

**DOCKETED**

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<b>Project Title:</b>	Potentia-Viridi Battery Energy Storage System
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<b>Description:</b>	This plan describes anticipated emergency actions, employee training and emergency response for the Project
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# **Appendix 1J**

## Emergency Response Plan



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# Emergency Response Plan

# **Potentia-Viridi Battery**

# **Energy Storage Project**

# **Alameda County, California**

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**JULY 2024**

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# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AEDs	Automated external defibrillators
APSA	Aboveground Petroleum Storage Tank Program
BESS	Battery Energy Storage System
BMS	Battery Management System
CalEPA	California Environmental Protection Agency
CERS	California Environmental Reporting System
CPR	Cardiopulmonary resuscitation
CUPA	Certified Unified Program Agency
ERP	Emergency Response Plan
HMBP	Hazardous Materials Business Plan Program
HVAC	Heating, Ventilation, and Air Conditioning System
kV	kilovolt
LFP	lithium iron phosphate
MW	Megawatt
MWh	Megawatt-hour
MV	Medium Voltage
NFPA	National Fire Protection Association
O&M	Operations and Maintenance
PCS	Power Conversion Systems
PG&E	Pacific Gas and Electric
Project	Potentia-Viridi Battery Energy Storage System
UL	Underwriter's Laboratories



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# 1 Objectives

## 1.1 Purpose

Levy Alameda, LLC (Applicant), a wholly owned subsidiary of Obra Maestra Renewables, LLC, proposes to construct, operate, and eventually repower or decommission the 400-megawatt (MW) Potentia-Viridi Battery Energy Storage System (Project) on approximately 85 acres in eastern Alameda County. The primary components of the Project include an up to 3,200 megawatt-hour (MWh) battery energy storage system (BESS) facility, an operations and maintenance (O&M) building, a project substation, a 500 kilovolt (kV) overhead intertie transmission (gen-tie) line, and interconnection facilities within the Pacific Gas and Electric (PG&E) owned and operated Tesla Substation (see Appendix A).

This Emergency Response Plan “ERP” has been written as part of the project development documents to describe anticipated emergency actions, employee training and emergency response for the Project. This originally submitted documentation will need to be reviewed and any changes will need to be updated just prior to construction, during the operating life of the Project and during decommissioning.

## 1.2 Emergency Action Plan Regulations

The California Code of Regulations Subchapter 7. General Industry Safety Orders Section 3220 Emergency Action Plan state the Project ERP must contain the following:

### §3220. Emergency Action Plan.

- A. Scope and Application. This section applies to all emergency action plans. The emergency action plan shall be in writing, except as provided in the last sentence of subsection (e)(3) of this section and shall cover those designated actions employers and employees must take to ensure employee safety from fire and other emergencies.
- B. Elements. The following elements, at a minimum, shall be included in the plan:
  - 1. Procedures for emergency evacuation, including type of evacuation and exit route assignments.
  - 2. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate.
  - 3. Procedures to account for all employees after emergency evacuation has been completed.
  - 4. Procedures to be followed by employees performing rescue or medical duties.
  - 5. The preferred means of reporting fires and other emergencies; and
  - 6. Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.
- C. Alarm System.
  - 1. (1) The employer shall establish an employee alarm system which complies with Article 165.
  - 2. (2) If the employee alarm system is used for alerting fire brigade members, or for other purposes, a distinctive signal for each purpose shall be used.

- D. Evacuation. The employer shall establish in the emergency action plan the types of evacuation to be used in emergency circumstances.
- E. Training.
  - 1. Before implementing the emergency action plan, the employer shall designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees.
  - 2. The employer shall advise each employee of his/her responsibility under the plan at the following times:
    - a. Initially when the plan is developed,
    - b. Whenever the employee's responsibilities or designated actions under the plan change, and
    - c. Whenever the plan is changed.

(3) The employer shall review with each employee upon initial assignment those parts of the plan which the employee must know to protect the employee in the event of an emergency. The written plan shall be kept at the workplace and made available for employee review. For those employers with 10 or fewer employees the plan may be communicated orally to employees and the employer need not maintain a written plan.

Note: Authority and reference cited: Section 142.3, Labor Code.

The 2022 California Code, Chapter 6.95, Hazardous Materials Release Response Plans and Inventory, Section 25505 states that:

**CA Health & Safety Code § 25505 (2022)**

(3) Emergency response plans and procedures in the event of a release or threatened release of a hazardous material, including, but not limited to, all of the following:

- A. Immediate notification contacts to the appropriate local emergency response personnel and to the unified program agency.
- B. Procedures for the mitigation of a release or threatened release to minimize any potential harm or damage to persons, property, or the environment.
- C. Evacuation plans and procedures, including immediate notice, for the business site.

## 1.3 Certified Unified Program Agency (CUPA)

The California Unified Program was established by the passing of California Senate Bill 1082 in 1994 to consolidate six related environmental programs into one oversight authority for the purposes of streamlining local oversight, administrative requirements, permits and emergency response. The Unified Program requires the California Environmental Protection Agency (CalEPA) to certify qualified local governments known as Certified Unified Program Agencies (CUPAs) as able to implement the programs for a coordinated Emergency Response. The CUPA and local Emergency Responders share data including contacts, project site maps, and descriptions of onsite facility materials.

The six programs that have been consolidated under the Unified Program in California include:

- Aboveground Petroleum Storage Tank Program (APSA)
- Hazardous Materials Business Plan Program (HMBP)

- California Accidental Release Prevention Program
- Hazardous Material Inventory Statement and Hazardous Materials Management Plan
- Hazardous Waste Generator-Tiered Permitting
- Underground Storage Tank Program

## 1.4 Information and Documentation Submittals in CERS

Documentation for Emergency Response of BESS facilities are submitted to the local CUPA by means of a statewide run database called the California Environmental Reporting System or CERS. To keep accuracy of the CERS database relevant to emergency response, project information is generally submitted just before, or when a project qualifies under one of the programs regulated under one of the Unified Programs. CERS Project information should be updated as frequently as needed to keep information current or at a minimum of once per year. If no changes are required to the plan or contacts, the Project may certify that there has been no change on the CERS database.

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## 2 Project Description

Levy Alameda, LLC (Applicant), a wholly owned subsidiary of Obra Maestra Renewables, LLC, proposes to construct, operate, and eventually repower or decommission the 400-megawatt (MW) Potentia-Viridi Battery Energy Storage System (Project) on approximately 85 acres in eastern Alameda County. The primary components of the Project include an up to 3,200 megawatt-hour (MWh) battery energy storage system (BESS) facility, an operations and maintenance (O&M) building, a project substation, a 500 kilovolt (kV) overhead intertie transmission (gen-tie) line, and interconnection facilities within the Pacific Gas and Electric (PG&E) owned and operated Tesla Substation.

