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3.5 Hazardous Materials Handling

This section discusses the use and storage of hazardous materials associated with the Project and the potential effects on human health and the environment. The evaluation of hazardous materials handling includes the following elements:

- **Section 3.5.1** describes the existing environment that may be affected, including land use and hazardous use materials and storage;
- **Section 3.5.2** provides an overview of the regulatory setting related to hazardous materials handling;
- **Section 3.5.3** identifies potential impacts to the environment and on human health during construction and operations;
- **Section 3.5.4** discusses potential cumulative effects;
- **Section 3.5.5** identifies proposed mitigation measures; Section 3.5.6 presents laws, ordinances, and standards (LORS) applicable to hazardous materials;
- **Section 3.5.7** identifies agencies involved and provides agency contacts;
- **Section 3.5.8** describes permits; and
- **Section 3.5.9** provides all references used to develop this section.

The following environmental setting and impact evaluation is based in part on the following Project-specific technical report, included as an appendix to this EIR:

1. **Appendix 3.5A** – Phase I Environmental Site Assessment, prepared by Tetra Tech, August 2023

3.5.1 Affected Environment

3.5.1.1 Land Use

The Project site is currently undeveloped, and the regional land use has remained largely unchanged since the 1980s based on aerial imagery (Google Earth Pro 2024). The PG&E Tesla substation is directly east; along the western Project boundary there are transmission lines running northeast to southwest; Patterson Pass Road follows the eastern boundary; there is a railroad line to the south and a gravel access road to the north. The gen-tie alignment connecting the BESS facility to the PG&E substation crosses Patterson Pass Road, Patterson Run (an ephemeral stream channel), and runs northwest to southeast to the southwestern corner of the substation. The site and surrounding land have been used for cattle grazing. The area of the BESS facility and immediately south of the substation is not currently being grazed, while much of the gen-tie alignment is currently used as cattle pasture. The nearest city is Tracy, approximately 2.5 miles to the east.

The Phase I ESA did not identify any recognized environmental conditions (RECs), conditional RECs, or historical RECs associated with the Project site. The Phase I ESA did identify historical agricultural use between approximately 1940 to the 1960s, it and notes these activities may have been subject to application of pesticides and herbicides, which could contain hazardous materials. This is identified as a “business environmental risk (BER)” in the Phase I ESA. None of the following features were observed at the Project site during the Phase I ESA site reconnaissance: clarifiers, oil/water separators, lifts/hoists, trench drains, wastewater treatment systems, pits, pools of liquid or discolored water, pavement patches indicative of removed subsurface features or subsurface

investigation/remediation, evidence of filling, and evidence of dumping/burning trash or other materials. No strong, pungent, or noxious odors were noted at the Project site during the site reconnaissance (Appendix 3.5A).

Table 3.5-1. Schools Located with 6 miles of the Project Site

Name of School	Distance to Project Site	Address
Mountain House High School	approximately 2.50 miles northwest	1090 South Central Parkway, Mountain House, California 95391
Hansen Elementary School	approximately 3.40 miles northwest	1400 South Durant Terrace, Mountain House, California 95391
Lammersville Elementary School	approximately 4 miles northwest	16555 West Von Sostan Road, Tracy, California 95304-7220
Bethany Elementary School	approximately 4.25 miles north	570 Escuela Drive, Mountain House California 95391-2051
Wicklund Elementary School	approximately 4.4 miles north	300 East Legacy Drive, Mountain House, California 95391
Altamont Elementary School	approximately 4.9 miles north	452 West Saint Francis Avenue, Mountain House, California 95391
Mountain House Elementary School	approximately 5.1 miles north	3950 Mountain House Road, Byron, California 94514-1920
John C. Kimball High School	approximately 5.3 miles west	3200 Jaguar Run, Tracy, California 95377-7216
Sebastian Questa Elementary School	approximately 5.3 miles north	543 North Montebello Street, Mountain House, California 95391
George Kelly Elementary School	approximately 5.8 miles west	535 Mabel Josephine Drive, Tracy, California 95377-6645

Eight childcare/daycare facilities are located within six miles of the Project site. These childcare/daycare facilities include:

- Precious Gems Preschool and Daycare (approximately 3 miles north of Project site) - 64 W Pasqua Glen, Mountain House, California 95391
- Sunshine Shwetha Preschool & Daycare (approximately 3.3 miles north of Project site) - 648 Downey Dr, Mountain House, California 95391
- Little Einsteins Daycare/Preschool (approximately 3.75 miles north of Project site) - 1307 Azores Ct, Mountain House, California 95391
- Little Angels Daycare Preschool Before & After School Care (approximately 3.9 miles northwest of Project site) - 2056 Shenandoah St, Tracy, California 95377
- KidzCorner Preschool, Daycare & After School Care (approximately 3.92 miles north of Project site) - 252 E Angelina Ave, Mountain House, California 95391
- Charlotte's Academic Playhouse (approximately 4 miles north of Project site) - 292 Ashlee Ave, Mountain House, California 95391
- Happy Panda Preschool & Daycare (approximately 4.06 miles north of Project site) - 96 W Recreo Court, Mountain House, California 95391

- Sunshine Preschool & Daycare (approximately 5.3 miles north of Project site) - Wilson Ave, Tracy, California 95376

Figure 3.5-1, Sensitive Receptors within 6 Miles of the Project, shows the location of schools and childcare/daycare facilities within a 6-mile radius of the Project site. Also, it should be noted that no hospitals or long-term care facilities are located within the 6-mile radius of the Project.

3.5.1.2 Hazardous Materials Use and Storage

Hazardous materials will be used during construction and operation; the facility will comply with all applicable laws and regulations. Proper use and storage of hazardous materials will minimize potential for accidental release. The following sections describe use, followed by general characteristics of hazardous materials.

During construction, operation, and decommissioning, all fuels, waste oils, and solvents would be collected and stored in tanks or drums within a containment area consisting of an impervious floor and sidewalls. Fuel would be stored in aboveground storage tanks. These tanks may have either a double wall or would be placed within temporary containment skid or lined, earthen berms for spill containment. Upon the conclusion of construction and decommissioning phases, excess fuels would be removed from the site and any surface contamination resulting from fuel handling operations would be remediated.

The facility is anticipated to require a Hazardous Materials Business Plan (HMBP) during construction, operations, and decommissioning because it is anticipated to have materials onsite that are greater than the State of California thresholds for quantities of hazardous materials. 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 the hazardous substances which qualify for reporting is maintained in California Occupational Safety and Health Regulations Chapter 3.2 Article 5 §339. The anticipated hazardous materials anticipated at the Project are discussed below. A safe designated Hazardous Waste Storage Location will be determined closer to design finalization for storage of any hazardous materials and waste used or generated during normal and emergency actions. However, it is expected the location will be within the main laydown yard during construction and within the substation area during operations.

3.5.1.2.1 Construction Phase

The hazardous materials used for construction will be typical of most construction projects of this type. Materials will include small quantities of gasoline, diesel fuel, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliatives, herbicides, and welding materials/supplies. Petroleum such as Diesel No. 2 or gasoline, may be stored onsite during construction and decommissioning to fuel construction and decommissioning equipment, with minimal amounts of diesel anticipated to be stored onsite during the operation of the site.

