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Document Title:	Section 4-5_Hazardous Materials Handling
Description:	This section discusses the use and storage of hazardous materials associated with the Project and the potential effects on human health and the environment from the operation of the Project.
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4.5 Hazards and Hazardous Materials

This section discusses the use and storage of hazardous materials associated with the Project and the potential effects on human health and the environment from the operation of the Project,

Section 4.5.1 describes the existing environment that may be affected, and Section 4.5.2 identifies potential impacts to the environment and on human health during construction and operations. Section 4.5.3 discusses potential cumulative effects; Section 4.5.4 identifies proposed mitigation measures; Section 4.5.5 presents laws, ordinances, and standards (LORS) applicable to hazardous materials. Section 4.5.6 identifies agencies involved and provides agency contacts. Section 4.5.7 describes permits and Section 4.5.8 provides all references used to develop this section.

Analysis for the Project is based in-part on information from the Phase I Environmental Site Assessment (Phase I ESA) (see Appendix 4.5A). A draft Hazardous Materials Business Plan (HMBP) has also been prepared for future construction and operation activities associated with the Project and is referred to throughout this section (see Appendix 4.5B). A final HMBP would be prepared prior to Project construction once design details are finalized.

4.5.1 Affected Environment

4.5.1.1 Land Use

As discussed in Section 4.6, Land Use, zones and land use north of the site is bounded by Single Family Residential, Open Space and Community Service/Open Space zones and designations within the City of Laguna Niguel. Immediately east are parcels owned by the Orange County Flood Control District, the Union Pacific Railroad, a bridge over Oso Creek to Camino Capistrano which provides access to the site, SDG&E transmission lines, and the U.S. Interstate 5 Freeway. Other surrounding areas within the one-mile radius include a mix of Single and Multi-Family Residential neighborhoods, Designations south and west of the Project Site are Open Space with undeveloped land and foothills. Beyond the crest of the foothills is the City of Laguna Niguel, there are Single Family residential zones developed with neighborhoods. Public Institutional areas including two high schools, a Community Park District including Northwest Open Space, Assisted Care Facilities, Community Commercial, Planned Community and Community Commercial Managed Care Overlay District

The nearest residences to the east are approximately 0.18-mile from the Project Site, across Interstate 5. The next nearest residences to the west are approximately 0.25-mile from the Project Site at the top of the slope. See Figure 4.6-1 and 4.6-2 within Section 4.6, Land Use, for zoning and land use designations.

The nearest schools are Capistrano Valley High School at 26301 Via Escolar, Mission Viejo, California 92692, approximately 0.68-mile northeast of the Project Site and Niguel Hills Middle School at 29070 Shark Bay, Laguna Niguel, California 92677, approximately 0.70-mile northwest of the Project Site. The nearest health care facilities/clinics to the Project Site are CDS of San Juan Capistrano, Aestheticare Outpatient Surgery Center, and Capistrano Surgicenter, Inc. which are all located at 30280 Rancho Viejo Rd, San Juan Capistrano, California 92675, approximately 0.77-mile southeast of the Project Site. Figure 4.5-1 shows the location of schools, hospitals, daycare facilities, emergency response facilities, and long-term health care facilities within a 2-mile radius of the Project Site.

4.5.1.2 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, 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 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.

4.5.1.2.1 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, though it is not anticipated to be stored onsite during the operation of the site.

4.5.1.2.2 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 the spill prevention control and countermeasures plan to be prepared for the proposed Project. 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 Phosphate (LFP) batteries will be used at the Project site. 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 an integrated fire suppression system, 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 and National Fire Protection Association standards. Additional fire prevention features are detailed in Section 4.17 herein.

Hazardous water treatment chemicals' use, typical quantities, and toxicity are described in Table 4.5-1.