The Project would draw electricity from the power grid to charge and store electrical energy and discharge back to the power grid when the stored energy is needed. The Project would provide several benefits to the power grid, including reducing the need to operate natural gas power plants to balance intermittent renewable generation and serving as an additional capacity resource that would enhance grid reliability. The Project will have operational staff onsite in addition to being remotely operated and monitored year-round and be available to receive or deliver energy 24 hours a day and 365 days a year.

### 2.1 Project Location

The Project site is located at 17257 Patterson Pass Road, Tracy, CA 95377. The property is southwest of Interstate 580 and Interstate 205 on a portion Alameda County Assessor's Parcel Number 99B-7890-002-04. The Project area consists of approximately 70 acres. The gen-tie line would extend southeast from the Project substation, crossing Patterson Pass Rd, and then proceed east to the Tesla Substation. The Project's gen-tie line would be sited on APNs 99B-7890-2-4, 99B-7890-2-6, and 99B-7885-12. The Project site has land use and zoning designation of Agriculture. The area surrounding the Tesla Substation is sparsely developed for residential use, with the nearest residence, which is also owned by the same landowner leasing the land for the Project, is approximately 1,500 feet southeast of the Project site and 560 feet south of the proposed gen-tie line.

### 2.2 Project Components

Project components include the Battery Energy Storage System (BESS) Enclosures, Power Conversion Systems (PCS), Medium voltage (MV) Collection System, Project Substation, Control Building, and Telecommunications Facilities, Access Roads, Laydown Yards, Stormwater Facilities and Outfall, Site Security and Fencing, including fire detection system, and an Operations and Maintenance Building. This section provides details of each component.

- **Battery Energy Storage System (BESS).** The energy storage facility would utilize a modular and containerized BESS. The initial Project concept has been developed assuming lithium iron phosphate (LFP) cells. It is anticipated ESS enclosure height will not exceed 12 feet. The structures may also have a heating, ventilation, and air conditioning (HVAC) system for optimal performance and safety.
- **Power Conversion Systems (PCS).** The PCS would convert electric energy from AC to DC when the energy is transferred from the grid to the battery, and from DC to AC when the energy is transferred from the battery to the grid.
- **Project Substation.** A Project substation is anticipated to be constructed adjacent to the BESS facilities. The power to and from the BESS would be passed through a final interconnection step-up transformer to convert it from 34.5 kV to 500 kV high-voltage for delivery to the PG&E Tesla Substation.

- **Telecommunications Facilities.** Fiber-optic cables will be used to connect the Project site switchyard with the PG&E point of interconnection and to existing fiber-optic lines for remote monitoring. Fiber optic cable may require trenching for installation, or it may be placed on poles, or a combination of both.
- **Access Roads.** Access to the Project site would be provided via an existing private driveway to the north of the site, off of Patterson Pass Road, and a new private driveway to the southeast of the site, off of Patterson Pass Road.
- **Laydown Yards.** There would be four laydown yards onsite. The primary laydown yard would be maintained just north of the central project substation area. This yard would be used during both construction and operation of the BESS facility.
- **Site Security, Lighting, and Fencing.** The Project would be enclosed at the perimeter by a 6-foot to 8-foot-tall security fence. Lighting would only be in areas where it is required for safety, security, or operations. Security cameras will be placed on site and monitored 7 days a week and 24 hours per day.
- **Fire detection system.** Multiple fire detection systems will be installed on-site and within the individual BESS enclosures including an infrared camera system and an onboard battery management system (BMS). In the event of an anomaly, the system will shut down to mitigate the hazard. The BESS enclosures are designed and constructed in such a way that fire would not propagate from one enclosure to a neighboring enclosure in the event of a thermal runaway.
- **Operations and Maintenance Building.** An O&M building would be constructed within the primary laydown yard for the Project's anticipated three full-time operations staff.
- **Generation Tie-Line.** Electrical energy would be transmitted to and from the Project substation to the existing Tesla PG&E Substation through a proposed 500-kV gen-tie line. The gen-tie line would extend southeast from the facility to the Tesla PG&E Substation.

## 2.3 Battery Energy Storage System Enclosures

The energy storage facility would utilize a modular and containerized BESS. There are several battery cell technologies commercially available, with one of the most common at present being lithium iron phosphate (LFP) cells (often colloquially referred to as 'lithium-ion'). LFP technology is considered one of the safest, most efficient, and commercially financeable energy storage technologies available on the market. The initial Project concept has been developed assuming an LFP technology. By the time the Project reaches the procurement stage, it is possible for other battery cell technology with proven safety and performance records to be suitable for the Project. Although the number and dimensions of the containers may change (as it does between LFP technology providers), the technology ultimately procured would result in potential environmental impacts substantially similar to, or less than, those analyzed based on this Project Description.

The BESS enclosures would be prefabricated off-site and arrive at the site ready to be installed and commissioned. Each modular BESS enclosure would include battery packs on racks, a battery management system (BMS), fire protection, and ancillary power electronics within a specialized steel-framed, non-occupiable container. The BESS enclosures would not exceed approximately 12 feet in height. The BESS enclosures may also have a heating, ventilation, and air conditioning (HVAC) system for optimal performance and safety. Power for the HVAC system, lighting, and other electrical systems would be provided through separate auxiliary power connection to the on-site project substation with connection lines installed above and/or below ground.

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## 3 Emergency Preparedness

### 3.1 Assembly Location / Muster Point

The project must identify an assembly location(s) or “muster point(s)” which must be clearly identified to ensure a safe assembly during emergencies. The primary purpose is to ensure that everyone is safe and accounted for during an emergency. The chosen area(s) should be located outside and close enough to work areas that employees can access promptly but allowing space for traffic and emergency services (ambulance, fire, police) to conduct their work unhindered.

All staff should be aware of the muster point location(s). Site plans that include the muster point(s), emergency exits, and emergency service access routes should be posted in the site office or other visible location available to employees (see Appendix A).

### 3.2 Contacts

A list of all emergency contacts is listed below in Table 1 and Table 2. The lists should be posted in visible strategic locations around the Project site (contractor trailers, lunch areas, bathroom facilities, etc.).

