

DOCKETED	
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Project Title:	Potentia-Viridi Battery Energy Storage System
TN #:	258026
Document Title:	Waste Management
Description:	This section includes the expected potential effects on human health and the environment from nonhazardous and hazardous waste generated by the Project.
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3.14 Waste Management

This section includes the expected potential effects on human health and the environment from nonhazardous and hazardous waste generated by the Potentia-Viridi Battery Energy Storage System (BESS) Project (Project). This evaluation of socioeconomics includes the following elements:

- **Section 3.14.1** describes Project site investigations and the non-hazardous and hazardous waste facilities that would serve the Project;
- **Section 3.11.2** provides an overview of the regulatory setting related to waste management;
- **Section 3.14.3** describes the Project’s environmental analysis in terms of waste and waste disposal sites;
- **Section 3.14.4** discusses potential cumulative effects;
- **Section 3.14.5** describes mitigation measures that should be considered during Project construction, operation, maintenance, and decommissioning;
- **Section 3.14.6** presents laws, ordinances, regulations, and standards (LORS) that apply to the generated waste;
- **Section 3.14.7** lists the agencies that have jurisdiction over the generated waste and specifies whom to contact in those agencies;
- **Section 3.14.8** describes permits required for generated waste and a schedule for obtaining those permits; and
- **Section 3.14.9** provides the references used to prepare this subsection.

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:

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

3.14.1 Affected Environment

This subsection discusses the condition of the site and identifies the nonhazardous and hazardous waste facilities that would serve the Project.

3.14.1.1 Site Investigations

Existing site conditions were captured in a Phase I Environmental Site Assessment (Tetra Tech) (Appendix 3.5A). The Phase I ESA was conducted in accordance with methods prescribed by the American Society for Testing and Materials (ASTM) document entitled “Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process (Designation: E 1527-13).” The Phase I ESA did not identify any recognized environmental conditions (RECs), conditional RECs, or historical RECs associated with the Project site.

3.14.1.2 Non-Hazardous Waste Disposal Facilities

There are two non-hazardous solid waste disposal facilities (landfills) within Alameda County. Information about solid waste facilities, operations, and disposal sites was obtained from the CalRecycle Solid Waste Information System (CalRecycle 2024a). Table 3.14-1 presents a summary of solid waste disposal facilities within the County.

Table 3.14-1. Solid Waste Disposal Facilities in the Vicinity of the Project

Landfill/ Transfer Station	Location	Class	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Permitted Throughput (tons per day)	Estimated Closure
Altamont Landfill & Resource Recovery	10840 Altamont Pass Rd Livermore, CA 94550	II,III	124,400,000	65,400,000	11,150	12/1/2070
Vasco Road Sanitary Landfill	4001 N Vasco Rd Livermore, CA 94551	II,III	40,207,100	11,560,000	2,158	12/31/2051

Source: CalRecycle 2024a.

3.14.1.3 Hazardous Waste Disposal Facilities

California has two active Class I landfill facilities that accept hazardous waste: Waste Management Kettleman Hills Landfill and Clean Harbor's Buttonwillow Landfill (DTSC 2024). Class I landfill facilities vary considerably in what they can do with the hazardous waste they receive. Some waste disposal facilities can only store waste, some can treat the waste to recover usable products, and others can dispose of the waste by incineration, deepwell injection, or landfilling. The State of California does not permit the incineration and deep-well injection disposal of these materials. The following includes a summary of the Class I landfills available for disposal in California:

Waste Management Kettleman Hills Landfill. This landfill is on a 1,600-acre parcel that has 695 acres of permitted land for management of federal and state-listed hazardous wastes and municipal solid wastes. According to the 2003 Final Combination Permit, this landfill accepts Class I and II waste, including all hazardous waste except radioactive, medical, and unexploded ordnance. A comprehensive list of all hazardous waste accepted is included in Appendix A of the Kettleman Hills Landfill Part B permit. Based on the aforementioned list, all anticipated hazardous waste generated by the Project is accepted by Kettleman Hills Landfill (DTSC 2024). The Kettleman Hills facility currently has three operational landfills (1) B-17 is permitted to have a 17.8-million-cubic-yard capacity Class II/III (2) B-18 is permitted to have a 15.6-million-cubic-yard capacity classified as a Class I/II and (3) B-19 is a permitted 7.7-million-cubic-yard capacity classified as a Class II/III landfill. Permit renewal for the facility is currently being reviewed by the Department of Toxic Substance Control and is expected to have an updated closure date of January 2055.