Table 4.5-1. 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.	Exposure to hydraulic fluids occurs mainly in the workplace. (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	Each battery module will include the following materials (Tesla 2024): <ul style="list-style-type: none"> ▪ Anode (including carbon/graphite): 14,755 kg 	Under normal usage conditions, the materials do not exhaust vapors. Cell electrolyte should not be encountered by anyone handling a battery, making the risk of a spill of electrolyte from any commercial battery pack very remote. Furthermore, in most commercial cells, the electrolyte is largely absorbed in electrodes, such that there is no free or

Table 4.5-1. Hazardous Materials Use during Construction and Operation

Hazardous Material	Uses	Typical Quantities	Toxicity
		<ul style="list-style-type: none"> ▪ Cathode (including lithium transition metal oxides or lithium iron phosphate): 12,765 kg ▪ Electrolyte (including lithium salts and carbonate esters): 18,440 kg ▪ Coolant: 237 kg ▪ Refrigerant: 3 kg 	“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 risk at places of work. Most of the organic solvents are combustible, often highly volatile and extremely flammable and they should always be handled with care. Some solvents produce vapors which are heavier than air. These may move on the floor or ground to a distant ignition source, such as a spark from welding or 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 ^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.	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	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

Table 4.5-1. Hazardous Materials Use during Construction and Operation

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

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.

4.5.2 Environmental 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.

4.5.2.1 Significance Criteria

The hazardous materials used at the proposed Project would significantly affect the environment if it met the criteria outlined in the California Environmental Quality Act Guidelines Section 15002, Appendix G:

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

Discussion of each criteria in association with the proposed Project are in the sections below.

4.5.2.2 Transportation of Hazardous Materials

Transportation of hazardous materials will be required once the Project is operating. All transportation of hazardous materials will 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

To manage and prevent potential impacts caused by transporting hazardous materials, contractors will adhere to EPA Caltrans, DTSC, CHP, and California State Fire Marshal regulations. Materials will only be mobilized along approved transportation routes, thereby avoiding sensitive receptors to the extent practicable. Compliance with applicable regulations will ensure that impacts from the transportation of hazardous materials will be less than significant. Refer to Section 4.12, Traffic and Transportation, for details on the proposed transportation routes.

4.5.2.3 Hazardous Materials Use

4.5.2.3.1 Construction Phase

As discussed in 4.5.1.2.1, construction will involve storage and use of hazardous materials; there are minor risks associated with the use of those materials.

Project construction activities could result in the transport, use, and disposal of hazardous materials such as fuels, asphalt, lubricants, toxic solvents, and herbicides. Although care will 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 activities would occur in accordance with all applicable local standards set forth by Orange 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 contractor 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 SWPPP would be implemented to minimize potential hazards associated with construction site pollutants. The SWPPP would include best management practices (BMP), 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 (see Appendix 4.5B).

Therefore, construction-related Project impacts would be less than significant with implementation of the BMPs and training as described in Section 4.5.4.1 and Section 4.16, Worker Health and Safety, and compliance with applicable federal, state, and local requirements related to hazardous materials.

4.5.2.3.2 Operations Phase

As discussed in 4.5.1.2.2, operation will involve use and storage of hazardous materials. Most of the hazardous materials used and stored on site will consist of lithium-ion batteries for Project operations and diesel storage for back-up generators. The batteries are solid state and do not present a risk of liquid runoff. Uncontrolled release of liquid chemicals could run off and drain into the stormwater system and potentially have harmful effects. However, the use and storage hazardous materials will pose minor risks for release if best management practices are adopted, as discussed in 4.5.4.2. The facility will not store any substances listed in the federal and/or state regulated substance list.

The use and storage of hazardous materials will be contained in designated areas onsite that will be outlined in the HMBP. The HMBP includes an emergency action plan, clean-up and containment provisions, and training and recordkeeping requirements (see Appendix 4.5B). The risk of public exposure, 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 as described in Section 4.5.4.1 and Section 4.16, Worker Health and Safety, and compliance with applicable federal, state, and local requirements related to hazardous materials.

