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Description:	This section discusses the potential effect on human health and the environment from existing site conditions as well as nonhazardous and hazardous waste generated during construction and operation at the Darden Clean Energy Project.
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5.11 Waste Management

This section discusses the potential effect on human health and the environment from existing site conditions as well as nonhazardous and hazardous waste generated during construction and operation at the Darden Clean Energy Project (Project). Section 5.11.1 describes the environmental setting, site investigations that have been completed at the Project site, and waste that would be generated by the Project. Section 5.11.2 describes the Regulatory Setting of the Project in terms of waste management. Section 5.11.3 presents the impact analysis and Section 5.11.4 presents the cumulative impacts of the project with respect to waste management. Section 5.11.5 describes the Laws, Ordinances, Regulations, and Standards (LORS) applicable to waste management for the Project. Section 5.11.6 presents the agencies that have jurisdiction over the waste generated at the Project site and specifies the contact at each agency. Section 5.11.7 describes the permits required for waste generated at the Project and a schedule for obtaining the permits. Section 5.11.8 provides the references used to prepare this subsection.

5.11.1 Environmental Setting

This subsection summarizes the environmental condition of the Project site and the potential need to remove or otherwise treat contaminated soil or groundwater at the Project site. In addition, this section describes nonhazardous and hazardous waste streams associated with construction and operation of the Project. The following existing conditions are described:

- Results of a Phase I Environmental Site Assessments (ESAs), which were completed for the Project in September 2022 and May 2023, using 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 1527-93, May 1993) (see Section 5.11.1.1).
- Results of the Phase II ESA, which was conducted in conformance with the requirements of ASTM International (ASTM) Designation E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (see Section 5.11.1.1.)
- A description of each waste stream estimated to be generated during Project construction and operation, including origin, anticipated hazardous or nonhazardous classification pursuant to Title 22, California Code of Regulations, § 66261.20 et seq., chemical composition, estimated annual weight or volume generated, and estimated frequency of generation (see Section 5.11.1.3).
- A description of waste disposal sites which may feasibly be used for disposal of Project wastes, including the name, location, classification under Title 23, California Code of Regulations, § 2530 et seq., the daily or annual permitted capacity, daily or annual amounts of waste currently being accepted, the estimated closure date and remaining capacity, and a description of any enforcement action taken by local or state agencies due to waste disposal activities at the site (see Section 5.11.1.4).
- A description of management methods for each waste stream, including methods used to minimize waste generation, length of on- and off-site waste storage, re-use and recycling opportunities, waste treatment methods used, and use of contractors for treatment (see Section 5.11.3).

5.11.1.1 Site Investigations

Stantec conducted a Phase I ESA and Limited Soil Sampling for the Project that focused on 42 parcels (9,116 acres) northwest of State Route (SR) 145 and Mount Whitney Avenue in Fresno, California, which is the proposed footprint for the solar subarray portion of the Project (Stantec 2022). In addition, Stantec completed a second Phase I ESA and Limited Soil Sampling for parcels proposed for development with supporting solar infrastructure that includes a battery energy storage system (BESS) site (this site is now proposed for the alternate hydrogen location), a utility switchyard, high voltage generation tie (gen-tie) line easement, and medium voltage (MV) collector line easement associated with the Project (Stantec 2023). The Phase I ESAs were conducted in conformance with the requirements of ASTM International Designation E2247-16 Phase I Environmental Site Assessment Process for Forestland or Rural Property, and All Appropriate Inquiry (AAI). The Phase II ESA was conducted in conformance with the requirements of ASTM International Designation E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process.

Subsequently, Stantec completed a Phase II ESA with the objective of further investigating impacts from current and historical agricultural use associated with the Project site as well as historic oil exploration activities that occurred within and in the vicinity of the Project site. The findings of these site investigations are summarized below. Identified environmental issues that may need to be addressed at the Project site are presented below in italic.

2022 Phase I ESA and Limited Soil Sampling, Photovoltaic Site

The "subject property" investigated for the 2022 Phase I ESA consists of 42 parcels comprising approximately 9,116-acres of covering the areas proposed for the solar facility and Options 1 and 2 BESS, green hydrogen facility, and step-up substation. The 2022 Phase I ESA identifies potential or existing environmental conditions through a review of current and historical uses of the Project site, as well as the extent of site contamination (Stantec 2022). The 2022 Phase I ESA identifies the following findings that pertain to waste management:

- Historical oil drilling operations are known to have occurred at the Project site. The potential presence of impacted soils associated with drilling mud pits/sumps is considered a recognized environmental condition (REC). Stantec recommended that further investigation be performed in the area west/northwest of the Leoscher "1" well where the rectangular depressions were noted in the 1940 aerial photograph to evaluate potential impact to soil at this location. S*ince there was no visible indication of mud pits/sumps in any of the other aerial photographs, Stantec recommended that a Soil Management Plan (SMP) be prepared that provides the procedures, methodologies and reporting requirements if unknown impacts to soil are encountered during demolition, grading and construction activities at the Project site, including areas where further investigation was recommended.*
- Abandoned oil wells were identified within the footprint of the Project site (see Section 5.16, *Geological Hazards and Resources*, for more information). Seven abandoned dry holes were reportedly located within the project boundaries according to data provided on the California Geologic Energy Management Division (CalGEM) Well Finder online database.
- Irrigation/groundwater wells were observed at the Project site during reconnaissance activities. *Stantec recommended proper abandonment of the wells under regulatory oversight unless the wells are used as part of the Project.*

- At least 16 groundwater monitoring wells were observed within the footprint of the Project site during reconnaissance. *Stantec recommended that the wells be properly abandoned under regulatory oversight.*

In addition, the 2022 Phase I ESA includes the results of shallow soil sampling that was undertaken to investigate potential agricultural impacts at the Project site. The findings of shallow soil sampling activities are summarized below:

- Organochlorine pesticides (OCPs) and lead were reported at low concentrations that do not exceed the Department of Toxic Substances Control (DTSC) commercial screening levels or California hazardous waste thresholds (DTSC 2020a).
- Arsenic was reported at concentrations exceeding DTSC commercial screening level; however, arsenic concentrations were within the range considered to be naturally occurring in California (DTSC 2020b).
- No further assessment regarding OCPs, lead, and arsenic was recommended for the Project site.