Hazardous material use would present relatively low public health risk, but could contaminate subsurface soils, ground water if a release or incident occurred. The use of best management practices (BMP) would reduce the likelihood of potential incidents involving hazardous materials.

General industry health, safety and environmental BMPs will be implemented by construction personnel. The following BMPs are designed to reduce incidents involving hazardous materials:

- Equipment and vehicles requiring diesel refueling and maintenance will generally occur in designated areas that are designed to control potential spills. Designated areas will be bermed and/or covered by an impervious surface (asphalt or concrete) to control potential spills. Employees will be present during diesel refueling activities. When mobile diesel refueling is required, the diesel refueling vehicle will be equipped with fire extinguishers and spill containment equipment, such as absorbents. The facility and surface drainage systems are designed to manage stormwater runoff within the property bounds during construction in accordance with the Construction General Permit and SWPPP.
- Only authorized personnel will conduct vehicle and equipment service maintenance
- Only EPA approved pumps, hoses and nozzles will be used to refuel equipment and vehicles
- During servicing, catch-pans will be placed under equipment to catch potential spills or leaks
- After servicing, disconnected hoses will be placed in containers to collect any residual fuel from the hoses
- During diesel refueling, vehicle engines will be shut off
- Smoking, open flames or welding will not be permitted in diesel refueling and service areas, or hazardous waste storage areas
- Diesel refueling will be performed away from surface water or storm water drains
- Following diesel refueling activities, service trucks will immediately leave the construction zone
- All service trucks used to refuel equipment and vehicles on site will be provided with fire extinguishers and spill containment equipment, such as absorbents
- All maintenance and diesel refueling areas will be inspected monthly. Results of inspections will be recorded in a logbook that will be maintained onsite.

3.5.1.2.2 Operations Phase

Limited amounts of hazardous materials will be stored or used on the site during operations, including mineral oil to be sealed within the transformers. Appropriate spill containment and cleanup kits would be maintained during operation of the Project. Fuels and lubricants used in operations will be subject to a Spill Prevention Control and Countermeasures Plan (SPCC) to be prepared for the Project. Federal and California regulations requires a SPCC Plan if stored quantities are equal to or greater than 660 gallons for a single container, or equal to or greater than 1,320 gallons total. The Project would store sufficient diesel to supply local backup power for fire pumps required to meet fire department and insurance requirements. Should this exceed 1,320 gallons total on site, an SPCC will be prepared and be included in the HMBP. Solid waste, if generated during operations, will be subject to the material disposal and solid waste management plan to be prepared for the proposed Project.

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. The modules 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 California Fire Code.

Hazardous chemicals' use, typical quantities, and toxicity are described in Table 3.5-2.

Table 3.5-2. Hazardous Materials Use during Construction and Operation

Hazardous Material	Uses	Typical Quantities	Toxicity
Diesel ^a	Fuel for construction and transportation equipment during construction and decommissioning. Used to power an emergency generator during operation, if needed.	Over 5,000 gallons would be stored in aboveground tanks during construction and operation. The amount of diesel to be stored onsite during decommissioning is unknown at this time but is assumed be similar to that of construction. ^b	Fuel oils are liquid mixtures produced from petroleum, and their use mostly involves burning them as fuels. Drinking or breathing fuel oils may cause nausea or nervous system effects. However, exposure under normal use conditions is not likely to be harmful (ATSDR 1996).
Gasoline	Some construction equipment and vehicles	Gasoline would not be stored onsite during construction or operation.	
Lubricating oils/ grease/ hydraulic fluids/gear oils	Lubricating oil would be present in the diesel engine of the emergency generator, and in engines of construction and transportation equipment.	Limited quantities would be stored in portable containers (capacity of 55 gallons or less) and maintained onsite during all phases of the Project. Containers would be double lined and stored within secondary containment.	Exposure to hydraulic fluids occurs mainly in the workplace. Some hydraulic fluids have a bland, oily smell and others have no smell; some are flammable and some are not. Ingesting large amounts of some types of hydraulic fluids can cause pneumonia (ATSDR 1997).
Glycol-based antifreeze	Used in the diesel engine for the emergency generator.	Limited quantities (10 to 20 gallons of concentrate) would be stored onsite during each phase of the Project.	Ethylene glycol is a clear liquid used in antifreeze and de-icing solutions. Exposure to large amounts of ethylene glycol can damage the kidneys, nervous system, lungs, and heart (ATSDR 2013).
Lead-acid storage batteries and electrolyte solution	Present in construction and transportation equipment. Backup power source for control equipment.	Limited quantities of electrolyte solution (<20 gallons) for maintenance of construction and transportation equipment during construction and decommissioning.	The electrolyte solution in lead acid batteries contains sulfuric acid, which is highly corrosive and can cause severe chemical burns to the skin and can damage the eyes. The solution is also poisonous if ingested. In addition, overcharging a lead acid battery can produce hydrogen sulfide gas. The gas is heavier than air and will accumulate at the bottom of poorly ventilated spaces (UMass 2023)
Lithium-ion batteries	Used for Project operations	Unknown at this time.	Batteries commonly contain materials such as lithium, cobalt, nickel, manganese, and titanium, as well as graphite and a flammable electrolyte. Under normal usage conditions, they do not exhaust vapors. In normal usage, cell electrolyte should not be encountered by anyone handling a battery, making the risk of a spill of electrolyte from any commercial battery

Table 3.5-2. Hazardous Materials Use during Construction and Operation

Hazardous Material	Uses	Typical Quantities	Toxicity
			pack very remote. Furthermore, in most commercial cells, the electrolyte is largely absorbed in electrodes, such that there is no free or “spillable” electrolyte within individual sealed cells. In those instances, severe mechanical damage (e.g., severe crushing) can cause a small fraction of total electrolyte quantity to leak out of a single cell; however, any released electrolyte is likely to evaporate rapidly (NFPA 2016).
Cleaning solvents	Organic solvents would be used for equipment cleaning and maintenance when water-based cleaning and degreasing solvents cannot be used.	Limited quantities or organic solvents (<55 gallons) would be stored onsite during construction and decommissioning to maintain construction and transportation equipment. Limited quantities (<10 gallons) of water-based cleaning solvents would be stored onsite during operation.	Exposure to solvents and other organic liquids is one of the most common chemical health risks at places of work. Most of the organic solvents are combustible, often highly volatile and extremely flammable and they should always be handled with care. Some solvents produce vapors which are heavier than air. These may move on the floor or ground to a distant ignition source, such as a spark from welding or caused by static electricity. The vapors may also explode from smoking. Vapors of solvents can also accumulate in confined places and stay there for a long time, presenting risks for health and property. Solvents enter the body by inhalation, by swallowing and through the skin. The effect depends on several factors (International Labour Organization 2004).
Dielectric fluids (i.e., Mineral Oil) ^c	Used in electrical transformers and other electric power management devices as an electrical insulator.	Some transformers may contain more than 500 gallons of dielectric fluid. Onsite transformers each contain approximately 10,000 gallons of mineral oil.	Dielectric fluids such as mineral oil may cause allergic reactions. Primary Routes of Entry: Eye and skin contact, inhalation; Target Organs: Eyes, skin, respiratory tract; Persons with preexisting skin and respiratory conditions may be more susceptible to the effects of this product. Mineral oil is not listed in the National Toxicology Program (NTP) Annual Report on Carcinogens and not listed as OSHA carcinogens (Environmental Protection Services 2023).
Herbicides that contain glyphosate	May be used for vegetation control around facilities for fire safety.	If deemed necessary, herbicides would be brought to the site and applied by a licensed applicator.	If a large amount is swallowed, glyphosate can cause nausea and vomiting. It can be very irritating if it is left on your skin or eyes. Glyphosate has been associated with respiratory effects (lung and nose), such as irritation in the nose, or asthma, in people