Clean Harbors Buttonwillow Landfill. This landfill is permitted at 13.25 million cubic yards and can accept 10,500 tons per day (CalRecycle 2024a). The landfill is permitted to accept waste until 2040 (CalRecycle 2024a). Buttonwillow has been permitted to manage a wide range of hazardous wastes, including Resource Conservation and Recovery Act (RCRA) hazardous wastes, California hazardous waste, and nonhazardous waste for stabilization treatment, solidification, and landfill. The landfill can handle waste in bulk (solids and liquids) and in containers. Typical waste streams include nonhazardous soil, California hazardous soil, hazardous soil for direct landfill, hazardous waste for treatment of metals, plating waste, hazardous and nonhazardous liquid, and debris for microencapsulation (CalRecycle 2024a).

3.14.2 Regulatory Setting

Federal, state, and local laws, ordinances, regulations, and standards (LORS) related to waste management were reviewed for applicability to the Project. These are detailed in Section 3.14.6, Laws, Ordinances, Regulations, and Standards.

3.14.3 Impact Analysis

3.14.3.1 Methodology

The information presented is based on data obtained from the State of California about the capacity of landfills, Phase I ESA, and other readily available resources provided online. Potential direct and indirect Project impacts related to waste management were evaluated against the CEQA significance criteria and are discussed below. The impact analysis evaluates potential Project impacts during Project construction, operation, and decommissioning.

3.14.3.2 Impact Evaluation Criteria

Environmental analysis for waste management is in accordance with the criteria from the California Environmental Quality Act (CEQA) Guidelines Section 15002[g], Appendix G. This section evaluates the Project against the following criteria: Would the Project:

- Be located on a site that is included on a list of hazardous materials sites (Cortese List) compiled pursuant to Government Code Section §65962.5 and, as a result, will create a significant hazard to the public or the environment; or
- Have solid waste disposal needs beyond the capacity of appropriate landfills to accommodate them?

The risks or hazards posed by the transportation of hazardous materials, including hazardous wastes, are described, and analyzed in Section 3.5, Hazardous Materials Handling.

3.14.3.3 Impact Evaluation

Impact 3.14-1 Would the Project be located on a site that is included on a list of hazardous materials sites (Cortese List) compiled pursuant to Government Code Section §65962.5 and, as a result, will create a significant hazard to the public or the environment?

No Impact. Government Code §65962.5 was originally enacted in 1985 and established a list consisted of sites bearing on the local permitting process as well as on compliance with the CEQA. Although it refers to a list, modern uses of the internet have propelled responsible organizations to make information web accessible (CalEPA 2024). For those requesting a copy of the Cortese List, CalEPA now refers users to the following agencies where listed sites and associated information is available:

- List of Hazardous Waste and Substances sites from the Department of Toxic Substances Control (DTSC) EnviroStor database
- List of Leaking Underground Storage Tanks from the State Water Board's GeoTracker database
- List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit

- List of “active” Cease and Desist Orders and Cleanup Abatement Orders
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of Health and Safety Code, identified by DTSC.

A review of the each of the online accessible databases or lists was conducted. The closest listed site is the Biosolids Recycling, Inc. site, which is located in the City of Tracy. The site’s address is 15850 Jess Ranch Rd., Tracy, California 95377. The Biosolid Recycling, Inc. site is located approximately 9,900 feet north of the proposed BESS facility. The site consisted liquid waste, biosolid, and hazardous waste discharges to land not specifically authorized and conducted in accordance with WDRs order R5-200600071. Stoppage of all discharges at the site and detailed reporting of how the site will correctly dispose of biosolids moving forward was completed by October 2013. Since the Project site and gen-tie line are not located on a site that is included on a list of hazardous materials sites, there would be no impact and development of the Project site present would not pose a significant hazard to the public or the environment.

Impact 3.14-2 Would the Project have solid waste disposal needs beyond the capacity of appropriate landfills to accommodate them?