2023 Phase I ESA and Limited Soil Sampling, BESS and Utility Corridors

The Subject Property investigated for the 2023 Phase I ESA and Limited Soil Sampling included the gen-tie corridor, the utility switchyard parcel, the parcels proposed for the alternative hydrogen location (shown as BESS in the Phase I ESA report), and the potential medium voltage (MV) collector line alignments. The 2023 Phase I ESA and Limited Soil Sampling report includes an examination of potential or existing environmental conditions through a review of current and historical uses of the lands (Stantec 2023a). The 2023 Phase I ESA identifies the following findings:

- Groundwater wells were observed at the Project site during the field reconnaissance activities. Stantec recommended that the wells be abandoned under permit from Fresno County Department of Public Health (FCDPH) in accordance with the California Well Standards Ordinance as stated in Bulletin 74-81, unless the wells will be used by the proposed development. *Stantec recommended that information/documentation on the location, status, and depth of the wells be obtained so that a plan can be developed with regard to use or destruction of the wells.*
- Aboveground storage tanks (ASTs) containing oil were observed throughout the investigation areas that are believed to be related to the irrigation well pumps. Minor soil staining was observed near the irrigation well sites but was limited to topsoil in an approximately 5 foot by 5 foot area. This soil impact is considered de minimis given the minimal amount of staining.
- Significant oil staining was observed on two irrigation well pads along the MV collector line easement, located approximately 0.5 mile west of the intersection of Harlan Avenue and Colusa Avenue, and along the gen-tie line easement, located at the northeast corner of the intersection of Harlan Avenue and Calaveras Avenue. *If any of the gen-tie structures/towers, or belowground collector lines are specifically planned to be constructed within these areas (i.e., where stained soil was located around well pumps) and the lines cannot be rerouted to avoid these areas, Stantec recommends that soil samples be collected and evaluated for potential contaminants of concern in these areas.*
- Vista Verde Farms is located at the corner of Harlan Avenue and Stanislaus Avenue within the gen-tie easement. This facility is listed in the hazardous waste tracking system (HWTS) database from 1998 through 2002. There are no reported releases associated with this property. However, during the field reconnaissance a large AST and numerous used 50-gallon drums were

observed at this. Since the gen-tie lines are aboveground, no further investigation is recommended. *However, if the gen-tie line plans call for an underground component in this area, Stantec recommended soil sampling on Assessor's Parcel Number (APN) 045-080-49S to evaluate whether contaminants of concern are present in soil. Likewise, if procurement of this parcel is required, or if development plans include structures or towers within this parcel, soil sampling is recommended.*

During this investigation, Stantec completed additional shallow soil sampling activities at 30 locations in April 2023 along the proposed gen-tie corridor. Soil samples were analyzed for arsenic, lead, selenium, and OCPs. The findings of the limited soil sampling are summarized below:

- OCPs and lead were reported at low concentrations that did not exceed DTSC commercial screening levels or California hazardous waste levels (DTSC 2020a).
- Arsenic was reported at concentrations exceeding DTSC commercial screening levels and naturally occurring background concentrations but were within the range considered to be naturally occurring in California (DTSC 2020b).
- No further assessment regarding OCPs, lead, and arsenic was recommended.

2023 Phase II ESA, Photovoltaic Site

Stantec completed a Phase II ESA that included soil sampling within the 42 parcels comprising the proposed footprint for the solar subarray portion of the Project (Stantec 2023b). The objectives of the 2023 Phase II ESA included the following:

- To assess the potential accumulation of selenium in shallow soils, as requested by the Fresno County Planning Commission
- To confirm the presence of a suspected mud pit/sump located on APN 050-030-24ST
- To locate historical oil wells at the Project site

The results of the Phase II ESA are summarized as follows:

- Selenium was not detected above the laboratory reporting limits of 5.0 milligrams per kilogram (mg/kg) in the soil samples collected within the Project site. No further assessment was recommended with regard to selenium.
- Five test pits were excavated to 8 feet below ground surface (bgs) in the area where a mud pit/sump was suspected. No stained, odorous, or non-native soils were observed in the test pits; therefore, no soil sampling occurred. *No further investigation was recommended with regard to the surface impoundments noted in the 1940 aerial photograph to the northwest of the "Loescher" 1 well. Stantec prepared a Soil Management Plan (SMP) as a contingency document that provides procedures, methodologies and reporting requirements in the event that unknown impacts to soil are encountered during grading, trenching, or other construction activities that would involve ground disturbance at the Project site.*
- In an effort to locate abandoned oil wells, vegetation was cleared, geophysical surveys were conducted, and the test pits were excavated to visually confirm the top of the steel well casings. The abandoned well search activities successfully located all seven of the wells recorded by CalGEM records as being located within the boundaries of the Project site. *In the unlikely event that oil well casings are encountered during construction activities, any future work required by CalGEM on the oil wells would be required of the owner of the Project site. In such instances,*

CalGEM would require notification in the case of any physical alteration such that proper permitting could be completed prior to making alterations.