Communication during emergency situations is critical for alerting, informing, and directing the Project personnel and the responders. During an emergency, alternative forms of communication may be needed, such as radios, phones, social media, or notes. Communication during emergency situations has three stages: crisis, response, and post-crisis, each with different goals and needs.

### 3.3 Emergency Equipment

Emergency equipment must be inspected as per site requirements. The complete list of emergency equipment is included in Appendix B. An inspection of emergency equipment is made to ensure that it is complete and that there are sufficient quantities.

1. Fire extinguishers are located in all of the trucks. In the event of fire, any employee may use extinguishers to attempt to extinguish the fire before evacuating. Portable extinguishers or hose should be visually inspected monthly and are subject to an annual maintenance check.
2. First aid and spill kits stations will be located at various places on the site.

### 3.4 Records

Records associated with training, equipment checks, implementation of emergency procedures (drills), debriefing, etc. will be available on-site at the site safety trailer during construction and decommissioning, and in the O&M building during operations.



## 3.5 Responsibilities of Personnel

### 3.5.1 Facility Staffing

Following construction of the BESS facility, an O&M building will be built within the primary laydown yard for the Project's anticipated three full-time operations staff. The BESS would be remotely operated and monitored year-round, and there would be on-site disconnects for use in case of an emergency or a situation requiring unscheduled maintenance.

### 3.5.2 Project Manager (Emergency Coordinator)

During emergencies, the Project Manager will assume the role of the Emergency Coordinator and considered the "person in charge" until emergency response agencies (such as police or fire) arrive on-scene. The Emergency Coordinator has the authority to initiate a shutdown, signal an evacuation if needed, and direct response contractors to mobilize.

The specific duties of the Emergency Coordinator are as follows:

- Assess the emergency and determine the appropriate level of response.
- Direct on-site response activities.
- Assess the actual and potential hazards that the emergency may create for Project employees, Project equipment, or the environment.
- Direct on-site evacuation, as needed.
- Provide site resources and personnel to assist off-site emergency responders.
- Act as a liaison between the Project and the responders.
- Enter the incident into the incident reporting system and lead the incident investigation following the emergency.

### 3.5.3 Remote Systems Operator

The Remote System Operator plays a crucial role in emergency situations. They oversee communication and monitor Project operations during emergencies. If an emergency is detected through system monitoring, the Remote System Operator promptly contacts the Emergency Coordinator and off-site emergency responders. The Remote Systems Operator will assist the Emergency Coordinator as required and participate in the incident investigation process after the emergency.

### 3.5.4 All Employees

All employees are responsible for reporting the discovery of an emergency to the Emergency Coordinator. All employees are not required to perform emergency response activities except to call 911. Employees may provide basic first aid or CPR during a minor medical emergency if trained to do so.

### 3.5.5 Off-Site Emergency Organizations

Certain emergencies require response from off-site emergency organizations. Effective emergency response planning and response is dependent on close, ongoing coordination between Endurant and off-site emergency organizations.

The following emergency organizations will be contacted as needed to respond to site emergencies.

**Table 1. Emergency Response Phone Numbers**

Resource	Phone Number	Address
Emergency Coordinator	TBD	TBD
Ambulance, Fire, Police and CHP	911	Call or Text
Nearest Fire Station	Tracy Fire Department 209.831.6700	835 N Central Ave, Tracy, CA 95376
Nearest Police Station	Tracy Police Department 209.831.6550	1000 Civic Center Drive Tracy, CA 95376
Nearest Medical Facility	Sutter Tracy Community Hospital 209.835.1500	1420 N Tracy Boulevard Tracy, CA 95376
Local Unified Program Agency (CUPA)	Alameda County Department of Environmental Health 510.567.6702	1131 Harbor Bay Parkway Alameda, CA 94502-6577
California State Warning Center / CAL OES	800.852.7550	
National Response Center (NRC)	800.424.8802	
Poison Control Center	800.222.1222	

**Table 2. Agency Notification Phone Numbers**

Agency	Phone Number / Email	Address
California Department of Toxic Substance Control (DTSC)	916.255.3545	
San Francisco Bay Regional Water Quality Control Board	510.622.2300 or spillreportR2@waterboards.ca.gov	1515 Clay Street, Suite 1400 Oakland, CA 94612
US Environmental Protection Agency (EPA)	800.424.9346 – EPA Information Center phone number	US EPA Pacific Southwest, Region 9 75 Hawthorne St. San Francisco, CA 94105
California Department of Fish and Wildlife (CDFW)	916.358.2900	
US Coast Guard (USCG)	202.267.2180	
CAL OSHA	916.263.2800	
CAL Fire Office of the State Fire Marshal (OSFM)	916.323.7390	

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## 4. Emergency Procedures

### 4.1 Hazardous Materials

The hazardous materials that are anticipated to be used at the project site are safe under normal handling and operating conditions. Each individual module will be monitored and controlled to ensure safe and efficient operations, and every BESS enclosure will be equipped with ventilation, as well as gas, heat and smoke detection and alarms. The systems will be designed, constructed, and operated pursuant to the applicable California Fire Code.

The following types of hazardous materials that may be found at the project site during construction, operation and decommissioning of the project site:

- **Temporary Fuel Tanks:** Petroleum such as Diesel No. 2 or gasoline, may be stored onsite during construction and decommissioning to fuel construction and decommissioning equipment, including onsite generators, though it is not anticipated to be stored onsite during the operation of the site.
- **Battery Energy System Components:** Lithium-ion batteries commonly contain the heavy metals cobalt, copper and nickel as well as other trace heavy metals depending on the location of the source of the mined components. The exact components will not be fully known until the batteries are sourced closer to construction.

**Table 3. Potential Sources of Hazardous Materials at the Project**

Location	Type of Container	Volume and Oil Type	Stage
BESS – Laydown	Temporary auxiliary fuel storage for generator	1 EA at approximately 1,000-gallon Diesel No. 2	Construction/ Decommissioning
BESS – Laydown	Temporary fueling station	1 EA at approximately 500-gallon Diesel No. 2	Construction/ Decommissioning
Substation	Temporary auxiliary fuel storage for generator	1 EA at approximately 1,000-gallon Diesel No. 2	Construction/ Decommissioning
BESS	BESS Enclosures	1,000 EA lithium-ion phosphate cells.	Operations
Substation	Main Power Transformers	3 EA at approximately 17,000-gallons of transformer oil	Construction/ Operations/ Decommissioning

Once specific properties and quantities of onsite materials are known, a hazardous materials inventory for any hazardous materials that are greater than the State of California thresholds for quantities of hazardous materials can be uploaded onto the CERS system.