4.5.2.4 Accidental Release Hazards

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

In the unlikely event that a release occurs, no schools or other sensitive receptors are within a 0.5-mile radius of the Project site; therefore, the effects of potential emissions from an accidental release are less than significant. All transportation of hazardous substances will be with Department of Transportation (DOT)-approved personnel and trucking/transport equipment. The Project operations will not involve the handling of any other acutely hazardous materials 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).

Therefore, impacts would be less than significant with implementation of BMPs and training as described in Section 4.5.4.1 and Section 4.16, Worker Health and Safety will be implemented.

4.5.2.5 Schools and Sensitive Receptors

No sensitive receptors, including schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities are within a 0.5-mile radius. Residences are within 0.5-mile of the Project Site.

The proposed transportation route for delivery of hazardous materials and regulated materials, will arrive at the site via approved routes. Transportation permits will be obtained for all heavy and oversize loads, if required. Proposed transportation routes for hazardous material deliveries are discussed in Section 4.12 Traffic and Transportation.

Due to the selected routes for hazardous material delivery and the distance relative to sensitive receptors during operation, effects on sensitive receptors will be less than significant.

4.5.2.6 Cortese List

An examination of the California Environmental Protection Agency Cortese List Data Resources (Cortese List) compiled pursuant to Government Code Section 65962.5 was conducted in Section 4.14, Waste Management. Several leaking underground storage tank cleanup sites and cleanup program sites were identified within 1 mile of the Project Site, all of which have been completed, and the case for each site is closed.

Thus, it is highly unlikely that any impacts will result from Cortese-listed properties, nor will the Project present a significant hazard to the public or the environment.

4.5.2.7 Effects on Emergency Response Plan

The 2020 County of Orange and Orange County Fire Authority Local Hazard Mitigation Plan (LHMP) was developed collaboratively with emergency management staff, County and external partners, and Orange County residents. The mission of the LHMP is to promote sound public policy designed to protect residents, critical facilities, infrastructure, key resources, private property, and the environment from natural hazards in unincorporated areas, fire hazards in the Fire Authority service area, and County and OCFA owned facilities.

The City has also identified several evacuation routes for emergency access. Government Code 65302(g) requires communities to identify residential developments in any hazard area identified in the safety element that does not have at least two emergency evacuation routes meaning the communities can evacuate on two separate roadways. Per the evacuation route maps in the Safety Element of the General Plan, Camino Capistrano is identified as an evacuation route therefore, the Project site is designated as an area with access to less than two evacuation routes (City of San Juan Capistrano 2022).

Primary access roads on-site would be a minimum of 20 feet in width. All on-site roads would consist of aggregate base in compliance with OCFA requirements. Activities associated with the Project would not impede the free movement of emergency response vehicles. Construction vehicles would access the Project site(s) from I-5 and

which would provide connection to local access roads (i.e., Camino Capistrano). During construction, materials would be placed within the Project boundaries adjacent to the current phase of construction in order to avoid any access conflicts in case of emergency evacuations.

Activities associated with the Project would not impede existing emergency response plans or evacuation routes for the Project site and/or other land uses in the Project vicinity. The Project would not result in any closures of I-5 that might have an effect on emergency response or evacuation plans in the vicinity of the Project Site. All secondary roads, such as Camino Capistrano, would be kept open for public use during Project construction and operations. All vehicles and stationary equipment would be staged off of public roads and would not block or restrict emergency access routes.

The Project will adhere to all safety practices addressed in the LHMP, and BMPs and training as described in Section 4.5.4.1 and Section 4.16, Worker Health and Safety will be implemented. Therefore, impacts would be less than significant. In addition, as discussed herein at Section 4.17, Wildfire and Fire Prevention the Project will prepare and Hazard Mitigation Analysis (HMA) and Emergency Response Plan (ERP) for this Project in compliance with all state and local laws and regulations and incorporating BMPs.