5.11.1.2 Soil Management Plan

Stantec prepared an SMP as "…a contingency document that provides procedures, methodologies and reporting requirements in the event that unknown impacts to soil are encountered during grading, trenching, or other construction activities that would involve ground disturbance at the Project site," (Stantec 2023c). The purpose of the SMP is to provide protocols for the proper management of unknown impacts to soil or undocumented subsurface features potentially encountered at the Project site during grading and construction activities. The SMP provides recommended protocols for handling, moving, stockpiling, and disposing of soils within the Project site, and proposed mitigation measures if previously undocumented soils are encountered that exhibit evidence of chemical impacts. The SMP includes the following:

- Description of constituents of concern known or suspected to be present at the Project site
- Responsible parties and contact information
- Procedures for contaminated soil management
- Transportation requirements and procedures
- Soil sampling and analysis protocol

5.11.1.3 Project Waste Generation

This section identifies nonhazardous waste, hazardous waste, and wastewater that would be generated at the Project site during construction and operation activities.

A majority of the waste that is anticipated to be generated during construction activities associated with the Project would be classified as nonhazardous waste; however, it is anticipated that some hazardous waste would be generated. The types of construction waste and their estimated quantities are presented below. in Table 5.11-1.

Table 5.11-1 Potential Waste Streams Generated During Construction

Waste Stream	Origin	Classification	Composition	Disposal	Estimated Total Quantity
Excess concrete	Construction of concrete pads, foundations, and supports	Nonhazardous	Concrete	Recycle or Class II/III landfill	TBD
Excavated soil	Excavation or trenching activities	Nonhazardous	Soils	On-site re-use or Class II/III landfill	TBD
Scrap metal	Construction of supports, racks, and other structural components	Nonhazardous	Metal	Recycle or Class II/III landfill	20 tons
Incidental office waste	General administrative activities	Nonhazardous	Paper, plastic, solid waste	Recycle or Class II/III landfill	TBD
Solar panels	Construction of solar subarrays	Nonhazardous	Glass, plastic, and metal	Contracted recycling	10,000 units

Waste Stream	Origin	Classification	Composition	Disposal	Estimated Total Quantity
Sanitary waste	Sanitary waste generated during construction activities	Nonhazardous	Liquid	Septic system	TBD
Potable water	General construction activities and dust suppression activities	Nonhazardous	Water	Recycle or treat and discharge	TBD
Equipment washing water	General construction activities	Nonhazardous waste	Water	Recycle or treat and discharge	TBD
Waste oil (lubricating, insulating)	Heavy machinery or other heavy equipment maintenance	Hazardous	Hydrocarbons	Recycling or dispose by certified oil handler/recycler	2,750 gallons
Solvents, detergents, glycols, refrigerants, paint, adhesives	Equipment maintenance	Hazardous	Solvents	Recycle or Class II/III landfill	TBD
Empty hazardous material containers	Transport of hazardous materials to the Project site	Hazardous	Drums, totes, containers	Recycle	20 units
Fuels	Generators or other heavy equipment	Hazardous	Hydrocarbons	Recycle	550 gallons
Welding materials	Construction of supports, racks, and other structural components	Hazardous	Solids, metals	Recycle or dispose at Class I landfill	More than 100 pounds
Oil filters	Vehicles, generators, heavy equipment	Hazardous	Hydrocarbon or solvent impacted solids	Recycling or dispose by certified oil handler/recycler	200 units
Oily rags/sorbents	Cleanup of spills	Hazardous	Hydrocarbon or solvent impacted solids	Recycling or dispose by certified oil handler/recycler	500 units
Spent lead acid batteries	Battery operated equipment	Hazardous	Heavy metals	Returned to manufacturer for recycling	50 units
Spent alkaline batteries	Battery operated equipment	Hazardous	Metals	Recycle, dispose off-site at Universal Waste Destination Facility	200 units
Controlled substances	Inerts/explosives packaging	Hazardous	Controlled substance	Dispose by certified handler	TBD

TBD = To be determined

A majority of the waste that is anticipated to be generated during operational activities associated with the Project would be classified as nonhazardous waste; however, it is anticipated that some hazardous waste would be generated. The types of operational waste and their estimated quantities are presented below. In Table 5.11-2.

Table 5.11-2 Potential Waste Streams Generated During Operation

Waste Stream	Origin	Classification	Composition	Disposal	Estimated Quantity
Paper, wood, glass, insulation, plastics	General operational activities	Nonhazardous	Solids (paper, wood, glass, insulation, plastics)	Recycle or Class II/III Landfill	TBD
Concrete	Maintenance of structural elements	Nonhazardous	Concrete	Recycle or Class II/III Landfill	TBD
Scrap metal	Maintenance of structural elements	Nonhazardous	Metal	Recycle or Class II/III Landfill	TBD
Spent solar panels and components	Operations and Maintenance of the solar subarray	Nonhazardous	Glass, plastic, and metal	Recycle or Class II/III Landfill	TBD
Spent transformer components	Operations and Maintenance of the step-up substation	Nonhazardous	Metals, mineral oils, solids	Recycle or Class II/III Landfill	TBD
Spent switchyard equipment	Operations and Maintenance of the switchyard	Nonhazardous	Metals, solids	Recycle or Class II/III Landfill	TBD
Hydrogen generation-components - electrolyzer	Operation of the green hydrogen facility	Nonhazardous	Transformers (metals, mineral oil), rectifiers, solids	Recycle or Class II/III Landfill	TBD
Reverse osmosis membrane, other filtration membranes	Water treatment system associated with electrolysis	Nonhazardous	Sediment and solids	Recycle or Class II/III Landfill	TBD
Spent activated carbon filters, air filters	Water treatment system associated with electrolysis	Nonhazardous	Carbon, metals, hydrocarbons	Recycle or Class II/III Landfill	TBD
Water treatment soil/sludge	Water treatment system associated with electrolysis	Nonhazardous	Sediment and sludge	Dispose at Class I/II landfill	8 cubic feet/day
Incidental office waste	General administrative activities	Nonhazardous	Paper, plastic, solid waste	Recycle or Class II/III Landfill	TBD
Water treatment	Feedstock for electrolysis	Nonhazardous	Water	Recycle or treat and discharge	420 acre-feet/year