Construction and Decommissioning

Less-than-Significant Impact. During the construction phases, the Project would generate nonhazardous and hazardous waste. As discussed in Section 2, Project Description, the construction of the Project would require approximately 18 months to complete. Table 3.14-2 presents a summary of anticipated waste streams created by construction activities. The quantities listed in Table 3.14-2 are estimates and are subject to change based on design modifications or market conditions.

Table 3.14-2. Potential Waste Generated during Construction

Waste	Origin	Composition	Classification	Disposal	Estimated Quantity
Nonhazardous Solid Waste					
Scrap wood, steel, plastic, paper, etc.	Construction	Normal refuse	Nonhazardous	Recycle and/or dispose of at a Class II or III landfill	10 tons
Concrete waste	Construction	Solids	Nonhazardous	Recycle and/or dispose of at a Class II or III landfill	20 tons
Scrap metal	Construction	Parts, wire, etc.	Nonhazardous	Recycle and/or dispose of at a Class II or III landfill	20 tons
Soil/rock	Excavation and grading	Subsurface soil and rock	Nonhazardous	See Section 3.14.2.3.1	0
Wastewater					
Sanitary waste	Portable toilets	Water	Nonhazardous liquid	Remove by contracted sanitary service	50,000 gallons

Table 3.14-2. Potential Waste Generated during Construction

Waste	Origin	Composition	Classification	Disposal	Estimated Quantity
Other Waste					
Empty hazardous material containers	Construction	Drums and containers	Hazardous and nonhazardous	Dispose of containers <5 gallon as normal refuse. Return containers >5 gallons to vendors for recycling or reconditioning	5 units
Spent welding materials (welding rods, wire and grinding wheels, etc.)	Construction	Solids	Hazardous	Dispose of at Class I landfill	More than 100 pounds
Waste oil	Construction equipment and vehicles, lube oil and flushes	Hydrocarbons	Non-RCRA hazardous liquid	Recycle or dispose of at a permitted facility	1,000 gallons
Waste oil filters	Construction equipment and vehicles	Solids	Hazardous	Recycle at a permitted facility	50 units
Oily rags, oil sorbent	Cleanup of small spills	Hydrocarbons	Hazardous	Recycle or dispose of at a permitted facility	100 units
Solvents, detergents, palliatives, glycols, and refrigerants, paint, and adhesives	Equipment maintenance	Solvents	Hazardous	Recycle at a permitted facility	5 gallons
Spent lead-acid batteries and electrical fuses	Equipment	Metals	Universal waste	Recycle or dispose of offsite at Universal Waste Facility	< 5 units
Spent lithium-ion batteries	Equipment	Metals	Universal waste	Recycle or dispose of offsite at Universal Waste Facility	100 units

The Project would dispose of nonhazardous waste from construction and decommissioning activities at a Class III landfill. When practical, nonhazardous waste would be recycled to the extent possible. What cannot be recycled would be disposed of at any of the permitted landfills discussed below. A Waste Management Plan would ensure disposal of waste conforms with applicable regulations. A Waste Management Plan (Appendix 1I) has been prepared for the Project. Most solid waste generated during construction would be non-hazardous and consist primarily of cardboard, wood pallets, copper wire, scrap metal, common trash, concrete waste, and wood spire spools. Construction waste materials would be handled in accordance with the California Green Build Standards Code (24 CCR Part 11, § 5.408), which establishes standards for construction and demolition waste management, and recycling or salvage of a minimum of 65% of nonhazardous construction and demolition waste. Non-recyclable construction waste would be placed into commercial trash dumpsters located on-site. Dumpsters would be collected as needed by a commercial service and delivered to a landfill.

Construction of the Project would result in the excavation of soil. Where feasible, excavated soil would be used for fill on the Project site. As required by mitigation measure MM-HAZ-1 (Section 3.5.5.1), a soil sampling and analysis plan (SAP) would be prepared prior to approval of the site plan and soil sampling and testing would be conducted. If pesticide- and herbicide-related contamination is identified in site soils above Environmental Screening Levels (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. However, if required and deemed free of contamination by the SAP, non-contaminated soil disposal is permitted at the County's nearby landfills. Criteria for the acceptance of clean soil is required to be met to protect the environment and ensure regulatory compliance. (Community Development Agency 2024).