Threshold quantities are hazardous materials at or above the reporting quantities of 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas. A list of reportable hazardous substances is maintained in California Occupational Safety and Health Regulations Chapter 3.2 Article 5 §339.

## 4.1.1 Emergency Action Plan

The following Emergency Action Plan covers potential onsite chemical spills, fires and earthquakes involving the hazardous materials described in Section 3 above:

### Notify Internal and Onsite Personnel

1. Onsite alarm system(s) will automatically alert Internal Staff and Tracy Fire Department.
2. Notify facility personnel via cell phone and evacuate if necessary.
3. Proceed to a Project Muster Point (See Figure 1).

### Notify Emergency Response

1. Notify local emergency responders by calling 9-1-1.
2. Onsite alarm system(s) will automatically alert Internal Staff and Tracy Fire Department.

### Notify Neighboring Facilities That May Be Affected by an Off-Site Release

1. Notify Neighboring Facilities that may be affected by an off-site release:
  - a. Verbally.
  - b. Via Cell Phone.

### Notification to CUPA and State

1. (if needed) Notify the local Unified Program Agency (UPA) Alameda County Hazardous Materials Division 510.567.6702.
2. (if needed) Notify the State Warning Center at 800.852.7550.

### Prior to Resumption of Operations

Following notification and before facility operations are resumed in areas of the facility affected by the incident, the Emergency Coordinator shall notify the local UPA and the local fire department's hazardous materials program, if necessary that the facility is in compliance with requirements to:

- Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from and explosion, fire, or release at the facility; and,
- Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until clean up procedures are completed.

## 4.2 Fire & Explosion Hazards

Each BESS enclosure contains multiple fire detection systems on-site and within the individual BESS enclosures. An infrared camera system would be installed throughout the BESS facility to achieve 100% of electrical infrastructure and trigger an alarm in case of an onsite fire. Each BESS enclosure would have a fire rating in conformance with the California Fire Code 2022. In addition, each BESS enclosure would contain an onboard

battery management system (BMS) that monitors the appropriate state of individual battery cells and relays information 24-7. In the event of an anomaly, the system is designed to shut down and mitigate the hazard.

The Project’s fire protection design would comply with California Fire Code 2022, Section 1207 Electrical Energy Storage Systems, which adopts the National Fire Protection Association’s Standard for the Installation of Stationary Energy Storage Systems (NFPA 855). BESS enclosures would be Underwriters Laboratories (UL) listed, tested, and certified to the most rigorous international safety standards. UL independently tests equipment for compliance with the latest fire safety code requirements, and the methods were developed to minimize fire risk and safety concerns about battery storage equipment raised by fire departments and building officials in the United States.

Faults, mechanical damage, or manufacturing defects in lithium-ion batteries can cause thermal runaway, which can lead to fires or other hazards. Should a thermal runaway event occur, the BESS enclosures are designed and constructed in such a way that fire would not propagate from one enclosure to a neighboring enclosure. The Project’s BESS enclosures, as part of the testing and listing process, would be subjected to destructive testing including fire testing. The Project’s BESS enclosures would include the following UL certifications:

- **UL 1642** – Standard for Lithium Batteries (cell level certification).
- **UL 1973** – Standard for Batteries for Use in Stationary Applications (module level certification).
- **UL 9540** – Standard for Energy Storage Systems and Equipment (system level certification).
- **UL 9540A** – Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems.
- **IEC 62619** – Standard for Battery Safety in Stationary Applications.

The Alameda County Fire District would review and comment on the facility fire protection and suppression plans.

- Evacuate the danger zone.
- Go immediately to the muster point by the most efficient way; notify all staff and visitors that they must leave by walking and without running.
- Wait for instructions from Emergency Site Coordinator before returning to the workplace.

#### 4.2.1 Fire External to Battery Container or Enclosure

- Report the discovery of fire to the Emergency response coordinator immediately. If you are unable to contact the Emergency Coordinator, call 9-1-1.
- All site personnel will evacuate to the muster point for a head count. The Emergency Coordinator will account for all personnel and make sure the immediate area of the fire is clear. Remain at the muster point and await further instructions.
- Remove any obstructions (vehicles, material, etc.) that might impede response to the scene and halt all traffic flow to the fire scene.
- If you encounter heavy smoke, stay low and breathe through a handkerchief or other fabric; move away from the area.
- Attempt to extinguish the fire ONLY if you have had the appropriate training and proper firefighting agent for the type of fire.

- The Emergency Response Coordinator will issue an 'all clear' only when the fire department informs them that it is safe to do so.
- The energy storage system is not to be accessed until Emergency Response Coordinator gives authorization.

## 4.2.2 Fire Internal to BESS Enclosure

As previously mentioned, each BESS enclosure contains multiple fire detection systems on-site and within the individual BESS enclosures. An infrared camera system would be installed throughout the BESS facility to achieve 100% of electrical infrastructure and trigger an alarm in case of an onsite fire. All personnel within the Project site should follow the following guidelines:

- Evacuate the area immediately if the fire warning alarm sounds or fire warning lights illuminate.
- If no alarm is heard but a fire or smoke is observed, report the discovery to the Emergency Coordinator immediately. If you are unable to contact the Emergency Coordinator, call 9-1-1.
- Proceed to the designated muster point for head count.
- The Emergency Coordinator should account for all employees, contractors, and visitors who were working in the area of the fire. If any personnel are unaccounted for from the immediate fire area, a communication shall be made throughout the facility in attempt to locate the person(s) missing.
- Remove any obstructions (vehicles, material, etc.) that might impede response to the scene and halt all traffic flow to the fire scene.
- If you encounter heavy smoke, stay low and breathe through a handkerchief or other fabric.
- If there is a second means of egress that is clear of smoke, that egress path will be used, and a radio transmission or other type of communication shall be made stating that the clear egress point for other personnel to use for escape is the second means of egress.
- Assist anyone having trouble leaving the area so long as doing so does not put the assistor at additional risk.
- DO NOT put anyone in harm's way to save the battery equipment in the container.
- Once the Fire Department arrives, provide them with the following:
  - All applicable SDS documents.
  - Assistance isolating equipment electrically.
  - A liaison to remain with the fire department Incident Commander as needed.
- Do not leave the designated muster point until advised to do so.
- The Emergency Coordinator will issue an 'all clear' only when the fire department informs them that it is safe to do so and the site (or portions of it) can be reoccupied or normal working conditions can be resumed.
- The energy storage system is not to be accessed until the Emergency Coordinator and the emergency responders give authorization.
- In the event of a fire incident, the designated operations personnel responsible for the safe shutdown of the plant will open switchgear to ensure the grid side of the plant is de-energized and isolate the batteries as best able to (i.e. verify the AC and DC breakers are open in the inverter). The Fire Department needs to understand that some of the equipment (batteries) will remain energized no matter what actions are taken, and the recommended option is containment. Batteries remain energized even if all the contactors, breakers, and switches have been opened.