Waste Stream	Origin	Classification	Composition	Disposal	Estimated Quantity
Sanitary waste	On-site personnel use	Nonhazardous	Liquid	Contracted sanitary service	TBD
Potable water	On-site personnel use	Nonhazardous	Water	Recycle or treat and discharge	TBD
Wastewater	Washing solar panels, equipment cleaning	Nonhazardous	Water	Evaporation or treat and discharge	TBD
Waste oil (lubricating, insulating)	Equipment, transformers	Hazardous	Hydrocarbons	Cleaned w/ rags/sorbents/disposed by certified oil recycler	TBD
Solvents, detergents, glycols, refrigerants, paint, adhesives	Maintenance of heavy equipment	Hazardous	Solvents	Class I landfill	TBD
Empty hazardous material containers	Transport of hazardous materials to the Project site	Hazardous	Drums, totes, containers	Recycle or Class I Landfill	TBD
Fuels (generators, other equipment)	Equipment, potential spills	Hazardous	Hydrocarbons	Recycle or Class I Landfill	TBD
Welding materials	Maintenance of structural elements	Hazardous	Metals	Recycle or Class I Landfill	TBD
Oil filters	Equipment, vehicles, generators	Hazardous	Hydrocarbon or solvent impacted solids	Recycle or dispose by certified oil handler/recycler	TBD
Oily rags/sorbents	Cleanup of spills	Hazardous	Hydrocarbon or solvent impacted solids	Recycle or dispose by certified oil handler/recycler	TBD
Spent Lead acid batteries	Battery operated equipment	Hazardous	Heavy metals	Returned to manufacturer for recycling	TBD
Spent alkaline batteries	Battery operated equipment	Hazardous	Metals	Recycle, dispose off-site at Universal Waste Destination Facility	TBD
Controlled substances	Inerts/explosives packaging, smoke detectors, fire extinguishers	Hazardous	Controlled substance	Dispose by certified hauler	TBD

TBD = To be determined

5.11.1.4 Waste Disposal

This section describes the waste disposal facilities that may feasibly be used for disposal and recycling of waste generated by the Project.

Solid Waste Disposal

Nonhazardous solid waste would generally be recycled or disposed of at a Class II/III landfill. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. There are 10 active, permitted solid waste disposal and recycling facilities within a 50-mile radius of the Project site, which are summarized in Table 5.11-3.

Table 5.11-3 Solid Waste Disposal Facilities in the Vicinity of the Project

Landfill	Location	Class	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Permitted Throughput (tons/day)	Estimated Closure Date	Violation of Minimum State Standards Noted
Waste Management Inc. Kettleman Hills Facility (Unit B-17)	35251 Old Skyline Road, P.O. Box 471, Kettleman City, CA 93239	II, III	18,400,000	17,468,595	2,000	1/1/2030	No
Waste Management Inc. Kettleman Hills Facility (Unit B-18)*	35251 Old Skyline Road, P.O. Box 471, Kettleman City, CA 93239	II	10,700,000	15,600,000	9,000	2/25/2020[1]	No
American Avenue Disposal Site	18950 W American Avenue, Kerman, CA 93630	II, III	32,700,000	29,358,535	2,200	8/31/2031	Yes
Mid-Valley Disposal & Transfer Recycling Station	15300 West Jensen Avenue, Kerman, CA 93630	Transfer/ Processing	49,000	Not Applicable	1,500	Not Applicable	No
Mid-Valley Recycling*	2721 S. Elm Street, Fresno, CA 93706	Transfer/ Processing	2,000	Not Applicable	2,000	Not Applicable	Yes
Allan Company Fresno MRF	2525 S. Sunland Avenue, Fresno, CA 93725	Transfer/ Processing	1,250	Not Applicable	1,000	Not Applicable	No

Landfill	Location	Class	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Permitted Throughput (tons/day)	Estimated Closure Date	Violation of Minimum State Standards Noted
Cedar Avenue Recycling and Transfer Station	3457 S. Cedar Avenue, Fresno, CA 93725	Transfer/ Processing	Not Listed	Not Applicable	3,100	Not Applicable	No
West Coast Waste	3077 Golden State Frontage Road, Fresno, CA 93725	Transfer/ Processing	2,000	Not Applicable	1,500	Not Applicable	Yes
KROEKER Recycling Facility 93725	4627 South Chestnut Avenue, Malaga, CA	Transfer/ Processing	7,500	Not Applicable	2,500	Not Applicable	No
Jefferson Avenue Transfer Station 93725	5608 S. Villa Avenue, Fresno, CA	Transfer/ Processing	3,500	Not Applicable	1,250	Not Applicable	No
Rice Road Recyclery & Transfer Station	10463 N. Rice Road, Fresno, CA 93730	Transfer/ Processing	600	Not Applicable	400	Not Applicable	Yes

Source: California Department of Resources Recycling and Recovery [CalRecycle] 2023d

Notes: [1] Facility registration permit issued on March 12, 2020 for Unit B-18 at the Kettleman Hills facility indicates that the site capacity is 15,600,000 cubic yards with an annual loading of 2,340,000 cubic yards. As of the date of this application, the Solid Waste Information System Facility/Site Activity Details lists Remaining Capacity as 15,600,000 cubic yards (https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3771?siteID=914). It is anticipated that capacity will remain for several more years as of the preparation of this CEC application.

*Indicates the facility does not accept construction and demolition waste.

Hazardous Waste Disposal

Hazardous waste generated at the Project site would be stored on-site in accordance with the accumulation limits detailed in Title 22, CCR, section 66262.34 and would be transported to a treatment, storage, and disposal (TSD) facility by a licensed hazardous waste transporter. According to DTSC, 145 facilities in California accept wastes such as batteries, used oil, solvents, and other hazardous wastes, for treatment, recycling, or disposal (DTSC 2023). California has two active hazardous waste (Class I) landfills for permanent disposal: Chemical Waste Management, Inc. Kettleman Hills Facility and Clean Harbors Buttonwillow Landfill.