Table 3.5-2. Hazardous Materials Use during Construction and Operation

Hazardous Material	Uses	Typical Quantities	Toxicity
			using glyphosate products. Workers that use large amounts of glyphosate products for long periods of time may be more likely to develop respiratory effects. Studies in animals have shown that glyphosate can cause developmental effects (such as lower body weight and problems with bone and organ growth) when the pregnant animals were given very large amounts of glyphosate (ATSDR 2020)

Notes:

- a Diesel fuel would be replenished onsite by commercial vendors, as necessary.
- b These values represent the total onsite storage capacity, not the total amount of fuel which would be consumed during Project construction.
- c It is assumed that the majority of transformers and other electrical devices that rely on dielectric fluids would have those fluids added during fabrication and would not require dielectric fluid to be added onsite. It is assumed that servicing of electrical devices that involves wholesale removal and replacement of dielectric fluids would not occur onsite and that equipment requiring such servicing would be removed from the site and replaced. New transformers or electrical devices are expected to contain mineral oil based, or synthetic dielectric fluids that are free of polychlorinated biphenyls. Some equipment may instead contain gaseous dielectric agents (e.g., sulfur hexafluoride) rather than liquid dielectric fluids.

3.5.2 Regulatory Setting

Federal, state, and local laws, ordinances, regulations, and standards (LORS) related to visual resources were reviewed for applicability to the Project. These are detailed in Section 3.5.6, Laws, Ordinances, Regulations, and Standards.

3.5.3 Impact Analysis

Construction and operation will involve the use of various hazardous materials. The use of hazardous materials and their potential to cause adverse environmental and human health effects are discussed in the sections below.

3.5.3.1 Methodology

The information presented is based on a site-specific engineering plans, Phase I Environmental Site Assessment, and readily available resources provided online. Potential direct and indirect Project impacts related to hazardous materials handling were evaluated against the CEQA significance criteria and are discussed below. The impact analysis evaluates potential Project impacts during Project construction, operation, and decommissioning.

3.5.3.2 Impact Evaluation Criteria

The potential for impacts related to hazardous materials handling were evaluated using the relevant criteria described in the California Environmental Quality Act (CEQA) Environmental Checklist (Appendix G of the CEQA Guidelines). Specific to hazardous materials handling, the CEQA Checklist asks, would the project:

- Create a significant hazard to the public or environment through routine transport or use of hazardous materials;
- Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Create emissions of handle materials, substances, or waste within 0.25 mile of an existing or proposed school;
- Be included on a list of hazardous materials sites compiled pursuant to Cortese List outlined in Government Code Section 65962.5 and result in a significant hazard to the public or environment;
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency plan?

3.5.3.3 Impact Evaluation

Impact 3.5-1 Would the project create a significant hazard to the public or environment through routine transport, disposal, or use of hazardous materials?

Construction and Decommissioning

Less than Significant. The proposed Project, including the solar PV facility and gen-tie connection, would not involve the routine transport, use, or disposal of hazardous materials, as defined by the Hazardous Materials Transportation Uniform Safety Act. Most of the hazardous waste generated by the Project would occur during the construction period and would consist of liquid waste, including cleaning fluids, dust palliative, herbicides, and solvents. Some solid hazardous waste, such as welding materials, may also be generated during construction. These materials would be transported to the Project site during construction, and any hazardous materials that are produced as a result of the construction of the Project would be collected and transported away from the site for disposal in an approved off-site waste disposal facility. During Project construction, material safety data sheets for all hazardous materials present on-site would be made readily available to on-site personnel to ensure awareness and proper handling in accordance with required BMPs as part of a Stormwater Pollution Prevention Plan. Workers would be trained to properly identify and handle all hazardous materials.

Transportation of hazardous materials would be required during construction, operation, and decommissioning activities. All transportation of hazardous materials associated with the Project would comply with:

- U.S. Environmental Protection Agency (EPA)
- California Department of Transportation (Caltrans)
- California Department of Toxic Substance Control (DTSC)
- California Highway Patrol (CHP)
- California State Fire Marshal Regulations

Overall, the relatively limited use of hazardous materials, and subsequent transport and disposal of such materials during construction, would be controlled through compliance with applicable regulations to limit releases of hazardous materials and wastes. Diesel fuel and lubricants used on field equipment would be subject to a Waste Management Plan and a SPCC plan (see Appendix 1I and 1K, respectively for preliminary Waste Management and SPCC Plans prepared for the Project). The disposal of all oils, lubricants, and spent filters would occur in accordance with applicable local, State, and federal regulations. Recyclable materials including wood, shipping materials, and metals would be separated as feasible for recycling. Liquids and oils in the transformer and other equipment would be used in accordance with applicable regulations. As such, Project construction is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Operations

Less than Significant. Operation and Maintenance (O&M) activities associated with a BESS facility are minimal and would require limited use of hazardous materials. Those that would be used would be stored on-site in designated, secured areas. The perimeter of the BESS facility would be fenced to prevent public access to any hazardous materials on-site. Operational activities would be limited to monitoring facility performance and conducting scheduled or emergency maintenance of on-site electrical equipment and/or the gen-tie line. No heavy equipment would be routinely used during normal Project operation. O&M vehicles would include trucks (i.e., pickup, flatbed), forklifts, and/or loaders for routine and unscheduled maintenance. Large heavy-haul transport equipment and cranes may be brought to the Project site when needed for equipment repair or replacement. Long-term maintenance and equipment replacement would be scheduled in accordance with manufacturer recommendations. The Project would also include operational and maintenance protocols that would be used to identify and remove damaged or defective battery modules as required. A Hazardous Materials Business Plan that would ensure that all handling, storage, and disposal of hazardous materials associated with Project operation would be conducted in accordance with standard practices to minimize potential exposure of workers or the public. As such, operations and maintenance of the Project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Impact 3.5-2 Would the project create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Hazardous Materials Use

Construction and Decommissioning

Less than Significant. As discussed under Impact 3.5.1, construction would involve storage and use of hazardous materials; there are minor risks associated with the use of those materials.

Project construction and decommissioning activities could result in the transport, use, and disposal of hazardous materials such as fuels, asphalt, lubricants, toxic solvents, pesticides, and herbicides. Although care would be used when transporting, using, and disposing of these materials, there is a possibility that upset or accidental conditions may arise which could release hazardous materials into the environment. Accidental releases of hazardous materials are those releases that are unforeseen or that result from unforeseen circumstances, while reasonably foreseeable upset conditions are those release or exposure events that can be anticipated and planned for.