## 4.2.3 Wildfire

The project site is surrounded by fallow annual grassland. Fires most often start and spread quickly in grasslands due to their high ignitability and often challenge containment efforts. California annual grasslands can sustain the spread of wildfire after the grass has cured which typically occurs around the onset of fire season, April to October, but occur earlier or later in the year based on conditions during the winter and spring. According to the State Fire Marshal Fire Hazard Severity Zone Maps, the proposed Project site and the surrounding area are located in an area currently designated as a High FHSZ.

Wildfire can be a result of natural causes such as lightening, but also construction activities such as welding sparks or idling vehicles pose a risk to igniting a wildfire. If possible, a fire break should be installed between the work area and the surrounding vegetation. If working within or adjacent to vegetation, consider the following:

- Possession of shovel, fire extinguisher and/or at least 5 gallons of water should be on hand in the event of an unintentional fire start.
- Catalytic converters should be inspected often and cleaned of all vegetation debris.
- Welding operations should be conducted in areas free or mostly free from vegetation.
- Report any signs of wildfire to the Emergency Coordinator immediately.

The Emergency Coordinator will monitor local emergency alerts and notifications for information and instructions, identify wind directions, and provide instruction regarding evacuation. All personnel on-site should be prepared to:

- Evacuate immediately if the Emergency Coordinator and/or local authorities tell you to do so.
- If trapped, call 9-1-1 and give your location, but be aware that emergency response could be delayed or impossible. If in a vehicle, turn on lights to help rescuers find you.
- Use an N95 mask or other respirator to protect yourself from smoke inhalation. If you don't have an N95 mask or other respirator, breathe through a handkerchief or other fabric.

The Emergency Coordinator will inform all personnel when it is safe to return to the Project site.

## 4.3 Environmental Hazards

### 4.3.1 Severe Weather

The Emergency Site Coordinator should monitor the progress of local weather conditions. In the event severe weather such as a lightning storm is approaching the Project site, the following procedures shall apply.

- Take appropriate steps to maintain safe access to site and reduce mobile equipment activities and/or vehicle traffic on-site. Determine the safe evacuation routes.
- Evacuate dangerous areas and go immediately to the muster point by the most efficient way.
- Ensure that the Emergency Coordinator has acknowledged your presence.
- If storm/lightning is still approaching the Project Site, get in and stay in company or personal vehicles that have rubber tires only.



- Once storm passes, remain in cars/trucks for at least 30 minutes depending on passing storm severity, and wait for instructions from Emergency Site Coordinator before returning to the workplace.

## 4.3.2 Earthquake

A natural disaster, especially common in California, is an earthquake. The key to surviving an earthquake/reducing the chance of injury is being prepared.

1. Be familiar with the evacuation route.
2. Pick a safe place in each area where you can take cover. Have each employee find an area in or around their workstations that would protect them.
3. Practice drop, cover and hold on. Drop to your hands and knees. Cover your head and neck with your arms. Hold on to any sturdy furniture until the shaking stops. If there is no sturdy furniture, take shelter near an internal wall away from windows and large items that may fall.
4. Store large or heavy items close to the ground to avoid injuries from falling objects. This should be checked during all facility inspections.

Earthquakes may strike with little to no advance warning. As such, when an earthquake does occur, it is important to stay as safe as possible. Be aware that some earthquakes are actually fore-shocks, and a larger earthquake may subsequently occur. Also, be aware that many earthquakes are accompanied by aftershocks after the main event has occurred. If an earthquake occurs minimize your movements to a few steps to a nearby safe place and if you are indoors, stay there until the shaking has stopped and you are sure exiting is safe.

### Personnel Indoors

The following actions should be followed for personnel indoors:

1. Drop to the ground and take cover by getting under a sturdy piece of furniture and hold on until the shaking stops. If there isn't a desk or sturdy piece of furniture near you, cover your face and head with your arms and crouch in an inside corner of the building.
2. Stay away from glass, windows, outside doors and walls, and anything that could fall such as lighting fixtures or furniture.
3. Use a doorway for shelter only if it is near you and if you know it is a strongly supported load-bearing doorway.
4. Stay inside until the shaking stops and it is safe to go outside.
5. If able, proceed to the muster point for further instructions.

### Personnel Outdoors

The following actions should be followed for personnel outdoors:

1. If you are already outdoors, stay there.
2. Move away from structures, light poles, and utility wires.
3. Once in the open stay there until the shaking stops to prevent being hit by falling debris.
4. If able, proceed to the muster point for further instructions.

5. If you are in a vehicle, pull over and stop. Set your parking brake.

Following seismic events, all structures and equipment (including fuel storage tanks and equipment fuel tanks) on the Project site will be thoroughly inspected for damage. All repairs will be performed under standard operational procedures.

## 4.4 Medical Emergency

Medical emergencies are a sudden onset of a medical condition that, without immediate attention, could put the person's health in jeopardy. Unfortunately, this definition puts the responsibility on witness of deciding what an emergency is.

The following conditions constitute as a medical emergency and should be evaluated further:

- Bleeding that will not stop.
- Difficulty breathing, shortness of breath, or abnormal breathing.
- Change in mental status such as unusual behavior and confusion.
- Chest pain.
- Choking, even if the object is expelled.
- Coughing or vomiting blood.
- Loss of consciousness.
- Suspected head or spine injury.
- Sudden and severe pain.
- Swallowing a poisonous substance.
- Upper abdominal pain or pressure.

### Medical Emergency Response

If an employee is injured, or an accident has occurred on site and first aid is not enough treatment for the emergency, 911 must be called. The call to 911 can be made by phone by any available site personnel. The caller must state to the dispatch that they are at the "Potentia-Viridi BESS". A second notification will be made to the O&M Building, to inform others of the situation.

Workers certified in first aid/cardiopulmonary resuscitation (CPR) may administer aid if they have completed training. Workers who are trained in first aid and CPR will be posted on an emergency information notice board and employees shall be aware of who on staff is certified. At least one first aid certified member of staff shall be present at all times during working hours. The location of first aid kits and automated external defibrillators (AEDs), if present, shall be identified by appropriate signage.