Chemical Waste Management, Inc. Kettleman Hills Facility is an approximately 1,600-acre hazardous waste TSD facility that accepts Class I and II waste, with the exception of radioactive materials, medical waste, compressed gas cylinders, and explosives. Currently, 695 acres of land are available and permitted for waste management activities (CalRecycle 2023a, DTSC 2023a). The B-18 hazardous waste landfill is planned for expansion. A new hazardous waste landfill (B-20) is planned to open after B-18 reaches capacity and will operate for approximately 24 years (Waste Management, Inc. 2023). As of February 25, 2023, B-18 (Class I/II) has a permitted capacity of 10.7

million cubic yards and a total remaining capacity of 15.6 million cubic yards[1]. It is anticipated that hazardous waste generated at the Project site would be accepted at the Kettleman facility.

Clean Harbors Buttonwillow is a 320-acre facility with an operating area of 160-acres and is permitted to accept waste until 2040 (CalRecycle 2023a). The Buttonwillow facility has a permitted capacity of 13.25 million cubic yards and can accept up to 10,500 tons per day (California Integrated Waste Management Board 2019). The remaining capacity at the Buttonwillow facility is not publicly available. Buttonwillow is permitted to manage Resource Conservation and Recovery Act (RCRA) hazardous waste, California hazardous waste, and nonhazardous waste for stabilization treatment, solidification, and landfill. The landfill accepts 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 2023d, DTSC 2023b). It is anticipated that hazardous waste generated at the Project site would be accepted at the Buttonwillow facility.

5.11.2 Regulatory Setting

A review of existing relevant LORS was conducted to understand the regulatory context regarding waste management for the Project. This review of applicable federal, state, and local policies and regulations includes the RCRA, the Clean Water Act, California Environmental Quality Act (CEQA), Fresno County's General Plan, Fresno County Code of Ordinances, and the Fresno County Multi-Jurisdictional Hazard Mitigation Plan. These are detailed in Section 5.11.5.

5.11.3 Impact Analysis

The following subsections discuss the potential direct and indirect impacts related to waste management from construction and operation (including maintenance) of the Project.

5.11.3.1 Methodology

To identify and assess potential impacts related to waste management, Rincon Consultants, Inc. reviewed the Phase I and Phase II ESAs, and the project-specific Soil Management Plan, as well as publicly available information, including the:

- State Water Resources Control Board (SWRCB) GeoTracker
- DTSC EnviroStor
- List of solid waste disposal sites identified by the SWRCB 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 the Health and Safety Code, identified by DTSC.

[1] Facility registration permit issued on March 12, 2020 indicates that the site capacity is 15,600,000 cubic yards with an annual loading of 2,340,000 cubic yards. As of the date of this application, the Solid Waste Information System Facility/Site Activity Details lists Remaining Capacity as 15,600,000 cubic yards (https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3771?siteID=914).

5.11.3.2 Impact Evaluation Criteria

The potential for impacts to waste management was evaluated using the criteria described in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (sections 15000-15387, Title 14, California Code of Regulations, Chapter 3). A project would have a significant environmental impact in terms of waste management if it would do the following:

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment; and/or
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

IMPACT WM-1

Threshold:	Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Refer to Impact HAZ-3 in Section 5.9, *Hazardous Materials Handling*, for additional details and a discussion of potential impacts related to this impact evaluation criteria.

IMPACT WM-2

Threshold:	Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The Project would implement the following measures related to hazardous waste storage, collection, and disposal, and waste minimization during both construction and operation of the Project.

- A site-specific United States Environmental Protection Agency (USEPA) identification number and hazardous waste generator classification would be obtained for the Darden Clean Energy Project. Hazardous waste generated at the Project site would be stored on-site in accordance with accumulation time limits detailed in Title 22, CCR, section 66262.34 before off-site disposal, treatment, or recycling.
- Hazardous wastes would be accumulated at the Project site according to the Title 22 California Code of Regulations (CCR) requirements for satellite waste accumulation.
- Hazardous wastes would be stored in appropriately segregated storage areas surrounded by berms to contain leaks and spills. The bermed areas would be sized to hold the full contents of the largest single container and, if outdoors and not roofed, would be sized for an additional volume for the rainfall associated with a 25-year, 24-hour storm event. If indoors, the containment would be sized for an additional volume equivalent to 20 minutes of the design flow of any fire protection water. These areas would be inspected weekly.
- Hazardous wastes would be collected by a licensed hazardous waste hauler using a hazardous waste manifest. Wastes would be transported to authorized hazardous waste management facilities. Copies of manifests, reports, waste analyses, and other documents would be kept on-site and would remain accessible for inspection for at least 3 years.

- Employees would be trained in hazardous waste procedures, spill contingencies, and waste minimization. All contractors and workers would be educated about waste sorting, appropriate recycling storage areas, and how to reduce landfill waste.
- Procedures would be developed to reduce the quantity of hazardous waste generated. Nonhazardous materials would be used instead of hazardous materials whenever practical, and wastes would be recycled whenever practical. Handling of hazardous wastes in this way would minimize the quantity of waste deposited to landfills: waste lubricating oil would be recovered and recycled by a waste oil recycling contractor and spent oil filters and oily rags would be recycled.
- Construction materials would be sorted on-site throughout construction and transported to appropriate waste management facilities. Recyclable materials would be separated from non-recyclable items and stored until they could be transported to a designated recycling facility. Recycling would be in accordance with applicable California state requirements. Wooden construction waste (such as wood from wood pallets) would be sold, recycled, or chipped and composted. Other compostable materials, such as vegetation, may also be composted off-site.

The following subsections describe the Project's impacts regarding construction and operational hazardous and nonhazardous waste generation.