Project construction and decommissioning activities would occur in accordance with all applicable local standards set forth by Alameda County, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risk to the public, such as California Division of Occupational Safety and Health (Cal/OSHA) requirements, the Hazardous Waste Control Act, the California Accidental Release Protection Program, and the California Health and Safety Code. The construction and decommissioning contractors would be required to implement such regulations relative to the transport, handling, and disposal of any hazardous materials, including the use of standard construction controls and safety procedures that would avoid or minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local and state laws.

Furthermore, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented to minimize potential hazards associated with construction and decommissioning site pollutants. The SWPPP would include BMPs, such as covering and containing hazardous materials so that they are not in contact with precipitation or runoff, identifying the worst-case and most likely spill scenarios, and providing adequate response equipment to ensure that hazardous materials are not carried off-site through stormwater runoff. The facility is anticipated to require a HMBP during construction, operations, and decommissioning because it is anticipated to have materials onsite that are greater than the State of California thresholds for quantities of hazardous materials. The HMBP includes an emergency action plan, clean-up and containment provisions, and training and recordkeeping requirements.

Therefore, construction-and decommissioning related Project impacts would be less than significant with implementation of the required BMPs and training and compliance with applicable federal, state, and local requirements related to hazardous materials.

Operations Phase

Less than Significant. As discussed under Impact 3.5-1, operation would involve use and storage of hazardous materials. Most of the hazardous materials used and stored on site would consist of lithium-ion batteries for Project operations and diesel storage for back-up generators. Uncontrolled release of liquid chemicals could run off and drain into the stormwater system and potentially have harmful effects. However, the use and storage of hazardous materials would pose minor risks for release if best management practices are adopted, as detailed above.

The use and storage of hazardous materials will be contained in designated areas onsite that would be outlined in the HMBP. The HMBP includes an emergency action plan, clean-up and containment provisions, and training and recordkeeping requirements. The risk of public exposure to hazardous materials, with appropriate BMPs, is low and would not be significant. All equipment (particularly equipment operating in or near a drainage or in a basin) would be maintained in good working condition, and free of leaks. All vehicles would be equipped with drip pans during storage to contain minor spills and drips. No refueling or storage would take place within 100 feet of a drainage channel or other sensitive resource. Spill kits would be located onsite and in vehicles for use in spill response. In addition, all maintenance crews working with heavy equipment would be trained in spill containment and response.

Therefore, operation-related Project impacts would be less than significant with implementation of the BMPs and training and compliance with applicable federal, state, and local requirements related to hazardous materials.

Accidental Release Hazards

Less than Significant. Without proper engineering controls, the public could be at risk of exposure to harmful vapors in the event of an accidental release during construction, operation, and decommissioning activities associated with the Project, as incompatible chemicals have the potential to mix, causing vapors that could also have harmful effects. However, the Project would implement California Fire Code (Articles 79 and 80) requirements for safe storage and handling of hazardous materials. The proposed Project and the affiliated staff would use engineering controls to reduce the potential for release of hazardous materials and mixing of incompatible materials.

All transportation of hazardous substances would be with Department of Transportation (DOT)-approved personnel and trucking/transport equipment. Project operations would not involve the handling of any other acutely hazardous materials other than those listed in Table 3.5-2 that would have the potential to generate significant offsite consequences. A risk management plan (Health and Safety Code section 25531 et seq.) is not required because the Project is not a stationary source that has more than a threshold quantity of a regulated substance (as specified in Tables 1-3, CCR, Title 19 section 2770.5). However, release prevention measures are required under HMBP and SPCC rules and regulations, which would be implemented in the event hazardous materials and/or petroleum products are stored above reportable quantities. These measures, which include protections like secondary containment and accessible spill response kits, would further reduce the potential for accidental releases.

As such, construction, operation, and decommissioning impacts related to Project implementation **would be less than significant** with implementation of the BMPs and training and compliance with applicable federal, state, and local requirements related to hazardous materials.

Fire and Explosion Hazards

See Section 3.17, Wildfire, for a discussion on impacts related to wildfire. As detailed in Section 3.17, Wildfire, CAL FIRE's Fire and Resource Assessment Program (FRAP) database includes map data documenting areas of significant fire hazards in the state. These maps categorize geographic areas of the state into different fire hazard severity zones (FHSZs). As shown in Figure 3.17-1, Fire Hazard Severity Zones, the proposed Project site and the surrounding area are located on SRA lands where the state has the primary responsibility for fire suppression. 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. The nearest Moderate Fire Hazard Severity Zone is located two miles to west near the ridgeline of the Diablo Mountain Range and the closest Very High FHSZ is located approximately 3.5 miles south-southwest of the proposed Project and just west of the Lawrence Livermore National Laboratory Site 300. The State adopted updated FHSZ maps on April 2, 2024. According to the updated maps, the Project site is in an area classified as a High Fire Hazard Severity Zone.

Construction and Decommissioning

Less than Significant. In the unlikely event that of a fire or explosion, other than several rural residences, no sensitive receptors, including schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities are within a 1-mile radius of the Project site. If a fire or explosion would occur due to handling of hazardous materials during construction activities, procedures from the Emergency Response Plan, Spill Prevention and Countermeasures Plan, Health and Safety Plan, and Fire Safety Plan (Appendices 1J, 1K, 10, and 3.17A, respectively) would be implemented to reduce risks to worker safety. Additionally, construction would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site

consequences, and as such, no protocol for modeling of hazardous materials releases is included and no modelling is proposed. Therefore, construction of BESS facility and gen-tie line components would result in a less-than-significant impact involving fire and explosion hazards.

Operations

Less than Significant. All hazardous material storage areas would be equipped with a fire extinguishing system and ventilation for enclosed substances per the requirement of Article 80 of the California Fire Code. Hazardous materials used and stored on-site during Project operation would be stored in appropriate containers in compliance federal and State regulations. During operation, procedures for the use and handling of hazardous materials would be described within the Project-specific Hazardous Materials Business Plan (HMBP) as well as the Emergency Response Plan, Spill Prevention and Countermeasures Plan, Health and Safety Plan, and Fire Safety Plan (Appendices 1G, 1J, 10, and 3.17A, respectively).

Operation of the BESS facility would require the use of flammable materials such as lubrication oil and diesel fuel. Storage of flammable materials would be in accordance with Article 80 of the California Fire Code. A fire extinguishing system would be nearby the storage and lube oil pumping areas. Flammable materials would be handled by in accordance with the HMBP and SPCC. With proper storage and handling, the risk of fire and explosion would be less than significant.

For emergency spills or fire related incidents, CalFire would first be called. If required for additional assistance, the closest County fire station is Alameda County Fire Department Station No. 20, located at 7000 East Avenue, Building 323, Livermore, CA 94550. If a fire involves hazardous materials, the Alameda County Department of Environmental Health, Hazardous Materials Division can be contacted to direct fire stations equipped to handle hazardous materials. Both the HMBP and SPCC Plan require emergency response procedures to be documented and available at the operating site. Contact information for applicable emergency response agencies must be included in these plans and posted in conspicuous locations at the site.