The following procedures apply for serious medical injuries as listed above:

1. If life threatening, call 911.
2. Notify Safety Manager(s).
3. Provide name, exact location, number of injured persons, and brief description of incident.

4. On-site personnel shall meet emergency responders at site entrance and direct them to location of incident.
5. Do not leave or move the injured unless directed to by Emergency Coordinator or emergency responder.
6. Administer first aid if necessary.
7. The Emergency Coordinator or Human Resources representative shall inform the employee's personal emergency contact.
8. Document incident and keep on file.

## Attending an Incident

When attending an incident, the following procedures apply:

1. Clear a path to the injured person for Operations and/or Safety Managers and assign personnel to assist with signaling emergency responders to the location of the incident.
2. Identify location of Project Site entrance nearest to the incident and notify emergency responders.
3. Emergency Coordinator or delegated member of staff shall meet emergency responders at site entrance.
4. Direct and accompany emergency responders to location of incident.
5. Follow all directions of emergency responders.

## Medical Facilities

The nearest medical facility to the Potentia-Viridi project site is located at:

Sutter Tracy Community Hospital  
1420 N Tracy Boulevard  
Tracy, CA 95376  
209.835.1500  
See driving map in Appendix E.

## 4.5 Security Incidents

### 4.5.1 Bomb/Chemical/Biological Agent Threat

The purpose of this plan is to give direction to all site personnel in the event Potentia-Viridi BESS is a target of an actual or threatened bomb assault/attack. Anyone receiving a bomb threat shall:

- Treat the caller with courtesy and respect. Complete the Bomb Threat Report (Appendix 6). Use this sheet as a reference while talking with the caller making the threat.
- Attempt to obtain as much information as possible. See the "Bomb Threat Checklist" (Appendix 7).
- Immediately notify the Emergency Coordinator by phone. Stop all radio transmissions from this point on until cleared by the Emergency Coordinator or other competent authority. Radio transmissions can activate electronic detonating or timing devices.

The Emergency Response Coordinator will immediately notify 911. The Emergency Response Coordinator shall:

- Evaluate the threat and determine the appropriate course of action to take.
- Notify law enforcement and/or ambulance.
- Evacuate the facility as necessary.
- Coordinate evacuation of any part of the surrounding community with local authorities as needed.
- Coordinate search of the site with proper authorities.

If any suspicious item(s) are found, they are not to be touched. Barrier tape will be used to mark the area where the suspicious item(s) are by extending a continuous line of tape beginning immediately in front of the suspicious item(s) and extending to just outside the room exit. This will help guide local authorities to the suspicious item.

The Emergency Response Coordinator will ensure that the “All Clear” message is communicated once the threat has passed or is no longer present.

## 4.5.2 Sabotage or Vandalism

Anyone detecting any act or threat of any act of sabotage or vandalism will immediately notify the Emergency Response Coordinator. The Emergency Coordinator will evaluate the situation and decide what actions to take. The following options should be considered and/or implemented:

- Notification of 911.
- Corrective action as required, providing that no person will risk injury.
- Evacuation of the facility.

## 4.5.3 Active Shooter

In an active shooter situation, workers should:

1. Quickly determine what actions to take to protect life. Options include:
  - Run
    - Seek safety. Getting away from the attacker is the top priority.
    - Leave your belongings behind and get away.
    - Call 9-1-1 when you are safe and describe the attacker, location and weapons.
  - Hide
    - Cover and hide if you can't evacuate. Find a place to hide out of view of the attacker and put a solid barrier between yourself and the threat if possible.
    - Lock and block doors, close blinds and turn off lights.
    - Keep silent.
  - Fight
    - **Fight only as a last resort** When you can't run or cover, attempt to disrupt the attack or disable the attacker.
    - Be aggressive and commit to your actions.

- Recruit others to ambush the attacker with makeshift weapons such as chairs, fire extinguishers, scissors, books, etc.
- Be prepared to cause severe or lethal injury to the attacker.
- Help the Wounded
  - Take care of yourself first and then, if you are able, help the wounded get to safety and provide immediate care. Call 9-1-1 when it is safe for you to do so.

Use best judgment based on the specific circumstances of the incident. Getting away from the shooter(s) is the top priority. Call 911 when in a safe location and warn/prevent individuals from entering an area where an active shooter may be if possible.

1. When encountering responding police, remain calm and follow any and all instructions from the officers. Officers may shout commands and push individuals to the ground for his/her safety as well as their own. When law enforcement personnel arrive at the scene, personnel should be aware of the following:
  - Follow all official instructions from police.
  - Remain calm, think, and resist the urge to panic.
  - Immediately raise hands and spread fingers.
  - Keep hands visible at all times.
  - Put down any items.
  - Avoid making sudden or quick movements toward officers.
  - Do not point, scream, or yell.
  - Do not ask for help from the officers when evacuating.
  - Proceed in the direction as advised by the officers; and
  - Provide all relevant information to police.

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# 5 References

U.S. Government. 2024. Ready. Accessed June 2024. <https://www.ready.gov/>

Alameda County. 2024 Ready *Title*. Accessed June 2024. <https://www.acgov.org/ready/>

American Clean Power. 2022. Energy Storage Emergency Response Template. Accessed June 2024. <https://cleanpower.org/resources/energy-storage-emergency-response-template/>