Solar Facility, Step-Up Substation, and Gen-Tie

Construction

Less than Significant Impact. As indicated in Table 5.11-1, construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would generate both hazardous and nonhazardous construction waste. Hazardous construction waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous construction waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous construction waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated construction waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would not exceed the capacity of surrounding accepting facilities. Therefore, Project construction would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Operation

Less than Significant Impact. As indicated in Table 5.11-2, operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would generate both hazardous and nonhazardous waste. Hazardous operational waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous operational waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous operational waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of

nonhazardous solid waste. Considering there are multiple locations that would accept anticipated operational waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would not exceed the capacity of surrounding accepting facilities. Therefore, Project operation would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

BESS

Construction

Less than Significant Impact. As indicated in Table 5.11-1, construction of the Options 1 and 2 BESS component would generate both hazardous and nonhazardous construction waste. Hazardous construction waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous construction waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous construction waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated construction waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from construction of the Options 1 and 2 BESS component would not exceed the capacity of surrounding accepting facilities. Therefore, Project construction would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Operation

Less than Significant Impact. As indicated in Table 5.11-2, operation of the Options 1 and 2 BESS component would generate both hazardous and nonhazardous waste. Hazardous operational waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous operational waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous operational waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated operational waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from operation of the Options 1 and 2 BESS component would not exceed the capacity of surrounding accepting facilities. Therefore, Project operation would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Green Hydrogen

Construction

Less than Significant Impact. As indicated in Table 5.11-1, construction of the Options 1 and 2 green hydrogen component and the alternate component site would generate both hazardous and

nonhazardous construction waste. Hazardous construction waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous construction waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous construction waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated construction waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from construction of the Options 1 and 2 green hydrogen component would not exceed the capacity of surrounding accepting facilities. Therefore, Project construction would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Operation

Less than Significant Impact. As indicated in Table 5.11-2, operation of the Options 1 and 2 green hydrogen component and the alternate component site would generate both hazardous and nonhazardous waste. Hazardous operational waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous operational waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous operational waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated operational waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from operation of the Options 1 and 2 green hydrogen component would not exceed the capacity of surrounding accepting facilities. Therefore, Project operation would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Utility Switchyard

Construction

Less than Significant Impact. As indicated in Table 5.11-1, construction of the utility switchyard would generate both hazardous and nonhazardous construction waste. Hazardous construction waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous construction waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous construction waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated construction waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from construction of the utility switchyard would not exceed the capacity of surrounding accepting facilities. Therefore, Project construction would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Operation

Less than Significant Impact. As indicated in Table 5.11-2, operation of the utility switchyard would generate both hazardous and nonhazardous waste. Hazardous operational waste would be stored on-site for less than 90 days and would be transported to a TSD facility by a licensed hazardous waste transporter. Hazardous operational waste is anticipated to be accepted by Chemical Waste Management, Inc. Kettleman Hills Facility and/or Clean Harbors Buttonwillow Landfill. Nonhazardous operational waste would be recycled or disposed of at a Class II/III landfill, 11 of which exist within a 50-mile radius of the Project site. The Project would employ third parties to manage appropriate handling and disposal of nonhazardous solid waste. Considering there are multiple locations that would accept anticipated operational waste streams, and the solid waste landfills listed in Table 5.11-3 have a collective remaining capacity of over 70 million cubic yards, waste generated from operation of the utility switchyard would not exceed the capacity of surrounding accepting facilities. Therefore, Project operation would have a less than significant impact involving solid waste recycling, disposal capacity, and impaired attainment of solid waste reduction goals.

Overall Project

Less than Significant Impact. The overall Project would generate both hazardous and nonhazardous construction and operational waste. As detailed above, multiple waste facilities would have the capacity to accommodate both construction and operational hazardous and nonhazardous waste. The Project would use third parties to manage the transportation of both hazardous and nonhazardous waste. Therefore, impacts involving the generation of solid waste that would exceed the capacity of local infrastructure would be less than significant, and no mitigation is required.

5.11.4 Cumulative Impacts

Impacts of the Project would be considered cumulatively considerable if they would have the potential to combine with other past, present, or reasonably foreseeable projects to become significant.

Overall Project

As described above, solid waste disposal facilities report substantial remaining capacity to serve the Project and cumulative projects. Similar to the Project, cumulative projects would be subject to applicable construction and operational solid waste diversion regulations. Therefore, the Project would not result in a cumulatively considerable impact related to generation of solid waste in excess of state or local standards or the capacity of local infrastructure.

Utility Switchyard

Construction and operation of the utility switchyard is considered in the cumulative impact analysis of the overall Project discussed above; therefore, similar to the overall Project, cumulative impacts related to waste management would be less than significant.

5.11.5 Laws, Ordinances, Regulations, and Standards

Nonhazardous and hazardous waste handling for 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 5.11-4 presents a summary of the LORS applicable to waste handling at the Project.