The applicant would use battery storage systems that are NFPA 855 Code compliant, and UL certified and that include built-in failsafe and cooling systems designed to prevent thermal runaway and the spread of fire. A fire protection system would be installed to automatically shut down any affected battery storage components and prevent the spread of the fire to the other battery storage modules. In addition, a fire wall will be installed around the perimeter of the BESS area for fire protection purposes – both to prevent wildfire from impacting the site and to reduce the chance of an on-site fire from escaping beyond the property. Fire hydrants would be installed in accordance with OCFA standards. As such, impacts would be less than significant.

Hazardous Materials in Soils

Less than Significant with Mitigation. As discussed in the Phase I ESA (Appendix 3.5A), historical agricultural use may have resulted in residual contaminants of concern associated with pesticide and herbicide use. This was identified as a BER. Recommendations of the Phase I ESA were as follows:

“In the event of any future construction and/or excavation activities at the [Project] site, dust suppression may be necessary during construction activities. Additionally, near-surface soils should be sampled and analyzed for herbicide- and pesticide-related hazardous substances prior to being removed from the [Project] site for any purpose” (Appendix 3.5A).

Construction of the proposed Project would result in grading and excavation of surface soils at the Project site. If contamination is present related to past pesticide and/or herbicide use, soil management may be required, including worker protections and special handling for removal, transportation, and disposal. Soil management would be implemented as outlined in MM-HAZ-1, which would require preparation of a soil management plan to be implemented during excavation and grading activities. With implementation of MM-HAZ-1, impacts would be less than significant.

Impact 3.5-3 Would the project create emissions of handle materials, substances, or waste within 0.25 mile of an existing or proposed school?

No Impact. Other than several rural residences, no sensitive receptors, including schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities are within a 1-mile radius of the Project site. The proposed transportation route for delivery of hazardous materials and regulated materials, would arrive at the site via approved trucking routes. Due to the selected routes for hazardous material delivery and the distance relative to existing or proposed schools during operation, there would be no impact.

Impact 3.5-4 Would the project be included on a list of hazardous materials sites compiled pursuant to Cortese List outlined in Government Code Section 65962.5 and result in a significant hazard to the public or environment?

Less than Significant. The Phase I ESA (Appendix 3.5A) included a review of hazardous material release sites identified on regulatory databases, including Cortese List Data Resources (Cortese List) compiled pursuant to Government Code Section 65962.5. The review, included as Appendix B of the Phase I ESA, was completed on April 10, 2023. One leaking underground storage tank (LUST) case was identified within the applicable search radius (0.50 miles), south and downgradient (lower elevation) of the Project site. Additionally, the LUST case received regulatory closure, indicating impacts related to the release have been resolved to the satisfaction of the regulatory agency. As such, this single Cortese List site does not appear to have impacted the environmental conditions of the Project site, nor would the Project present a significant hazard to the public or the environment. Impacts would be less than significant.

Impact 3.5-5 Would the project Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency plan?

Less than Significant. The proposed Project would not physically impede an existing emergency response plan, emergency vehicle access, or personnel access to the Project site. The Project site is located in an area with several alternative roadways allowing access in the event of an emergency. Access to existing roadways near the Project site would be maintained throughout construction, operation, and decommissioning phases and appropriate detours would be provided in the event of potential road closures. Therefore, no significant impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan would occur during Project construction.

The limited size of the Project's operational work force would not generate significant traffic volumes during an emergency evacuation scenario that could complicate area-wide emergency evacuation efforts. Driveways built to connect to existing local roads for direct site access would not affect designated emergency evacuation routes, as these are public roadways, and the driveways would not conflict with potential evacuation routes for surrounding land uses. As such, impacts would be less than significant.

3.5.4 Cumulative Effects

As defined by Public Resources Code Section 21083; Title 14 CCR, Sections 15064 [h], 15605 [c], 15130 and 15355, a cumulative effect refers to a proposed project's incremental effect paired with closely related past, present, and reasonably foreseeable future projects whose impacts compound or increase the incremental effect of the proposed project.

Similar to other potential impacts, such as those related to geology and soils, risks related to hazards and hazardous materials are typically localized in nature because they tend to be related to on-site existing hazardous conditions and/or hazards caused by a project's construction or operation. Cumulative projects were chosen based on proximity and similarity to the proposed Project. These selection factors are appropriate in the context of hazards and hazardous cumulative impacts because generally there needs to be a direct nexus and similar hazard for a synergistic impact to occur, such as hazardous materials from multiple sites being carried into the same river via stormwater runoff. Currently, there is not a known existing significant cumulative impact related to hazards or hazardous material within this geographic scope.

The proposed Project and other related infrastructure projects may involve the storage, use, disposal, and transport of hazardous materials to varying degrees. Impacts from these activities are anticipated to be less than significant, because similar projects would also comply with federal, state, and local regulations and policies. For example, all of the identified projects would be required to implement safety measures and precautions necessary to minimize any potential disturbance of hazardous materials and prevent the creation of additional hazards that cannot be mitigated or contained properly. Furthermore, other storage facilities would also be equipped with secondary containment and fire suppressant technology to lessen the impacts of potential battery fires. In light of all of the evidence provided here, cumulative impacts related to hazards would be less than significant.

3.5.5 Mitigation Measures

The following sections present mitigation measures for handling and storing hazardous materials during construction and operation to mitigate potential public health and environmental effects.

3.5.5.1 Construction Phase

MM-HAZ-1 **Soil Sampling and Analysis Plan and Management Plan:** Prior to approval of the site plan, the Project applicant/developer or their designated contractor shall retain a qualified environmental consultant to prepare a soil sampling and analysis plan (SAP). The SAP shall include procedures to conduct sampling and analysis of existing soils in areas where former agricultural and farming activities occurred. If pesticide- and herbicide-related contamination is not identified in site soils above Environmental Screening Levels (ESLs) for unrestricted land use, no additional measures are required. If they are detected above ESLs for unrestricted land use, a soil management plan (SMP) shall be prepared by a qualified environmental consultant that outlines the proper screening, handling, characterization, transportation, and disposal procedures for contaminated soils on site. The SMP shall include health and safety and training procedures for workers who may come in contact with contaminated soils. The SMP shall be implemented by the Project applicant or their designated contractor for all confirmed and suspected contaminated soils which require excavation and offsite disposal. The SMP shall include all applicable federal, state, and local regulations associated with handling, excavating, and disposing of contaminated soils; the proposed disposal

facility that will accept the contaminated soils; and appropriate procedures, notifications, permitting requirements, handling, and disposal requirements for decommissioning any underground storage tanks.

3.5.5.2 Operations Phase

Hazardous materials storage will all occur on site and will be in accordance with applicable codes and regulations specified in Section 3.5. As a result, no mitigation is required.

3.5.6 Laws, Ordinances, Regulations, and Standards

Storage and use of hazardous materials at the Project site are governed by laws, ordinances, regulations, and standards (LORS) established and enforced at the federal, state, and local levels. Applicable laws are addressed and described below and summarized in Table 3.5-3.

