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4.14 WASTE MANAGEMENT

This section describes waste management associated with the Puente Power Project (P3 or project), and evaluates potential impacts of the project associated with waste management. Included in this section are descriptions of waste streams to be generated during construction and operation; waste management procedures for P3; and descriptions of applicable waste disposal sites to be used by the facility. The project area discussed in this section refers to all areas of temporary and permanent disturbance associated with the construction and operation of the new plant and ancillary systems, and construction laydown areas. No new offsite linear facilities are required for P3. The study area for waste management evaluated in this section is defined as the area in the construction footprint.

The sections below provide an overview of the affected environment; an evaluation of the environmental consequences of the proposed project from waste management; a cumulative impact analysis; identification of mitigation measures that will avoid and reduce project impacts to less-than-significant levels; and applicable laws, ordinances, regulations, and standards (LORS).

4.14.1 Affected Environment

P3 will be sited in the northern portion of the existing approximately 36-acre Mandalay Generating Station (MGS) property at 393 North Harbor Boulevard in Oxnard, Ventura County, California. MGS is designated as Assessor's Parcel Number 183-0-022-025. The site is bordered by sand dunes and the Pacific Ocean to the west; McGrath Lake State Park, and land owned by SunCal to the north; industrial uses to the north, south, and east; and agricultural uses farther to the east. The closest existing residential neighborhood is the Oxnard Shores Mobile Home Park, approximately 0.75 mile (or approximately 3,900 feet) south from the proposed P3 stack, south of West 5th Street, and west of Harbor Boulevard. The North Shore at Mandalay Bay is a proposed residential development scheduled to commence construction in 2016. The distance from P3 to the closest North Shore at Mandalay Bay development boundary is approximately 0.47 mile, or approximately 2,460 feet.

P3 will consist of a new natural-gas–fired generation facility and ancillary systems on vacant property owned by NRG California South LP at the existing MGS. MGS is an existing natural-gas–fired steam electric-generating facility. MGS currently operates two conventional steam turbine units (Units 1 and 2) and one gas combustion turbine unit (Unit 3). MGS Units 1 and 2 were constructed in the 1950s, and have a combined generating capacity of 430 megawatts (MW). Cooling water for Units 1 and 2 is ocean water conveyed via the 2.5-mile-long Edison Canal from Channel Islands Harbor. MGS discharges into the Pacific Ocean via a concrete-and-rock revetted structure at a point immediately offshore to the west of the facility. MGS has a National Pollutant Discharge Elimination System (NPDES) permit for withdrawal and discharge.

MGS Unit 3 is a natural-gas-fired unit that was commissioned in the early 1970s, and has a generating capacity of approximately 130 MW. Unit 3 will continue to operate and will not be affected by the proposed project.

4.14.1.1 Plant Site

P3 will redevelop approximately three brownfield acres of the MGS site that are not currently being used in the MGS operations. All construction laydown and parking areas will be on the MGS site. P3 will be interconnected to the existing Southern California Edison (SCE) switchyard, adjacent to the P3 site. P3 will use natural gas supplied by Southern California Gas Company, and will connect to a new gas-metering station adjacent to the project site and inside the MGS facility. Process and domestic water will be supplied by the City of Oxnard. Sanitary wastewater will be discharged to the MGS existing septic system.

MGS currently does not separate process wastewater from stormwater runoff. The stormwater and process wastewater from MGS is currently collected in two retention basins. Oil-contaminated stormwater and process drains will be collected at a central location, routed through an oil/water separator (OWS). Clear effluent will be discharged to the existing basins, where the wastewater would be discharged to the ocean through the existing outfall. Oily waste will be pumped out of the OWS, and trucked offsite. Other plant low-volume process wastewater and stormwater collected from noncontaminated areas will be collected and conveyed to the basins. A system will be installed to provide the ability to recycle stormwater to the MGS Service Water Tank. MGS currently manages discharges in compliance with the Discharge Prohibitions, Effluent Limitations, and Receiving Water Limitation specified in the Los Angeles Regional Water Quality Control Board (RWQCB) Order No. 94-131, NPDES No. CA0001180 (LARWQCB, 2001), and the MGS Storm Water Pollution Prevention Plan (SWPPP) (NRG, 2014).

The portion of the MGS property where P3 will be located was originally slated for development of future steam-generating units (MGS Units 3 and 4); however, these units were never constructed at this location. A 30-inch-diameter gas line traverses the northern portion of the site; this gas line was intended to be the gas supply for the future steam-generating units. Previous uses and activities on the northern portion of the MGS property where P3 will be constructed include the following:

- 1950s: Site grading for the original MGS construction, and installation of the 30-inch-diameter gas line.

- 1970s: Construction of the Flood Protection berm along the northern boundary of the property.

- 1970s: An insulator testing facility previously existed at the northern portion of the MGS site. The insulator test facility was constructed in 1970, and was used from 1971 to 1978. The facility was built by SCE to study mean time to flash-over rates on various insulators in a coastal environment. The facility was observed during the 1996 Phase I Environmental Site Assessment (ESA), and was reported to be 100 feet by 100 feet in size. Two transformers were observed to be used at the facility. There was no documentation regarding the removal of the insulator testing facility and associated equipment.

- 1983: Temporary storage of approximately 7,000 cubic yards of dredged spoils for the canal.

- 1996-1997: Installation of the 10-inch-diameter gas line from the gas metering station to MGS Unit 3.

- 2000: Temporary storage of approximately 7,000 cubic yards of dredged spoils from the canal.