4.5.2.8 Summary of Significance Criteria

The proposed Project will use and store hazardous materials during construction and operation. Adhering to BMPs, HMBP, and local ordinances and codes would significantly reduce risk of public health and environmental effects of handling and storing hazardous materials. In the unlikely event that a release would occur, a 0.5-mile radius would be at risk of exposure to hazardous materials. No sensitive receptors, including schools, hospitals, day-care facilities, emergency response facilities and long-term health care facilities are within a 0.5-mile radius. Due to the distance relative to sensitive receptors during operation (Section 4.5.2.5), proposed mitigation measures for use and storage of hazardous materials (Sections 4.5.2.3 and 4.5.4) and approved hazardous material delivery routes (Section 4.12 Traffic and Transportation), effects on the environment will be less than significant.

4.5.3 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 that would have the potential to be considered in a cumulative context with the proposed Project's incremental contribution, and that are included in the analysis of cumulative impacts relative to hazards and hazardous materials, are identified in Table 4-1 and Figure 4-1 in Section 4 of this application. 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 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.

As with the proposed Project, the cumulative projects identified in Table 4-1 would also be required to avoid and/or mitigate impacts due to hazards and hazardous materials. With implementation of such safety measures in conjunction with hazardous materials regulatory compliance, the likelihood that hazards or hazardous materials from one site would contribute to impacts on a cumulative level is considered unlikely. Therefore, the proposed Project is not anticipated to contribute to a significant impact relative to hazards and hazardous materials when considered in combination with other reasonably foreseeable cumulative projects. Impacts would be less than significant.

4.5.4 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.

4.5.4.1 Construction Phase

Hazard material use, identified in Section 4.5.1.2.1, would present relatively low public health risk, but could contaminate subsurface soils, ground water if a release or incident occurred. The use of BMPs would reduce the likelihood of potential incidents involving hazardous materials. A discussion on BMPs to reduce construction related contaminants and hazardous materials released into stormwater can be found in Chapter 4.15, Water Resources. Additionally, for BMPs to mitigate risks from transportation of hazardous materials and hazardous waste, refer to Chapters 4.12 Traffic and Transportation and 4.14 Waste Management, respectively. A review of fire and explosion hazards and mitigation measures are discussed in Section 4.5.2.4.1.1.

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 refueling and maintenance will generally occur in designated areas that are designed to control potential spills. Designated areas will be bermed or covered by an impervious surface (asphalt or concrete) to control potential spills. Employees will be present during refueling activities. When mobile refueling is required, the 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.
- Only authorized personnel will conduct vehicle and equipment service maintenance
- Only 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 refueling, vehicle engines will be shut off

- Smoking, open flames or welding will not be permitted in refueling and service areas, or hazardous waste storage areas
- Refueling will be performed away from surface water or storm water drains
- Following 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 refueling areas will be inspected monthly. Results of inspections will be recorded in a logbook that will be maintained onsite.

In the unlikely event that a spill or leak were to occur and contaminate soil, Orange County CUPA Program would be notified. All remedial activities, soil storage and disposal will comply with federal, state, and local ordinances. With competent and trained personnel, small spills can be contained and cleaned up immediately. Large spills will require reporting to local emergency contacts. A designated onsite health and safety person will be responsible for implementing health and safety guidelines. For petroleum products, if the spill is over 42 gallons, all federal, state, and local reporting requirements will be followed. Onsite personnel will call local fire and emergency services in the event of a fire or injury.

4.5.4.2 Operations Phase

Hazardous materials storage will all occur on Site and will be in accordance with applicable codes and regulations specified in Section 4.5.6. The California Fire Code outlines the provisions to reduce the risk of fire or potential release of hazardous materials that could affect public health or the environment and include the following:

- For any indoor hazardous material storage areas, an automatic fire-suppression (such as sprinklers and/or foam application system) and exhaust system will be incorporated.
- Incompatible materials will be isolated from one another by noncombustible partitions
- Spill control measures and spill cleaning kits will be staged, readily accessible (with appropriate signage), in chemical storage, handling, and dispensing areas.
- Chemicals that require secondary containment storage systems will be present. In the event of a catastrophic spill, the secondary containment will have the sufficient capacity to adhere to the California Fire and California Health and Safety Code.