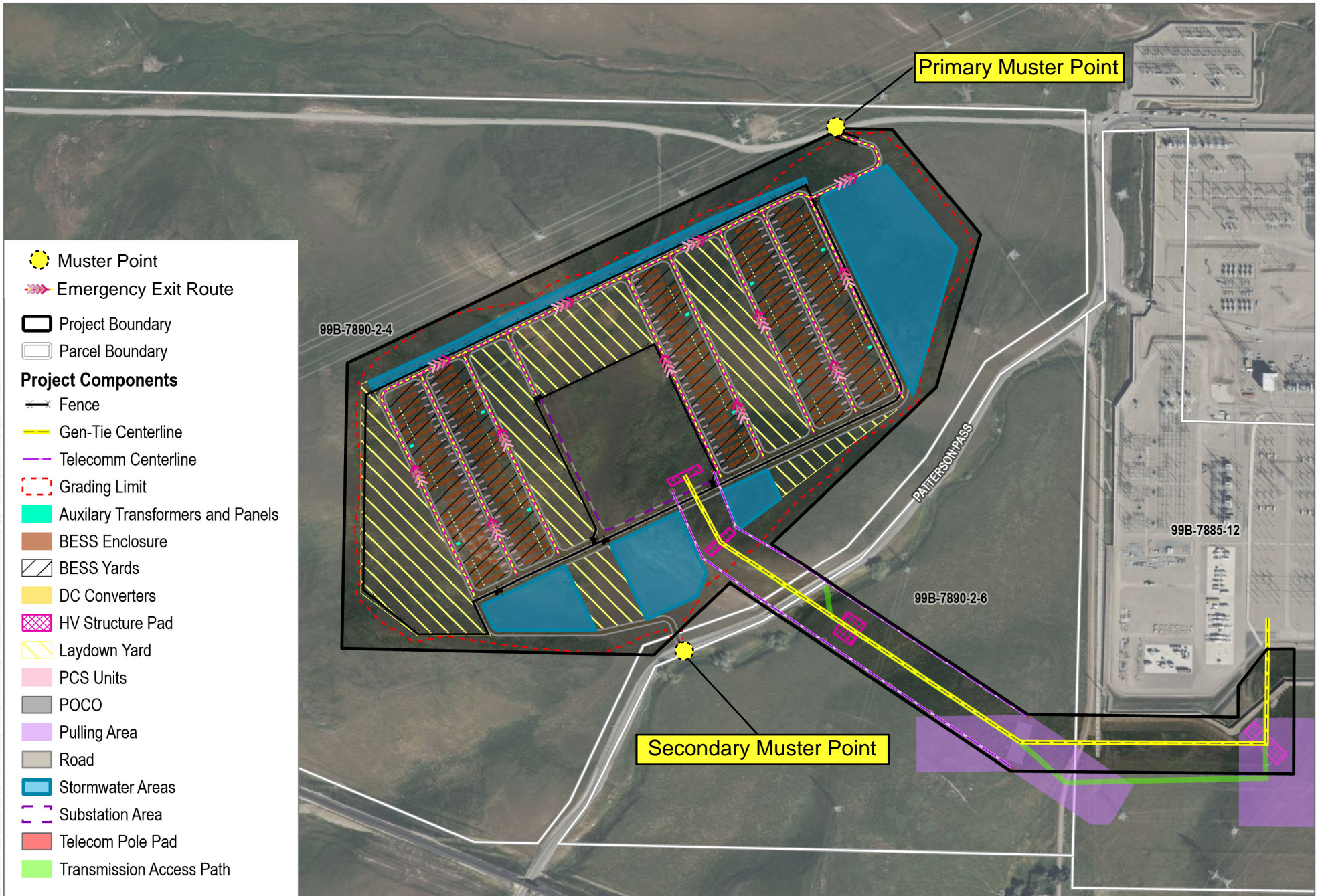
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# Appendix A

## Site Map





SOURCE: Bing Maps 2023, County of Alameda 2022

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# **Appendix B**

## Emergency Equipment List

**Emergency Equipment**

Check the applicable boxes to list emergency response equipment available at the facility, identify the location(s) where the equipment is kept, and indicate the equipment's capability, if applicable.

Type	Equipment Available		Location
Safety and First Aid	Chemical protective suits, aprons, and/or vests	<input type="checkbox"/>	
	Chemical protective gloves	<input checked="" type="checkbox"/>	Office trailer
	Chemical protective boots	<input type="checkbox"/>	
	Safety glasses, goggles, and face shields	<input checked="" type="checkbox"/>	Standard PPE for all on-site personnel. Also available in office trailer.
	Hard hats	<input checked="" type="checkbox"/>	Standard PPE for all on-site personnel. Also available in office trailer.
	Air-purifying respirators	<input type="checkbox"/>	
	Self-contained breathing apparatus (SCBA)	<input type="checkbox"/>	
	First aid kits	<input checked="" type="checkbox"/>	Office trailer and laydown area
	Plumbed eyewash fountain and/or shower	<input type="checkbox"/>	
	Portable eyewash kits and/or station	<input checked="" type="checkbox"/>	Office trailer and laydown area
Other	<input type="checkbox"/>		
Fire Fighting	Portable fire extinguishers	<input checked="" type="checkbox"/>	Office trailer, designated smoking areas, all on-site vehicles and equipment
	Fixed fire suppression systems and/ or sprinklers	<input type="checkbox"/>	
	Fire alarm boxes	<input type="checkbox"/>	
	Other	<input type="checkbox"/>	
Spill Control and Clean-Up	All-in-one spill kit	<input checked="" type="checkbox"/>	Laydown area
	Absorbent material	<input type="checkbox"/>	
	Container for used absorbent	<input checked="" type="checkbox"/>	Laydown area
	Berm and/or diking equipment	<input checked="" type="checkbox"/>	Construction equipment
	Broom	<input checked="" type="checkbox"/>	Laydown area
	Shovel	<input checked="" type="checkbox"/>	Laydown area
	Vacuum	<input type="checkbox"/>	
	Exhaust hood	<input type="checkbox"/>	
	Sump and/or holding tank	<input type="checkbox"/>	
	Chemical neutralizers	<input type="checkbox"/>	
	Gas cylinder leak repair kit	<input type="checkbox"/>	
	Spill overpack drums	<input type="checkbox"/>	
Other	<input type="checkbox"/>		
Communications and Alarm Systems	Telephones (e.g., Cellular)	<input checked="" type="checkbox"/>	Construction and safety leads
	Intercom and/or pa system	<input type="checkbox"/>	
	Portable radios	<input type="checkbox"/>	
	Automatic alarm chemical monitoring equipment	<input type="checkbox"/>	
Other	Other	<input type="checkbox"/>	
	Other	<input type="checkbox"/>	

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# Appendix C

## Record of Revisions



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# **Appendix D**

## Facility and Agency Contacts

## Facility and Agency Contacts

**Table D1. Facility Information**

	Project
Facility Name	Potentia-Viridi Battery Energy Storage System
Facility Address	17257 Patterson Pass Road Tracy, CA 95377
Facility Phone number	TBD
Facility Mailing Address	17257 Patterson Pass Road, Tracy, CA 95377
Owner or Operator Name	Levy Alameda, LLC
Owner Or Operator Address	155 Wellington Street W, Suite 2930 Toronto, Ontario M5V 3H1, Canada