Table 3.5-3. Laws, Ordinances, Regulations, and Standards

LORS	Requirements/ Applicability	Administering Agency	Application Section Explaining Conformance
Federal			
Section 302 EPCRA (Public Law 99-499, 42 USC 11022)	Requires one-time notification if environmental hazardous substances are stored in excess of threshold planning quantities	Alameda County Department of Environmental Health	A HMBP will be prepared (Impact 3.5-2).
Hazardous Chemical Reporting: Community Right-To-Know (40 USC 11002)			
Section 304, EPCRA (Public Law 99 – 499, 42 USC 11002)	Requires notification when there is a release of hazardous material in excess of its reportable quantity	Alameda County Department of Environmental Health	A HMBP will be prepared (Impact 3.5-2).
Emergency Planning Notification			
Section 311, EPCRA (Public Law 99-499, 41 USC 11-21)	Requires that safety data sheets for all hazardous materials or a list of all hazardous materials be submitted to the State Emergency Response Commission and Alameda County Department of Environmental Health.	Alameda County Department of Environmental Health	A HMBP will be prepared (Impact 3.5-2).
Hazardous Chemical Reporting: Community Right-To-Know (40 CFR 370)			
Section 313 EPCRA (Public Law 99 – 499, 42 USC 11023)	Requires annual reporting of releases of hazardous materials	Alameda County Department of Environmental Health	A HMBP will be prepared (Impact 3.5-2).
Toxic Chemical Release Reporting: Community To-Know (40 CFR 372)			

Table 3.5-3. Laws, Ordinances, Regulations, and Standards

LORS	Requirements/ Applicability	Administering Agency	Application Section Explaining Conformance
Section 112, CAA Amendments (Public Law 101 – 549, 42 USC 7412)	Requires facilities that store a regulated hazardous material at quantity greater than the threshold quantity to develop an RMP	Alameda County Department of Environmental Health	A RMP is not required.
Chemical Accident Prevention Provisions (40 CFR 68)			
Section 311, CWA (Public Law 92 – 500, 33 USC 1251 et seq.)	Requires the preparation of a SPCC plan if 660 gallons oil/petroleum products are stored in a single container or collectively the site stores 1,320 gallons or more	RWQCB	The Project will prepare a SPCC plan (Impact 3.5-2)
Oil Pollution Prevention (40 CFR 112)			
State			
Health and Safety Code, Section 25500 et seq. (HMBP)	Requires preparation of a HMBP if hazardous materials are handled or stored in excess of threshold quantities	Cal/OSHA, but submitted to Alameda County Department of Environmental Health	A HMBP will be prepared (Impact 3.5-2).
Health and Safety Code, Section 25531 through 25543.4 (CalARP)	Requires registration with local CUPA or lead agency and preparation of RMP if regulated substances are handled or stored in excess of threshold planning quantities	Alameda County Department of Environmental Health	A RMP is not required.
Occupational Safety and Health Act (19 CFR 1910.119)	For chemicals listed above thresholds listed in Appendix A, requires a process safety management (PSM) plan for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. These releases may result in toxic, fire, or explosion hazards.	Alameda County Department of Environmental Health	A PSM plan will not be required because there are no chemical that trigger a PSM plan will be used for the Project (Impact 3.5-2)
Health and Safety Code, Section 25270 through 25270.13 (Aboveground Petroleum Storage Act)	Requires the preparation of a SPCC plan if 660 gallons oil/petroleum products are stored in a single container or collectively the site stores 1,320 gallons or more.	RWQCB	The Project will prepare a SPCC plan, if required. (Impact 3.5-2)
Local			
Alameda County East Area Plan	Preserve and enhance agriculture and agricultural lands, and to protect	Alameda County Community Development Agency	Impact 3.5-3

Table 3.5-3. Laws, Ordinances, Regulations, and Standards

LORS	Requirements/ Applicability	Administering Agency	Application Section Explaining Conformance
	the natural qualities, the wildlife habitats, the watersheds, and the beautiful open space of Alameda County from excessive, badly located, and harmful development.		
Alameda County Local Hazard Mitigation Plan	Identifies and mitigates natural hazards	Alameda County Department of Environmental Health and Alameda County Fire Department	Impact 3.5-2 Impact 3.5-3

3.5.6.1 Federal LORS

29 CFR 1910 et seq. and 1926 et seq.

These sections contain requirements for equipment used to store and handle hazardous materials for the purpose of protecting worker health and safety. This regulation also addresses requirements for equipment necessary to protect workers in emergencies. It is designed primarily to protect worker health, but also contains requirements that affect general facility safety. The California regulations contained in Title 8 (California equivalent of 29 CFR) are generally more stringent than those contained in Title 29. The administering agencies for the above authority are Federal and State Occupational Health and Safety Administration (OSHA) and Cal/OSHA, respectively.

49 CFR Parts 172, 173, and 179

These regulations provide standards for labels, placards, and markings on hazardous materials shipments by truck (Part 172), for packaging hazardous materials (Parts 173), and for transporting hazardous materials in tank cars (Part 179). The administering agencies for the above authority are CHP and the U.S. DOT.

CERCLA

The Superfund Amendments and Reauthorization Act (SARA) amends the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and governs hazardous substances. The applicable part of SARA for the proposed Project is Title III, otherwise known as the Emergency Planning and Community Right-to Know Act (EPCRA), which requires states to establish a process for developing local chemical emergency preparedness programs and to receive and disseminate information on hazardous substances present at facilities in local communities. The law provides primarily for planning, reporting, and notification concerning hazardous substances. Key sections of the law are as follows:

- **Section 302**—Requires one-time notification when EHSs are present in excess of their TPQs. EHSs and their TPQs are found in Appendices A and B to 40 CFR Part 355.
- **Section 304**—Requires immediate notification to the Local Emergency Planning Committees (LEPC) and the State Emergency Response Commission when a hazardous material is released in quantities over

its RQ. If a CERCLA-listed hazardous substance RQ is released, notification must also be given to the National Response Center in Washington, DC. (RQs are listed in 40 CFR Part 302, Table 302.4). These notifications are in addition to notifications given to the local emergency response team or fire personnel.

- **Section 311**—Requires that either SDSs for all hazardous materials or a list of all hazardous materials be submitted to the State Emergency Response Commission, LEPC, and local fire department.
- **Section 313**—Requires annual reporting of hazardous materials released into the environment either routinely or as a result of an accident.

Clean Air Act

Regulations (40 CFR 68) under the Clean Air Act (CAA) are designed to prevent accidental releases of hazardous materials. The regulations require facilities storing a TQ or greater of listed regulated substances to develop a Risk Management Plan (RMP), including hazard assessments and response programs to prevent accidental releases of listed chemicals. Section 112(r)(5) of the CAA discusses the regulated substances. These substances are listed in 40 CFR 68.130.

Clean Water Act

The SPCC rule under the Clean Water Act (CWA) is designed to prevent or contain the discharge or threat of discharge of oil into navigable waters or adjoining shorelines. Regulations (40 CFR 112) under the CWA require facilities to prepare a written SPCC plan if they store oil, and its release would pose a threat to navigable waters. The SPCC rule is applicable if a facility has a single oil Aboveground Storage Tank (AST) with a capacity greater than 660 gallons, total petroleum storage (including ASTs, oil-filled equipment, and drums) greater than 1,320 gallons, or underground storage capacity greater than 42,000 gallons. The SPCC rule is administered by the local CUPA, which is the Alameda County Department of Environmental Health. GESC The GESC will store sufficient diesel to supply local backup power for fire pumps required to meet fire department and insurance requirements.