Additionally, to comply with federal and state regulations a HMBP, a Hazard Mitigation Analysis (HMA) combined with an Emergency Response Plan (ERP) will be prepared for the Project in coordination with City and County fire safety professionals and be fully compliant with the recommendations in Senate Bill 38. The HMA and ERP will include annual training for fire and safety personnel. A detailed discussion of fire prevention and management is provided within Section 4.17.

The HMBP will be prepared and submitted (a draft HMBP has been prepared and included as Appendix 4.5B to this application). The HMBP will include a hazardous materials inventory, including those that are handled or stored in excess of threshold quantities. The HMBP will also include the following:

- Business activities
- Business owner/operator information
- Facility site map

- Emergency Response Plan (ERP) to implement in the event of a spill
- Employee training documents
- Safety Data Sheets
- Best management practices and appropriate safety procedures

Federal and California regulations requires a Spill Prevention Control and Countermeasure (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 will 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, which will be included in the HMBP.

4.5.5 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 4.5-2.

Table 4.5-2. 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	Orange County Health Care Agency Environmental Health Division	A HMBP will be prepared (4.5.4.2).
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	Orange County Health Care Agency Environmental Health Division	A HMBP will be prepared (4.5.4.2).
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 Orange County Health Care Agency Environmental Health Division	Orange County Health Care Agency Environmental Health Division	A HMBP will be prepared (4.5.4.2).
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	Orange County Health Care Agency Environmental Health Division	A HMBP will be prepared (4.5.4.2).
Toxic Chemical Release			

Table 4.5-2. Laws, Ordinances, Regulations, and Standards

LORS	Requirements/ Applicability	Administering Agency	Application Section Explaining Conformance
Reporting: Community To-Know (40 CFR 372)			
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	Orange County Health Care Agency Environmental Health Division	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, if required. (4.5.4.2)
Oil Pollution Prevention (40 CFR 112)			
State			
Health and Safety Code, Section 25500 et seq. (HMBP)	Requires preparation of a Hazardous Materials Business Plan if hazardous materials are handled or stored in excess of threshold quantities	Cal/OSHA, but submitted to Orange County Health Care Agency Environmental Health Division	A HMBP will be prepared (4.5.4.2).
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	Orange County Health Care Agency Environmental Health Division	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.	Orange County Health Care Agency Environmental Health Division	A PSM plan will not be required because there are no chemical that trigger a PSM plan will be used for the Project (4.5.4.2)
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. (4.5.4.2)

Table 4.5-2. Laws, Ordinances, Regulations, and Standards

LORS	Requirements/ Applicability	Administering Agency	Application Section Explaining Conformance
Public Utilities Code, Section 761.3, Chapter 377	Requires the preparation of Emergency Response Plans for battery energy storage projects	CPUC	An Emergency Response Plan will be prepared in coordination with local and regional agencies.
Local			
City of San Juan Capistrano General Plan	Provides hazards and hazardous materials related goals and policies for development	City of San Juan Capistrano Planning Division	Section 4.5.5.3
Local Hazard Mitigation Plan	Mitigates natural hazards	Orange County and OCFA	Section 4.5.5.3

4.5.5.1 Federal LORS

4.5.5.1.1 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.

4.5.5.1.2 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.

4.5.5.1.3 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.

4.5.5.1.4 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. The Project does not anticipate any storage of regulated substances, therefore these regulations do not apply to the Project.

4.5.5.1.5 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 Kern County Public Health Services Department. 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 Kern County Public Health Services Department, ASPA Program guidance will be followed in preparation of the SPCC, which will be included in the Hazardous Material Business Plan (HMBP).