The proposed BESS facility would likely require lithium-ion batteries. If used, the batteries would be delivered to the Project site in U.S. Department of Transportation-certified vehicles and in compliance with all applicable requirements of the U.S. Department of Transportation, California Highway Patrol, and the California Department of Motor Vehicles. Further, batteries may be considered hazardous waste in California when they are discarded, whether rechargeable or not. Accordingly, the battery modules included in the BESS facility eventually would require disposal in accordance with the applicable hazardous waste requirements. Standard construction practices would be observed such that an incidental release shall be appropriately contained and remediated as required by regulation.

Other hazardous materials used for construction would be typical for most construction projects of this type. As described in Table 3.5-1, materials would include small quantities of gasoline, diesel fuels, oils, lubricants, cleaning solvents, detergents, degreasers, paints, glycol based anti-freeze, dust palliative, herbicides, and welding materials/supplies. All hazardous materials would be used, stored, and disposed of in accordance with the manufacturers' specifications and consistent with applicable regulatory requirements. Workers would be trained to engage in safe work practices and to properly identify and handle any hazardous materials on site. Limited amounts of hazardous materials would be stored or used onsite during Project construction, including diesel fuel, gasoline, and motor oil for vehicles; dielectric oil and mineral oil to be sealed within the transformers; herbicides, and lead acid-based or lithium-ion-based batteries for emergency backup. Appropriate spill containment and cleanup kits would be maintained during construction and decommissioning activities.

During decommissioning activities, nonhazardous waste and hazardous waste materials would be removed from site. A Decommissioning Plan would be prepared to ensure appropriate removal of BESS equipment from the foundations, disconnection of wiring, and removal of site infrastructure. The gen-tie facilities would be decommissioned and dismantled, and the site would be restored. Batteries and other equipment and materials

would be recycled to the extent feasible to minimize disposal in landfills. All nonhazardous wastes will be collected and disposed of in appropriate landfills or waste collection facilities. All hazardous wastes will be disposed of according to applicable LORS.

In summary, the Project would generate nonhazardous and hazardous waste during its construction, facility start up, testing, and decommissioning. However, there are multiple locations that will accept anticipated waste streams generated by the facility. The solid waste Class III landfills listed in Table 3.14-1 have a collective remaining capacity of over 76,960,000 cubic yards. Similarly, waste disposal needs for permitted hazardous waste and soil is within thresholds that accepting facilities can accommodate without altering or impacting accepting facility structure.

Waste generated during construction and operation of the Project alone is not expected to generate quantities of waste such that the surrounding accepting facilities cannot accommodate the additional materials. Therefore, the impact of the Project on solid waste recycling, disposal capacity, and hazardous waste capacity would be less than significant for construction and decommissioning activities.

Operations

Less-than-Significant Impact. A small amount of waste would be generated on-site during facility operations. Section 2, Project Description, includes a detailed description of the operations and maintenance activities of the Project. The operation of the Project is anticipated to generate nonhazardous and hazardous waste. Although the primary waste stream will be nonhazardous, the potential exists for varying quantities of hazardous waste to be generated on a periodic basis. Table 3.14-3 presents a summary of potential wastes generated during Project operations.

Table 3.14-3. Potential Annual Waste Generated during Operations

Waste	Origin	Composition	Classification	Disposal	Estimated Quantity
Nonhazardous Solid Waste					
Maintenance materials	Maintenance of BESS equipment electrical infrastructure	Metal and electrical materials	Non-hazardous	Recycle or dispose of offsite at Universal Waste Facility	More than 100 pounds
Wastewater					
Sanitary waste	Closed loop sanitary facility	Water	Non-hazardous liquid	Remove by contracted sanitary service	2,000 gallons
Other Waste					
Lubricating and insulating oil	Maintenance from machinery, lubricating oil systems and oil filled transformers; small leaks and spills	Hydrocarbons	Hazardous	Cleaned up using sorbent and rags – disposed of by certified oil recycler	100 gallons

Table 3.14-3. Potential Annual Waste Generated during Operations

Waste	Origin	Composition	Classification	Disposal	Estimated Quantity
Oily rags	Maintenance, wipe down of equipment etc.	Hydrocarbons and cloth	Hazardous	Recycled or disposed of by certified oil recycler	1 unit
Oil sorbents	Cleanup of small spills	Hydrocarbons	Hazardous	Recycled or disposed of by certified oil	1 unit
Controlled Waste Streams	Batteries, fire extinguishers	Controlled Substance	Hazardous	Recycled or disposed of by certified waste hauler	<20 pounds