Table 5.11-4 LORS Applicable to Waste Management

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	RCRA 42 United States Code 6901, Subtitle D	Regulates design and operation of nonhazardous solid waste landfills.	Impact WM-2	Solid waste generated by the Project would be collected and disposed in accordance with Subtitle D
Federal	RCRA 42 United States Code 6901, Subtitle C	Controls storage, treatment, and disposal of hazardous waste.	Impact WM-2	Hazardous waste generated by the Project would be handled and disposed in conformance with Subtitle C
State	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	The Project would conform with CEQA, as required by the California Energy Commission's Opt-In Application process.
State	California Green Building Standards Code	Provides mandatory recycling requirements.	5.11.5	Project-generated solid waste would be recycled in accordance with CALGreen requirements for recycling percentages.
State	California Integrated Waste Management Act (CIWMA), 1989	Controls solid waste collectors, recyclers, and depositors.	Impact WM-2	Solid waste generated by the Project would be collected and disposed by a collection firm in conformance with CIWMA
State	Assembly Bill 341/State Bill 1018 Mandatory Commercial Recycling	Requires commercial businesses that generate 4 cubic yards or greater of solid waste to recycle	Impact WM-2	The Project would recycle solid waste as able, in accordance with Assembly Bill 341/State Bill 1018
State	CCR Title 22, Division 4.5	Regulations regarding environmental health standards for the management of hazardous waste and universal waste	Impact WM-2	Hazardous waste generated by the Project would be managed in conformance with CCR Title 22, Division 4.5.
State	Hazardous Waste Control Act, Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq.	Authorizes the DTSC and local certified unified program agencies (CUPAs) to regulate facilities that generate hazardous waste	Impact WM-2	Hazardous waste generated by the Project would be in conformance with the Hazardous Waste Control Act.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Local	Fresno County General Plan: Policy PF-D.5 Policy PF-D.6 Policy PF-F.1 Policy PF-F.4 Policy PF-F.5 Policy PF-F.A Policy HS-F.1 Policy HS-F.2 Policy HS-F.4 Policy HS-F.A	Requirements for safe and efficient disposal or recycling of solid waste, and requirements for facilities that handle hazardous wastes	5.11.5	Waste generated by the Project would be in accordance with requirements detailed in the Fresno County General Plan
Local	Fresno County Code of Ordinances: Chapters 8.19 through 8.25, 8.28, and 8.50	Requirements for solid waste management, disposal, transportation, and permits	5.11.5	Solid waste generated at, and transported from, the Project would be done in accordance with the Fresno County Code of Ordinances
Local	Fresno County Multi-Jurisdictional Hazard Mitigation Plan, Section 4.4	Outlines mitigation guidelines for human-caused actions resulting in technological hazard events, such as a spill.	5.11.5	The Project would conform to guidelines described in the Fresno County Multi-Jurisdictional Hazard Mitigation Plan
Local	Fresno County Public Health Services – Environmental Health Division, Solid Waste Local Enforcement Agency (LEA)	Ensures proper storage and disposal of solid waste, minimizes the presence of vectors related to solid waste handling and disposal methods, and respond to public complaints relating to solid waste in Fresno County	5.11.5 and 5.11.6	The Project would conform to the requirements of the Fresno County Solid Waste LEA

Sources: CalRecycle 2023b and 2023c; Central Valley RWQCB 2023; Fresno County 2000, 2018, 2023a, 2023b, 2023c and 2023d; Governor's Office of Planning and Research 2023; SWRCB 2023; USEPA 2023

NPDES – National Pollutant Discharge Elimination System

5.11.5.1 Federal LORS

Resource Conservation and Recovery Act

Nonhazardous Solid Waste

The State hazardous waste regulatory agency or the USEPA enforces hazardous waste laws. RCRA 42 United States Code 6901 Subtitle D assigns responsibility for the regulation of nonhazardous waste to the states (USEPA 2023).

Hazardous Waste

RCRA 42 United States Code 6901 Subtitle C establishes a "cradle to grave" system hazardous waste management by instituting controls for generation, transportation, treatment, storage, and disposal

of hazardous waste. Above certain levels of hazardous waste generated, Subtitle C applies to all states and hazardous waste generators. RCRA also establishes regulations for the generation of energetic waste (explosives) in 40 CFR Part 266, Subpart M (USEPA 2023).

5.11.5.2 State LORS

CEQA

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. Appendix G of the CEQA Guidelines includes criteria for evaluating potential impacts related to soils.

California Green Building Standards Code

The California Green Building Standards Code, also known as CALGreen, includes mandatory recycling. Code Section 5.408 requires that 65 percent of the nonhazardous waste be recycled or salvaged for reuse. Code Section 5.408.3 (Excavated soil and land clearing debris) requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled.

California Integrated Waste Management Act

The California Integrated Waste Management Act (Assembly Bill [AB] 939, Sher, Chapter 1095, Statutes of 1989 as amended [IWMA]) made all California cities, counties, and approved regional solid waste management agencies responsible for enacting plans and implementing programs to divert 25 percent of their solid waste by 1995 and 50 percent by year 2000. Later legislation mandates the 50 percent diversion requirement be achieved every year. The California Department of Resources Recycling and Recovery (CalRecycle) oversees and provides assistance to local governments as they develop and implement plans to meet the mandates of the IWMA and subsequent legislation (CalRecycle 2023b).

Assembly Bill 341/State Bill 1018 Mandatory Commercial Recycling

Mandatory Commercial Recycling was one of the measures adopted in the AB 32 Scoping Plan by the California Air Resources Board (CARB) 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 greenhouse gas (GHG) emissions. The regulation was adopted at CalRecycle's January 17, 2012, Monthly Public Meeting. And reflects the statutory provisions of AB 341 (Chesbro, Chapter 476, Statutes of 2011). 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 2023c).

California Code of Regulations Title 22 Division 4.5

The DTSC is responsible for implementation of CCR Title 22 Social Security, Division 4.5 Environmental Health Standards for the Management of Hazardous Waste. The regulations are applicable to generators, transporters, and operation of hazardous waste transfer, treatment, storage, and disposal facilities.

Hazardous Waste Control Act

The Hazardous Waste Control Act grants authority to the DTSC and local agencies (CUPAs) to implement and enforce the provisions of the California Health and Safety Code, Division 20, Chapter 6.5, which includes those provisions included in CCR Title 22.