Other related federal laws that address hazardous materials but do not specifically address their handling include the Resource Conservation and Recovery Act (discussed in Section 4.14, Waste Management) and the Occupational Safety and Health Act (discussed in Section 4.16, Worker Health and Safety).

4.5.5.2 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).

4.5.5.2.1 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.

4.5.5.2.2 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.

4.5.5.2.3 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.

4.5.5.2.4 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.

4.5.5.2.5 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).

4.5.5.3 Local LORS

4.5.5.3.1 City of San Juan Capistrano General Plan

The Project will adhere to all policies within the City of San Juan Capistrano General Plan, Safety Element (City of San Juan Capistrano 2022). The following policies for the City were identified:

- **Policy 4.1:** Support the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations consistent with the Standardized Emergency Management System.
- **Policy 4.2:** Maintain and update the Emergency Operations Plan and Local Hazard Mitigation Plan
- **Policy 4.3:** Maintain an adequate stock of emergency preparedness equipment and supplies.
- **Policy 4.4:** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies and encourage them to sign up for an emergency notification system per City's Emergency Preparedness Program.
- **Policy 4.5:** Educate City officials periodically on the process and protocols to be followed in times of disaster.
- **Policy 4.6:** Continue to seek volunteers for current emergency preparedness and response programs as well as increasing awareness regarding homeless assistance programs.
- **Policy 4.7:** Identify rights-of-way that do not provide adequate clearance for emergency vehicles and develop a contingency plan, to reach people in need of evacuation.
- **Policy 4.8:** Ensure that all new residential projects provide secondary emergency access to the project site per Orange County Fire Authority requirements. The secondary access may be designated as emergency access only.
- **Policy 4.9:** Develop a program for residents and visitors to easily and quickly report issues related to safety.
- **Policy 4.10:** Create an expedited process for permit approval following a major disaster to bolster reconstruction efforts.

4.5.5.3.2 Local Hazard Mitigation Plan

The 2020 County of Orange and Orange County Fire Authority Local Hazard Mitigation Plan (LHMP) was developed collaboratively with emergency management staff, County and external partners, and Orange County residents (County of Orange & Orange County Fire Authority 2021). The document is an update to the 2015 LHMP and is a critical step in continuing Orange County's commitment to hazard mitigation as one component of its comprehensive emergency management program. The mission of the LHMP is to promote sound public policy designed to protect residents, critical facilities, infrastructure, key resources, private property, and the environment from natural hazards in unincorporated areas, fire hazards in the Fire Authority service area, and County and Fire Authority owned facilities. The LHMP is a multi-jurisdiction plan developed jointly between the County of Orange, a local government, and the Orange County Fire Authority, a Joint Powers Authority. This collaborative plan was developed to ensure that each participating agency has met the requirements of 44 CFR §201.6. The LHMP also meets the requirements of Activity 510 – Floodplain Management Planning under the National Insurance Program Community Rating System. The current approved LHMP is adopted as an element of The County of Orange General Plan under Chapter IX – Safety Element as required under California Government Code §8685.9 and §65302.6. As a multi-jurisdiction plan, the LHMP focuses on mitigating all natural hazards impacting unincorporated areas of the County as well as County and Orange County Fire Authority owned facilities. A Project specific HMA will be prepared for the Project to inform its ERP as discussed herein at Section 4.17.

4.5.5.3.3 Orange County Health Care Agency Environmental Health Division

The designated CUPA for the Project is the Orange County Health Care Agency Environmental Health Division. The Project is subjected to the requirements made by the Hazardous Materials Business Plan program, Aboveground Storage program and CalARP program (Orange County Environmental Health Division 2023).

Hazardous Materials Business Plan Program. To satisfy the California Health and Safety Code, Section 25500, et seq., and the related regulations in 19 CCR 2620, et seq., Hazardous Materials Business Plan are required.