During operations and maintenance (O&M) activities, the Project would generate small amounts of waste, such as broken or rusted metal, defective or malfunctioning equipment, electrical materials, empty containers, other miscellaneous solid waste, and typical refuse from the O&M staff. When practical, nonhazardous waste would be recycled to the extent possible. What cannot be recycled will be disposed of at a permitted landfill. On average, less than half a ton of waste per week is anticipated to be collected in a bin that would be collected by a commercial waste management service and disposed of at a Class III landfill.

The Project would generate minimal quantities of waste during operation activities. Waste generated during operation of the Project alone is not expected to generate quantities of waste such that the surrounding accepting facilities cannot accommodate the additional materials. Therefore, the impact of the Project on solid waste recycling, disposal capacity, and hazardous waste capacity would be less than significant for operational activities.

3.14.4 Cumulative Effects

A cumulative impact is defined at a proposed project’s incremental effect of closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Public Resources Code Section 21083; Title 14 California Code of Regulations, Title 14, Sections 15064 [h], 15065 [c], 15130 and 15355).

According to CalRecycle, approximately 11,913,357 tons of waste was landfilled within Alameda County in 2023 (CalRecycle 2024b). This number represents waste landfilled, not recycled, transformed, exported for outside disposal or total waste generation for the county. Prior to disposal, source reduction and recycling efforts would be implemented for both this and the cumulative projects listed in Table 3-2. As a worst-case scenario, if no waste can be recycled, transformed, or disposed by other means, it is estimated that approximately 26 tons of nonhazardous solid waste would be landfilled per year during operational activities, which would only represent approximately 0.000002% of Alameda County total waste landfilled. The Project has prepared a Waste Management Plan (Appendix 1I), which would ensure that waste is reduced and recycled to the maximum extent. Likewise, it is estimated that solid waste generated during construction will be minimal that. As all of the cumulative projects listed in Table 3-2 would also be required to comply with State and local waste reduction policies that would reduce the total volume of wastes sent to landfills for disposal, sufficient capacity is available at the landfill facilities listed

in Table 3.14-1 with no cumulative adverse impact anticipated. Therefore, anticipated waste generated by the Project would not result in a direct and indirect cumulative waste management impact to Alameda County.

3.14.5 Mitigation Measures

No mitigation measures are required as no significant impacts would occur.

3.14.6 Laws, Ordinances, Regulations, and Standards

Nonhazardous and hazardous waste handling associated with the Project would be governed by federal, state, and local laws. Applicable laws and regulations address proper waste handling, storage, and disposal practices to protect the environment from contamination and to protect facility workers and the surrounding community from exposure to nonhazardous and hazardous waste. Table 3.14-4 presents a summary of the LORS applicable to waste handling.

Table 3.14-4. LORS Applicable to Waste Management

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	RCRA Subtitle D	Regulates design and operation of nonhazardous solid waste landfills.	Impact 3.14-2	Non-hazardous waste generated as part of Project implementation would be handled and disposed of in accordance with Subtitle D.
Federal	RCRA Subtitle C	Controls storage, treatment, and disposal of hazardous waste.	Impact 3.14-2	Hazardous waste generated as part of Project implementation would be handled and disposed of in accordance with Subtitle C.
State	California Environmental Quality Act (CEQA)	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible.	Throughout this Opt-In Application	California Energy Commission (CEC), per the CEC’s Opt-In Application process.
State	California Integrated Waste Management Act (CIWMA) – AB 939	Controls solid waste collectors, recyclers, and depositors.	Impact 3.14-2	Waste generated as part of Project implementation would be handled and disposed of in accordance AB 939 requirements.
State	Assembly Bill 341 / State Bill 1018 – Mandatory	Requires commercial businesses generating 4 cubic yards per week or more of solid waste to adopt recycling practices	Impact 4.14-2	Recyclable materials generated as part of Project implementation would be recycled in accordance with