Should this exceed 1320 gallons total on site, measures consistent with the Alameda County Department of Environmental Health, Hazardous Materials Division, ASPA Program guidance will be followed in preparation of the SPCC, which will be included in the HMBP.

Other related federal laws that address hazardous materials but do not specifically address their handling include the Resource Conservation and Recovery Act and the Occupational Safety and Health Act.

3.5.6.2 State LORS

California laws and regulations relevant to hazardous materials handling at the facility include Health and Safety Code Section 25500 (hazardous materials), Health and Safety Code 25531 (regulated substances), and the Above Ground Petroleum Storage Act (petroleum in aboveground tanks).

Title 8, CCR, Section 339; Section 3200 et seq., Section 5139 et seq., and Section 5160 et seq.

Title 8 CCR Section 339 lists hazardous chemicals relating to the Hazardous Substance Information and Training Act; Title 8 CCR Section 3200 et seq. and 5139 et seq. address control of hazardous substances; and Title 8 CCR Section 5160 et seq. addresses hot, flammable, poisonous, corrosive, and irritant substances.

Health and Safety Code Section 25500

California Health and Safety Code, Section 25500, et seq., and the related regulations in 19 CCR 2620, et seq., require 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 respond 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. The TQs for hazardous materials are 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases measured at standard temperature and pressure.

Health and Safety Code Section 25531 (CalARP)

California Health and Safety Code, Section 25531, et seq., and CalARP regulate the registration and handling of regulated substances. Regulated substances are any chemicals designated as an EHS by EPA as part of its implementation of SARA Title III. Health and Safety Code Section 25531 overlaps or duplicates some of the requirements of SARA and the CAA. Facilities handling or storing regulated substances at or above TPQs must register with their local CUPA and prepare a RMP, formerly known as a Risk Management and Prevention Program (19 CFR 1910.119). CalARP is found in Title 19 CCR, Chapter 4.5.

Aboveground Petroleum Storage Act

The California Health and Safety Code Sections 25270 to 25270.13 ensure compliance with the CWA. The law applies to facilities that operate a petroleum AST with a capacity greater than 660 gallons or combined ASTs capacity greater than 1,320 gallons, or oil-filled equipment where there is a reasonable possibility that the tank(s) or equipment may discharge oil in “harmful quantities” into navigable waters or adjoining shore lands. If a facility falls under these criteria, it must prepare an SPCC plan.

Proposition 65

This California law requires the state to identify chemicals that cause cancer and reproductive toxicity, contains requirements for informing the public of the presence of these chemicals, and prohibits discharge of the chemical into sources of drinking water. Lists of the chemicals of concern are published and updated periodically by California’s Office of Environmental Health Hazard Assessment (OEHHA).

3.5.6.3 Local LORS

Alameda County East Area Plan

The purpose of the Alameda County East Area Plan (ECAP) is to present a clear statement of the County's intent concerning future development and resource conservation within East County. The goals and policies in the ECAP are intended to inform decisionmakers, the general public, public agencies, and those doing business in the County of the County's position on land use-related issues and to provide guidance for day-to-day decision-making. The programs that follow the policies identify a set of specific actions the County will undertake to achieve the goals and policies of the plan.

The Land Use and Environmental Health and Safety Elements of the ECAP contains goals and policies related to hazards and the proposed Project that are not related to wildfire (Alameda County 2000):

Land Use

Goal: To minimize the risks to lives and property due to environmental hazards.

Policy 139: The County shall adhere to the provisions of the Alameda County Fire Protection Master Plan and Fire Hazard Mitigation Plan.

Policy 320: The County shall consider, in reviewing development projects and subdivision of agricultural lands, the severity of natural fire hazards, potential damage from wildland and structural fires, the adequacy of fire protection services, road access, and the availability of an adequate water supply and pressure.

Policy 323: The County shall refer development applications to the County Fire Patrol, or local fire district, for review and recommendation.

Alameda County Local Hazard Mitigation Plan

The Alameda County Local Hazard Mitigation Plan (LHMP) was last updated in 2021 and adopted by the County Board of Supervisors and approved by FEMA in March 2022. The purpose of this plan, a requirement of FEMA, is to identify the natural hazards in our area, determine how they will impact our community, and develop strategies to lessen the effect of those hazards and create a more disaster-resilient Alameda County. The plan includes a discussion of Climate Change Adaptation and will also maximize the Community Rating System (CRS) credit for County residents under the auspices of the National Flood Insurance Program (NFIP) (Alameda County 2022).

Codes

The design, engineering, construction, and operation of hazardous materials storage and dispensing systems will be in accordance with all applicable codes and standards, including the following:

- CVC, 13 CCR 1160, et seq. – Provides CHP with authority to adopt regulations for the transportation of hazardous materials in California. CHP can issue permits and specify which route for hazardous material delivery
- The California Fire Code, Articles 79 and 80 – These are the hazardous materials sections of the Fire Code. Local fire agencies or departments enforce this code and can require than a HMBP and a Hazardous Materials Inventory Statement be prepared. The California Fire Code is based on the federal fire guidelines, which include the Uniform Fire Code.
- State Building Standard Code, Health, and Safety Code Sections 18901 to 18949 – Incorporates the Uniform Building Code, Uniform Fire Code and Uniform Plumbing Code

3.5.7 Agencies and Agency Contacts

Applicable agency contacts for worker health and safety are shown in Table 3.5-4. Approval of an HMBP from the Alameda County Department of Environmental Health, Hazardous Materials Division would be superseded by CEC approval of the Project under the opt-in program. The Project would prepare a SPCC if required and approval of the SPCC would also be superseded by CEC approval under the opt-in program. In addition, the Project would be designed per Alameda County Fire Department (ACFD) requirements and standards for BESS, however, approval from the ACFD would also be superseded by CEC approval of the Project under the opt-in program.

Table 3.5-4. Permits and Agency Contacts

Issue/Approval	Agency Contact	Applicability
HMBP*	Alameda County Department of Environmental Health, Hazardous Materials Division 1131 Harbor Bay Parkway, Alameda, CA 94502 (510) 567-6702	Hazardous materials compliance
SPCC*	Alameda County Department of Environmental Health, Hazardous Materials Division 1131 Harbor Bay Parkway, Alameda, CA 94502 (510) 567-6702	Hazardous materials compliance
AST Permits*	Alameda County Department of Environmental Health, Hazardous Materials Division 1131 Harbor Bay Parkway, Alameda, CA 94502 (510) 567-6702	AST approval

Note:

* Approval from the Alameda County Department of Environmental Health, Hazardous Materials Division would be superseded by CEC approval of the Project under the opt-in program.

3.5.7 Permits and Permit Schedule

There are no applicable permits or permit schedule for hazardous materials handling. Pending Project approval from the CEC, construction of the Project would commence.