Aboveground Petroleum Storage Tank Program. To adhere to 40 CFR 112, this program requires any facility with an aggregate capacity of 1,320 gallons of petroleum products or greater to prepare and implement a Spill Prevention and Countermeasure (SPCC) plan.

California Accidental Release Program. Under the CalARP regulations, facilities that store extremely hazardous substances or regulated substances above the threshold quantities must submit a risk management plan (RMP).

4.5.5.4 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 that 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

4.5.6 Agencies and Agency Contacts

Applicable agency contacts for worker health and safety are shown in Table 4.5-3. A draft HMBP has been prepared and is included as Appendix 4.5B, however, approval of the HMBP from the Orange County Health Care Agency Environmental Health 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 OCFA requirements and standards for BESS, however, approval from the OCFA would also be superseded by CEC approval of the Project under the opt-in program.

Table 4.5-3. Permits and Agency Contacts

Issue/Approval	Agency Contact	Applicability
HMBP*	Orange County Health Care Agency Environmental Health Division 1241 E Dyer Rd., #120, Santa Ana, CA 92705 (714) 433-6000	Hazardous materials compliance
SPCC*	Orange County Health Care Agency Environmental Health Division 1241 E Dyer Rd., #120, Santa Ana, CA 92705 (714) 433-6000	Hazardous materials compliance
AST Permits*	OCFA Planning and Development Services Section 1 Fire Authority Road, Building A, Irvine, CA 92602 (714) 573-6100	AST approval

* Approval from the Orange County Health Care Agency Environmental Health Division would be superseded by CEC approval of the Project under the opt-in program.

4.5.7 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.

4.5.8 References

- Agency for Toxic Substances and Disease Registry (ATSDR). 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 April 10, 2023.
- 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 April 10, 2023.
- ATSDR. 2013. Ethylene Glycol-CAS # 107-21-1 Fact Sheet. June. Available at: <https://www.atsdr.cdc.gov/toxfaqs/tfacts96.pdf>. Accessed April 10, 2023.
- ATSDR. 2020. Glyphosate ToxFAQs. Available at <https://www.atsdr.cdc.gov/toxfaqs/tfacts214.pdf>. Accessed April 10, 2023.
- California Environmental Protection Agency (CalEPA). 2023. Cortese List Data Resources. Available at: <https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed April 7, 2023.
- County of Orange & Orange County Fire Authority. 2021. Local Hazard Mitigation Plan. Available at: <https://www.ocsheriff.gov/commands-divisions/investigations-special-operations-command/emergency-management/hazard-mitigation>. Accessed April 7, 2023.
- City of San Juan Capistrano. 2022. General Plan Update, San Juan Capistrano Safety Element. Adopted February 1, 2022. Available at: <https://www.sanjuancapistrano.org/DocumentCenter/View/1081/General-Plan--Safety-Element-PDF>. Accessed April 7, 2023.

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 April 7, 2023.

International Labour Organization. 2004. Solvents. Available at <https://www.ilo.org/legacy/english/protection/safework/cis/products/safetytm/solvents.htm>. Accessed April 7, 2023.

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 April 10, 2023.