Table 3.14-4. LORS Applicable to Waste Management

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
	Commercial Recycling			Assembly Bill 341 / State Bill 1018 as applicable.
State	CCR Title 24, Part 11 (CALGreen Standards)	Establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality	Impact 3.14-2	Solid waste generated would be recycled in accordance with CALGreen requirements for recycling percentages.
State	CCR Title 22, Division 4.5	Controls storage, treatment, and disposal of hazardous waste under the Department of Toxic Substance Control.	Impact 3.14-2	Hazardous wastes generated by the Project would be handled and disposed of in conformance with CCR Title 22, Division 4.5.
Local	Alameda County, Department of Environmental Health, Office of Solid/Medical Waste and Body Art Program	Acts as the Local Enforcement Agency for CalRecycle	Impact 3.14-2	The Project would conform to the requirements of the Alameda County LEA/CUPA

3.14.6.1 Federal LORS

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), which amends the Solid Waste Disposal Act of 1965, was enacted in 1976 to address municipal and industrial solid waste generated nationwide. The act gives the EPA the authority to control hazardous waste from “cradle to grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of nonhazardous solid wastes. The federal Hazardous and Solid Waste Amendments to the RCRA were adopted in 1984 and were aimed at waste minimization and phasing out land disposal of hazardous waste, as well as providing guidance for corrective action of releases. The amendments also allowed for increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. Amendments to the RCRA in 1986 further enabled the EPA to address environmental hazards relative to underground tank storage of petroleum and other hazardous substances.

Nonhazardous solid waste: Federal involvement is limited to establishing minimum criteria that prescribe the best practicable controls and monitoring requirements for solid waste disposal facilities. RCRA 42 United States Code 6901 Subtitle D assigns responsibility for the regulation of nonhazardous waste to the states.

Hazardous waste: RCRA 42 United States Code 6901 Subtitle C establishes a “cradle to grave” system of hazardous waste management by instituting controls for generation, transportation, treatment, storage, and disposal of hazardous waste. Above certain levels of waste produced, Subtitle C applies to all states and all hazardous waste generators. RCRA also establishes waste regulations for energetic wastes (explosives) in 40 CFR Part 266, Subpart M.

3.14.6.2 State LORS

California Integrated Waste Management Act (AB 939)

Pursuant to the California Integrated Solid Waste Management Act of 1989 (PRC 40050 et seq.) or AB 939, all cities in California are required to reduce the amount of solid waste disposed in landfills. AB 939 required a reduction of 25% by 1995 and 50% by 2000. Contracts that include work that will generate solid waste, including construction and demolition (C&D) debris, have been targeted for participation in source-reduction, reuse, and recycling programs. C&D waste is heavy, inert material that creates significant problems when disposed of in landfills. Because C&D waste is heavier than paper and plastic, it is more difficult for counties and cities to reduce the tonnage of disposed waste. For this reason, C&D waste has been specifically targeted by the State of California for diversion from the waste stream. Projects that generate C&D waste should emphasize deconstruction and diversion planning rather than demolition. Deconstruction is the planned, organized dismantling of a prior construction Project, which allows maximum use of the deconstructed materials for recycling in other construction Projects and sends a minimum amount of the deconstruction material to landfills. Waste should be diverted from disposal in landfills (particularly Class III landfills) and maximize source reduction, reuse, and recycling of construction and demolition debris. AB 939 also required cities and counties to prepare solid waste planning documents (e.g., the Source Reduction and Recycling Element, the Household Hazardous Waste Element, and the Non-disposal Facility Element).

Senate Bill 341/State Bill 1018 Mandatory Commercial Recycling

Mandatory Commercial Recycling was one of the measures adopted in the Assembly Bill 32 Scoping Plan by the California Air Resources Board pursuant to the California Global Warming Solutions Act (Chapter 488, Statutes of 2006). The Mandatory Commercial Recycling Measure focuses on increased commercial waste diversion as a method to reduce GHG emissions. It is designed to achieve a reduction in GHG emissions of 5 million metric tons of carbon dioxide (CO₂) equivalents. To achieve the measure’s objective, an additional 2 to 3 million tons of materials annually will need to be recycled from the commercial sector by the year 2020 and beyond (CalRecycle, 2024).