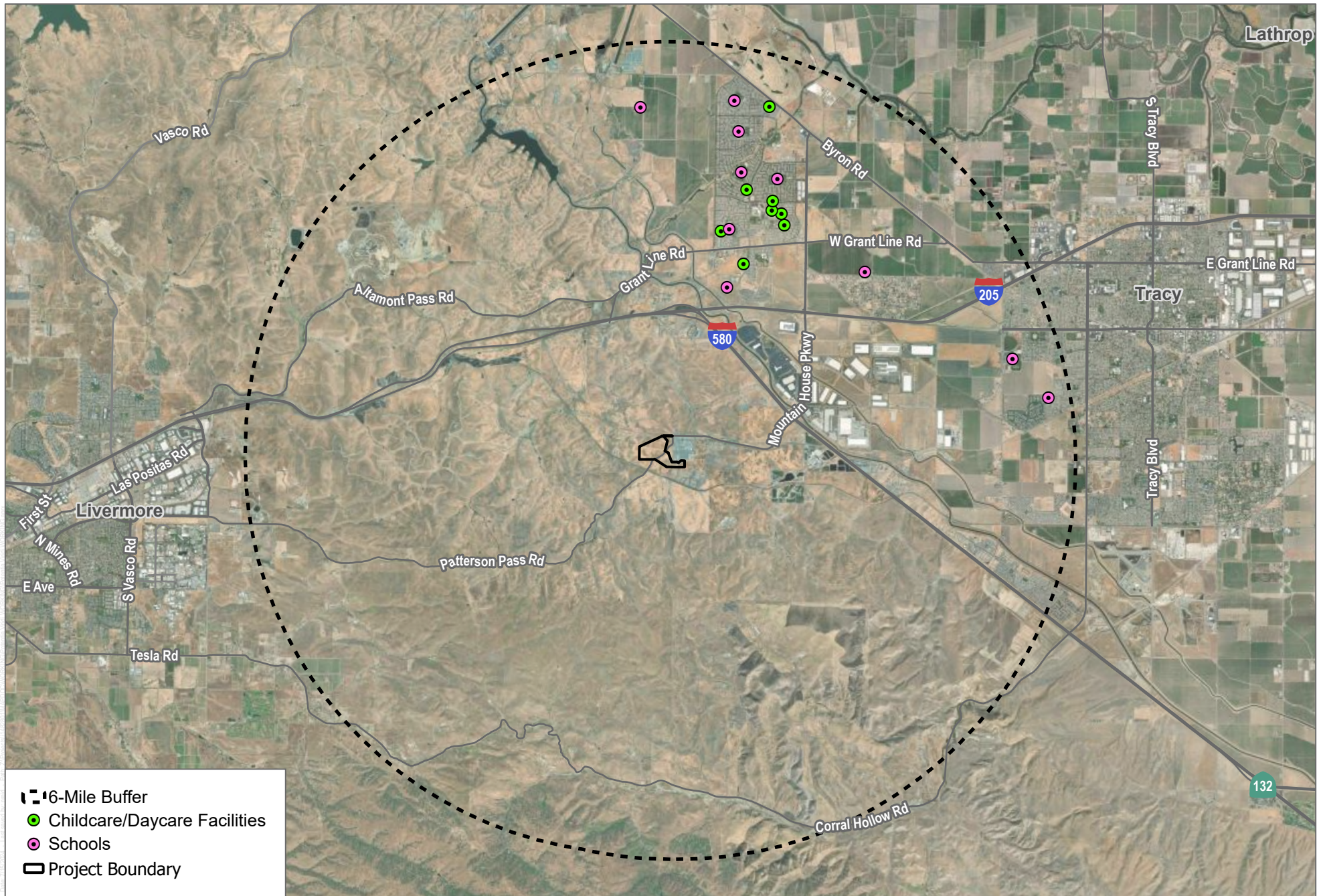
3.5.8 References

Alameda County Community Development Agency Planning Department. 2000. *East County Area Plan, A Portion of the Alameda County General Plan. Volume 1: Goals, Policies, and Programs*. Alameda County Community Development Agency Planning Department. <https://www.acgov.org/bc/scac/documents/EastCountyAreaPlancombined.pdf>. Accessed February 2024.

Alameda County Fire Department and Alameda County Flood Control and Water Conservation District. 2022. *Final 2021 Alameda County Local Hazard Mitigation Plan*. https://lhmp.acgov.org/documents/FinalHMP_AlamedaCo_Mar2022.pdf. Accessed February 2024.

ATSDR (Agency for Toxic Substances and Disease Registry). 1996. Fuel Oils CAS # 8008-20-6, 70892-10-3, 68476-30-2, 68476-34-6, 68476-31-3 Fact Sheet. September. Available at: <https://www.atsdr.cdc.gov/toxfaqs/tfacts75.pdf>. Accessed February 2024.

- ATSDR. 1997. Hydraulic Fluids CAS # 55957-10-3; 68937-40-6; 50815-84-4; 55962-27-1; 66594-31-8; 63848-94-2; 107028-44-4; 28777-70-0 Fact Sheet. September. Available at <https://www.atsdr.cdc.gov/toxfaqs/tfacts99.pdf>. Accessed February 2024.
- ATSDR. 2013. Ethylene Glycol-CAS # 107-21-1 Fact Sheet. June. Available at: <https://www.atsdr.cdc.gov/toxfaqs/tfacts96.pdf>. Accessed February 2024.
- ATSDR. 2020. Glyphosate ToxFAQs. Available at <https://www.atsdr.cdc.gov/toxfaqs/tfacts214.pdf>. Accessed February 2024.
- California Energy Commission. July 2021. California Code of Regulations, Title 20. Public Utilities and Energy, Division 2. State Energy Resources Conservation and Development Commission. Available: <https://www.energy.ca.gov/sites/default/files/2021-07/Title%2020%20Updated%20July%2023%2C%202021.pdf>.
- California Environmental Protection Agency (CalEPA). 2023. Cortese List Data Resources. Available at: <https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed February 1, 2024.
- Dudek. 2024. *Biological Technical Report for the Potentia-Viridi Battery Energy Storage System Facility Project*.
- Environmental Protection Services. 2023. SAFETY DATA SHEET Trans-X Mineral Oil Dielectric Fluid. Available at <https://www.epsonline.com/wp-content/uploads/2018/08/Trans-X-Oil-MSDS.pdf>. Accessed February 2024.
- Google Earth Pro. 2024. Project site and 6-mile radius. Version 7.3.6.9345. Mountain View, CA: Google Earth Mapping Service. Accessed February 2024.
- International Labour Organization. 2004. Solvents. Available at <https://www.ilo.org/legacy/english/protection/safework/cis/products/safetytm/solvents.htm>. Accessed February 2024.
- National Fire Protection Association (NFPA). 2016. Hazard Assessment of Lithium Ion Battery Energy Storage Systems FINAL REPORT. February. Available at <https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Hazardous-materials/RFFireHazardAssessmentLithiumIonBattery.ashx>. Accessed February 2024.
- University of Massachusetts Amherst (UMass). 2023. LEAD ACID, LITHIUM-ION, AND LITHIUM BATTERIES. Available at: <https://ehs.umass.edu/sites/default/files/Battery%20SOP.pdf> Accessed February 2024.
- United States Environmental Protection Agency (EPA). 2023. Risk Management Plan Rule Overview. Available at: <https://www.epa.gov/rmp/risk-management-plan-rmp-rule-overview>. Accessed February 2024.



SOURCE: Bing Maps (accessed 2024); Open Streets Map 2019

Figure 3.5.1
Sensitive Receptors within 6 Miles of the Project

Figure 3.5.1 SensitiveReceptors

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