous Trees, 4) Authority and Administration for Hazardous Materials, 5) Public Nuisance Abatement for Hazardous Materials, 6) Permits, Inspections and Hearing Procedures for Hazardous Materials, 7) CUPA Permit Elements for Hazardous Materials, and 8) Compliance with Roof Covering Requirements within the Fire Safety Overlay.
- **Title 6 Division 3 Chapters 1 through 5:** Division 3, Building Regulations, has a number of chapters that would be applicable to the Project, which include chapters 1) California Building Code, 2) California Electrical Code, 3) California Plumbing Code, 4) California Mechanical Code, and 5) California Energy Code.

1.4 Agencies and Agency Contact

Applicable agency contacts for worker health and safety and fire protection and prevention-related approvals are shown in Table F.

Table F: Agency Contacts for Worker Health and Safety

Issue	Agency	Contact
Worker Health and Safety	Cal/OSHA, Region 3, Santa Ana Regional Office	Vacant Regional Manager 2 MacArthur Place, Suite 720 Santa Ana, CA 92707 Phone: (714) 558-4300 Email: DIRDOSHRegionIII@dir.ca.gov
	Cal/OSHA, Region 3, San Bernardino District Office	Michael Loupe, District Manager 464 W. 4th Street, Suite 332 San Bernardino, CA 92401 Phone: (909) 383-4321 Email: DOSHSB@dir.ca.gov
	San Bernardino County Department of Public Health - Environmental Health Services	San Bernardino Office 385 N. Arrowhead Ave. 2nd Floor San Bernardino, CA 92415 Phone: (800) 442-2283
CUPA for HMBP	San Bernardino County Fire Protection District - Office of Fire Marshal	Monica Ronchetti, Fire Marshal 598 S Tippecanoe Ave San Bernardino, CA 92408 Phone: (909) 386-8400 24-hr Spill Notification Hotline: (909) 389-8425
Emergency Response for Hazardous Materials Spills and Fires	San Bernardino County, Office of Emergency Services	General Contact (909) 356-3998 sbcoa@oes.sbcounty.gov
		Anjila Lebsock, Assistant Director of Emergency Management 1743 Miro Way Rialto, CA 92376 Phone: (909) 356-3931 Email: anjila.lebsock@oes.sbcounty.gov
Fire Hazards	San Bernardino County Fire Protection District Department Headquarters	Department Headquarters Daniel R. Munsey, Fire Chief/Fire Warden 598 S Tippecanoe Ave San Bernardino, CA 92408 Phone: (909) 387-5974 Email: info@sbcfire.org

1.5 Permits and Permit Schedule

Applicable permits and permit schedule related to worker health and safety are shown in Table G.

Table G: Permits and Permit Schedule for Worker Health and Safety

Permit	Schedule	Status
CalOSHA Project Permit, for: <ul style="list-style-type: none"> • Trench/Excavation • Construction or Building/Structure • Scaffold/Falsework/Vertical Shoring 	Submittal to and approval by Cal/OSHA Region 3 district office prior to commencing construction.	To be submitted prior to any construction
San Bernardino County Building Permit	Submittal to and approval by San Bernardino County Building and Safety Division prior to commencing construction.	To be submitted prior to any construction
San Bernardino County Fire Protection District Plan Review, including: <ul style="list-style-type: none"> • Planning • Commercial/Multi-Family Construction • Non-Residential Fire Sprinklers • Fire Alarms • Pre-Engineered System/ASTs • Non-residential Pumps 	Detailed plans and associated documents related to the design of support buildings, the fire sprinklers/suppression system, the fire alarms, pre-engineered systems (fixed fire extinguishing systems, refrigeration systems, dust collection systems, gas detection systems, photovoltaic systems, above ground storage tanks), and any fire pumps must all be submitted to and approved by the San Bernardino County Fire Protection District prior to commencing construction. Estimated turn around time according to the FPD is approximately 21 business days. Submission of Plan Review however relies on prior approval by all FPD departments and Land Use Services.	Contact made but no official process begun. To be submitted prior to commencing any construction activities.
Hazardous Materials Business Plan	Submittal at least 30 days prior to operation and submitted through California Environmental Reporting System (CERS). Permit administered by local CUPA enforcement agency, San Bernardino County Fire Protection District	To be submitted prior to any construction
Tower Crane Permit	Submittal to and approval by Cal/OSHA Region 3 district office prior to commencing construction.	To be submitted prior to any construction
Pressure Vessel Permit	Submittal to and approval by Cal/OSHA Region 3 district office prior to commencing construction.	To be submitted prior to any construction

Source: CalOSHA, San Bernardino Fire Protection District, San Bernardino County Building and Safety Division

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