The regulation was adopted at CalRecycle’s January 17, 2012, Monthly Public Meeting. This regulation reflects the statutory provisions of AB 341 (Chesbro, Chapter 476, Statutes of 2011) and provides additional procedural clarifications and sets forth the requirements of the statewide mandatory commercial recycling program. The regulation was approved by the Office of Administrative Law on May 7, 2012, and became effective immediately. On June 27, 2012 the Governor signed Senate Bill 1018, which included an amendment that requires a business that generates 4 cubic yards or more of commercial solid waste per week to arrange for recycling services (CalRecycle, 2024).

California Code of Regulations Title 24, Part 11

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code, Part 11 of Title 24, commonly referred to as CALGreen, establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are updated periodically. The latest version (CALGreen 2022) became effective on January 1, 2023.

Mandatory CALGreen standards pertaining to water, wastewater, and solid waste include the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings.
- Mandatory reduction in outdoor water use through compliance with a local water-efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- Diversion of 65% of construction and demolition waste from landfills.

California Code of Regulations Title 22, Division 4.5

The Hazardous Waste Control Act of 1972 established standards for the handling, transportation, treatment, and disposal of hazardous waste. The regulatory framework is documented in CCR Title 22, Division 4.5, which is enforced by the Department of Toxic Substances Control.

3.14.6.3 Local LORS

Department of Environmental Health, Office of Solid/Medical Waste and Body Art Program

The Department of Environmental Health, Office of Solid/Medical Waste and Body Art Program is responsible for:

- Inspection of landfills, transfer stations, compostable material handling facilities and operations, construction and demolition facilities and closed landfills.
- Solid and liquid waste hauler vehicles registration and inspection.
- Investigation of complaints associated with solid, medical waste and body art facilities or practitioners.

3.14.7 Agencies and Agency Contacts

Federal and some state level agencies discussed in this section will all be involved in the regulation of the waste generated by the Project. However, the regulations are administered and enforced primarily through the designated by CalEPA's Certified Unified Program Agency/Local Enforcement Agency, which is the Alameda County Department of Environmental Health, Office of Solid/Medical Waste and Body Art Program. On their associated websites, the persons to contact for nonhazardous and hazardous waste management are listed in Table 3.14-5. A draft HMBP has been prepared and is included as Appendix 1F; however, approval of the HMBP from the Alameda County Office of Solid/Medical Waste Management and Body Arts Programs would be superseded by CEC approval of the Project under the opt-in program.

Table 3.14-5. Agency Contacts for Waste Management

Permit or Approval	Agency Contact	Applicability
Solid Waste and Recycling / C&D Waste Reduction and Recycling Plan*	Office of Solid/Medical Waste Management & Body Art Programs 1131 Harbor Bay Parkway Alameda, California 94502-6577 Telephone 510.567.6790 Fax 510.337.9234	Prior to waste generating activities.
Hazardous Waste / HMBP*	Office of Solid/Medical Waste Management & Body Art Programs 1131 Harbor Bay Parkway Alameda, California 94502-6577 Telephone 510.567.6790 Fax 510.337.9234	During construction and/or operations when hazardous materials will be stored on site.

Note:

* Approvals would be superseded by CEC approval of the Project under the opt-in program.

3.14.8 Permits and Permit Schedule

The temporary storage for disposal of hazardous wastes will be included in the Project's Hazardous Materials Business Plan (HMBP) (Appendix 1F). No additional permits are required.

3.14.9 References

CalEPA (California Environmental Protection Agency). 2024. Cortese List Data Resources. Available at: <https://calepa.ca.gov/sitecleanup/corteseelist/>. Accessed January 31, 2024.

CALGreen 2022. 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen). <https://codes.iccsafe.org/content/CAGBC2022P3>.

CalRecycle (California Department of Resources Recycling and Recovery). 2024b. 2021 Landfill Summary Tonnage Report. Available online: <https://www2.calrecycle.ca.gov/LandfillTipFees>. Accessed January 30, 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>.

CalRecycle. 2024a. Solid Waste Information System (SWIS) Database, Alameda County. Available online: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>. Accessed January 31, 2024.

DTSC (California Department of Toxic Substances Control). 2024. California Commercial Offsite Hazardous Waste Permitted Facilities. Available online: http://www.envirostor.dtsc.ca.gov/public/commercial_offsite.asp. Accessed January 29, 2024.

Community Development Agency. 2024. Alameda County's Waste Program webpage. <https://www.acgov.org/wasteprogram/>. Accessed February 1, 2024.

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