5.11.5.3 Local LORS

Fresno County General Plan

California Senate Bill 271 Assembly Bill 2038 required that counties and cities adopt General Plan policies regarding hazardous waste. The County of Fresno's General Plan outlines requirements for safe and efficient disposal or recycling of solid waste, and requirements for facilities that handle hazardous waste. The Fresno County General Plan contains several policies that are applicable to the Project, including, but not limited to:

- **Policy PF-D.5:** The County shall promote efficient water use and reduced wastewater system demand by requiring water-conserving design and equipment in new construction; encouraging retrofitting with water-conserving devices; and designing wastewater systems to minimize inflow and infiltration, to the extent economically feasible.
- **Policy PF-D.6:** The County shall permit individual on-site sewage disposal systems on parcels that have the area, soils, and other characteristics that permit installation of such disposal facilities without threatening surface or groundwater quality or posing any other health hazards and where community sewer service is not available and cannot be provided.
- **Policy PF-F.1:** The County shall continue to promote maximum use of solid waste source reduction, reuse, recycling, composting, and environmentally safe transformation of wastes.
- **Policy PF-F.4:** The County shall ensure that all new development complies with applicable provisions of the County Integrated Waste Management Plan.
- **Policy PF-F.5:** The County shall not allow the siting of new landfills. The County shall phase out privately-owned landfills, except for inert disposal sites. The County shall not permit existing privately-owned landfills to expand beyond the current capacities, which are defined in their solid waste facility permits.
- **Program PF-F.A:** The County shall require new commercial, industrial, and multi-family residential uses to provide adequate areas on-site to accommodate the collection and storage of recyclable materials.
- **Policy HS-F.1:** The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.
- **Policy HS-F.2:** The County shall require that applications for discretionary development projects that will use hazardous materials or generate hazardous waste in large quantities include detailed information concerning hazardous waste reduction, recycling, and storage.
- **Policy HS-F.4:** For redevelopment or infill projects or where past site uses suggest environmental impairment, the County shall require that an investigation be performed to identify the potential for soil or groundwater contamination. In the event soil or groundwater contamination is identified or could be encountered during site development, the County shall require a plan that identifies potential risks and actions to mitigate those risks prior to, during, and after construction.

- **Program HS-F.A:** The County shall review discretionary uses which involve use of hazardous materials or generate hazardous wastes in regulated quantities.

Fresno County Code of Ordinances

The Fresno County Code or Ordinances Chapters 8.19 through 8.25, 8.28, and 8.50 detail the requirements for solid waste management, disposal, and transportation, and permits pertaining to waste management. These requirements include, but are not limited to:

- **Chapters 8.19 through 8.25:** These regulations pertain to solid waste management prohibitions, solid waste disposal, exclusive service areas, unauthorized dumping, recycling hauler reporting, non-exclusive waste hauler agreement programs, and construction and demolition debris disposal bans.
- **Chapter 8.28:** These regulations pertain to industrial waste. According to Chapter 8.28, it is unlawful for any person to dispose of any industrial waste other than through a sewer system operated by a public agency or other than in strict conformity with the terms of a permit therefor previously issued by the health officer. Upon application for a permit to dispose of industrial waste, the health officer shall make a full investigation of the proposal and inspect the facility, and if it is found that there will not be maintained or created a hazard to public health or a public nuisance, a permit may be approved.
- **Chapter 8.50:** The purpose of these regulations is to establish a permit and inspection fee system for certain businesses and activities, which are subject to state statutes, orders, quarantines, rules or regulations and local ordinances relating to public health.

Fresno Multi-Jurisdictional Hazard Mitigation Plan

Section 4.4 of the County of Fresno Hazard Mitigation Plan presents mitigation guidelines for human-caused actions resulting in technological hazard event, such as a spill of hazardous materials (Fresno County 2018).

Fresno County Public Health Services

Fresno County Environmental Health Services, Solid Waste LEA is responsible for ensuring proper storage and disposal of solid waste, to minimize the presence of vectors related to solid waste handling and disposal methods, and to respond to public complaints relating to solid waste in Fresno County (Fresno County 2023b).

5.11.6 Agencies and Agency Contact

The U.S. Environmental Protection Agency, DTSC, and local agencies regulate and oversee the management of waste. In general, regulations are administered by Fresno County. A summary of Agency Contacts for waste management related to the Project are provided in Table 5.11-5.

Table 5.11-5 Agency Contacts for Waste Management

Issue	Agency	Contact
Solid waste management	Fresno County Public Health Fresno County Public Works Fresno County Department of Public Health, Environmental Health Division, Solid Waste LEA	Phone: (559) 600-3271 Fax: (559) 455-4646 Email: EnvironmentalHealth@fresnocountyca.gov
Hazardous waste	DTSC and Fresno County Public Health Fresno County Public Works Fresno County Department of Public Health, Environmental Health Division (CUPA)	Phone: (559) 600-3271 Fax: (559) 455-4646 Email: EnvironmentalHealth@fresnocountyca.gov
Water impacts, discharges, stormwater	RWQCB/SWRCB	Jim Marshall, Supervising Water Resource Control Engineer; email: James.Marshall@waterboards.ca.gov; Phone: (916) 464-4772
HMBP/hazardous and nonhazardous waste	CERS/CalEPA, Fresno County, Department of Public Health, Environmental Health Division, HazMat Compliance	Email: HazMatCUPA@fresnocountyca.gov Phone: (559) 600-3271

Sources: Fresno County 2023a, 2023b, and 2023c, SWRCB 2023b

5.11.7 Permits and Permit Schedule

Permits would be obtained after project approval for temporary storage and disposal of hazardous wastes. Additional permits pertaining to waste management during Project construction and operations phases are summarized in Table 5.11-6.

Table 5.11-6 Permits and Permit Schedule for Waste Management

Permit	Schedule	Status
Waste Discharge Requirement	After project approval and prior to beginning construction	Completion upon Project approval
Hazardous Materials Business Plan (HMBP)	After project approval and prior to beginning construction. Updated/new HMBP submittal for operations phase	Completion upon Project approval

Sources: Fresno County 2023a, 2023b, 2023c, and 2023d, SWRCB 2023b

5.11.8 References

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