**Table D2. Emergency Response Phone Numbers**

Resource	Phone Number	Address
Emergency Coordinator	TBD	TBD
Ambulance, Fire, Police and CHP	911	Call or Text
Nearest Fire Station	Tracy Fire Department 209.831.6700	835 N Central Ave, Tracy, CA 95376
Nearest Police Station	Tracy Police Department 209.831.6550	1000 Civic Center Drive Tracy, CA 95376
Nearest Medical Facility	Sutter Tracy Community Hospital 209.835.1500	1420 N Tracy Boulevard Tracy, CA 95376
Local Unified Program Agency (CUPA)	Alameda County Department of Environmental Health 510.567.6702	1131 Harbor Bay Parkway Alameda, CA 94502-6577
California State Warning Center / CAL OES	800.852.7550	
National Response Center (NRC)	800.424.8802	
Poison Control Center	800.222.1222	

**Table D3. Agency Notification Phone Numbers**

Agency	Phone Number / Email	Address
California Department of Toxic Substance Control (DTSC)	916.255.3545	
San Francisco Bay Regional Water Quality Control Board	510.622.2300 or spillreportR2@waterboards.ca.gov	1515 Clay Street, Suite 1400 Oakland, CA 94612
US Environmental Protection Agency (EPA)	800.424.9346 – EPA Information Center phone number	US EPA Pacific Southwest, Region 9 75 Hawthorne St. San Francisco, CA 94105

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**Table D3. Agency Notification Phone Numbers**

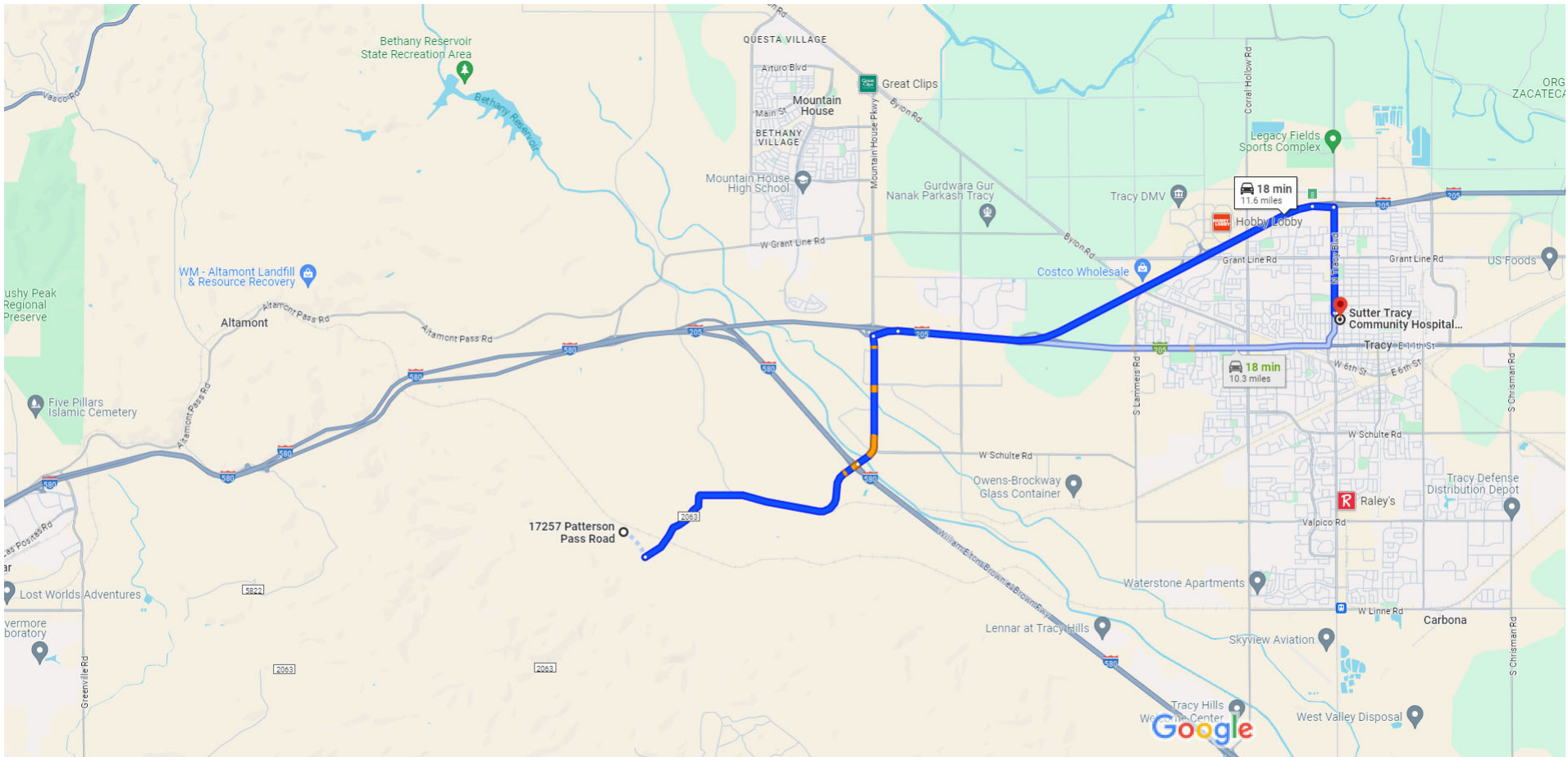
Agency	Phone Number / Email	Address
California Department of Fish and Wildlife (CDFW)	916.358.2900	
US Coast Guard (USCG)	202.267.2180	
CAL OSHA	916.263.2800	
CAL Fire Office of the State Fire Marshal (OSFM)	916.323.7390	



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# **Appendix E**

## Map to Nearest Hospital



17257 Patterson Pass Rd  
Tracy, CA 95377

- ↑ 1. Head northeast on Patterson Pass Rd  
5 min (3.2 mi)

Take I-205 E to W Beverly Pl in Tracy

- 
- 13 min (8.4 mi)
- ↑ 2. Continue onto International Pkwy/Mountain House Pkwy

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  - ↗ 3. Turn right onto the Interstate 205 E ramp to Sacramento 1.5 mi

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  - ↗ 4. Merge onto I-205 E 0.3 mi

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  - ↘ 5. Take exit 8 for Tracy Blvd 5.1 mi

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  - ↘ 6. Turn right onto N Tracy Blvd 0.3 mi
  - 📍 [Pass by Quality Inn Tracy I-205 \(on the right\)](#)

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  - 1.2 mi

**Continue on W Beverly Pl to your destination**

- 
- 38 sec (305 ft)
- ↶ 7. Turn left onto W Beverly Pl

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  - ↘ 8. Turn right 135 ft

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  - ↶ 9. Turn left 161 ft
  - 📍 [Destination will be on the right](#)

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  - 10 ft

Sutter Tracy Community Hospital Emergency Department  
1420 N Tracy Blvd, Tracy, CA 95376