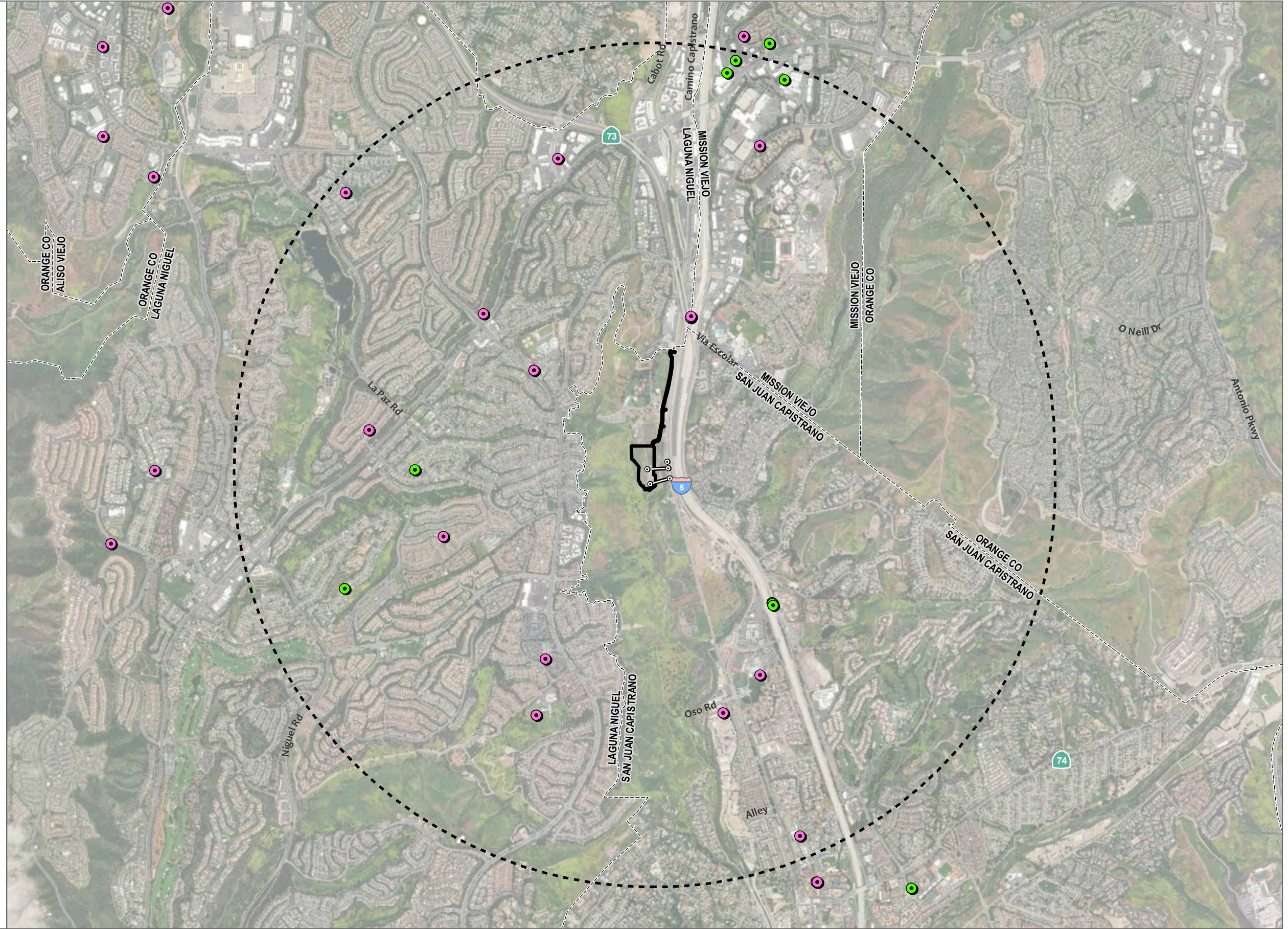
Orange County Environmental Health Division. 2023. CUPA Homepage. Available at: <https://www.ochealthinfo.com/about-hca/public-health-services/environmental-health-division/hazardous-materials>. Accessed April 7, 2023.

Tesla. 2024. Application Note: Considerations for Hazardous Materials Business Plan, Energy Product Components. March 8.

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 April 10, 2023.

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 April 7, 2023.

-  Project Site
-  Project Site 2-mi Buffer
-  Offsite Access Road
-  Transmission Line
-  New/Replacement Pole
-  City Limits
- Sensitive Receptors**
-  Health Care Facility
-  School



SOURCE: Esri World Imagery; California Atlas



FIGURE 4.5-1

Sensitive Receptors

Compass Energy Storage Project

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