- 2003-2005: Approximately 75,000 cubic yards of accumulated sediment from the canal were excavated and placed on the P3 site. Site preparation included excavation and placement of liner fabric. The dredged spoils were pumped into geotextile containment tubes, allowed to dry, and then hauled off to the Toland Road Landfill for disposal.

- 2011: As part of SCE's Retention Basin remediation project, the project site was used for temporary storage of contaminated soil (stored upon a plastic barrier). Gravel was placed along an access road that ran through the proposed P3 site.

A Phase I ESA of the Mandalay Generating Station Site, dated March 31, 2015, was prepared in accordance with the American Society for Testing and Materials International Practice E 1527-13 (AECOM, 2015) (Appendix M-1). The objective of the Phase I ESA was to identify recognized environmental conditions (REC) that may exist on the MGS site or the surrounding area.

At the time of the site reconnaissance, the MGS property was observed to be approximately 36 acres of land developed with an electrical power-generating station. The property was observed to include: two natural-gas–fired steam turbine units and one gas turbine peaking unit and associated powerblock equipment; an administrative building; a maintenance shop/warehouse building; numerous storage areas and buildings; three retention basins; a cooling water canal; aboveground storage tanks (ASTs); pipelines; electrical switching and transmission features; transformers; asphalt-and-concrete–paved driveways and parking lots; minor landscaped areas; and areas of undeveloped land (the P3 site). According to the Phase I ESA, the property was historically undeveloped land consisting of beach dunes. The primary construction of MGS was reported to be from 1956 to 1959, and included Units 1 and 2, and associated structures and equipment. Unit 3 was reportedly constructed in the early 1970s. Hazardous materials typical of a natural-gas–fired power plant are used at the MGS facility and stored in ASTs, drums, and small containers. Hazardous wastes typical of a natural-gas–fired power plant are generated at the facility, and accumulated in satellite accumulation areas and a central hazardous waste accumulation area.

Previous environmental investigations of the MGS facility identified known and potential subsurface impacts on the property and adjacent properties. These areas included: the onsite retention basins; fuel ASTs; the peaker unit (Unit 3) fuel pumping area; transformers and switchyards; pipelines, dredge soil piles, the powerblock perimeter; the OWS and sump; and the adjacent petroleum facility.

The Phase I ESA revealed the following RECs associated with the MGS property.

- A Final Judgment pursuant to Stipulation (Number BC 121219) (Stipulation), handed down by the Superior Court of California, Los Angeles County, on February 1, 1995, alleged that SCE had stored hazardous wastes in unpermitted surface impoundments and associated sumps. In 1995, SCE implemented a Water Quality Monitoring Program on the property. Forty-seven wells were installed at the MGS facility as part of the groundwater monitoring system for the retention basins. Field investigations have been performed in and around the retention basin site to characterize soil, soil gas, and groundwater in the areas impacted by historical boiler chemical cleaning operations. According to the approved Closure Plan, the soil at the retention basin site had been characterized as sufficient to proceed with site remediation and closure. The Closure Plan also indicated that groundwater at the retention basin site had been characterized, and the data collected were sufficient to proceed with site remediation and closure. According to a briefing report provided by Mr. Steven Rounds (MGS Case Worker with the Department of Toxic Substances Control [DTSC]) on March 6, 2015; in 2007, the Closure Plan was approved by DTSC, passed public comment period, and the approved remedy is currently being implemented. As part of the approved remedy, the DTSC gave approval for the removal of contaminated soil, which was performed in 2011. A Land Use Covenant will reportedly be put in place, restricting the use of groundwater pumped from the site. According to the DTSC EnviroStor database, the Remedial Action Completion Report is due on April 30, 2015.

- Impacts to soil were identified beneath the 21,000-barrel distillate tank on the southern boundary of the MGS property. Previous investigations of soil performed beneath and around the AST indicated that petroleum hydrocarbons were detected in soil to a maximum depth of 6 inches. The report concluded that the soil beneath the tank had been impacted with oil that was placed during construction for corrosion protection. The soil was further analyzed for waste profile characteristics, and it was reported that the soil would not be considered hazardous waste. It was recommended that petroleum-impacted soil be left in place. Based on a letter from the Los Angeles RWQCB dated May 26, 1995, the RWQCB reportedly concurred that the soil could be left in place until the tank was decommissioned and removed from the site.

- Based on past industrial practices and activities at the facility, there is the potential for subsurface impacts to areas in the MGS property that were not previously assessed and remediated. These

areas include, but are not limited to, the powerblock area around Units 1, 2, and 3, the transformer areas, former insulator test facility, pipeline areas, oil pumping areas, historical dredge spoil pile areas, the OWS and collection sump, and the AST and chemical storage areas.

- There is the potential for subsurface impacts to the MGS property from adjacent properties, including the former tank farm area to the south of the property; the petrochemical facility to the south of the property; and the SCE switchyard to the east of the property.

The P3 site consists of only a small portion of the boundary of the Phase I ESA, and is outside of the areas of identified subsurface impacts. However, based on the historic use of the property as an electrical-generating station, and the known and potential subsurface impacts identified in the Phase I ESA, there is the potential for subsurface impacts in the area of the proposed P3 site.

Impacts to soil and groundwater are currently being assessed and remediated. Closure activities associated with prior operations of retention basins and associated appurtenances on the MGS property, as described above, are not part of the proposed project. These activities are SCE's obligations under the Stipulation, and as the previous owner of the property, and include ongoing groundwater monitoring related to cleanup and closure of the three retention ponds.

4.14.1.2 Other Project Components

MGS Units 1 and 2 will be retired by the completion of commissioning of P3. The existing backup diesel generator near the warehouse building will also be retired. Approximately 500- linear feet of the abandoned 10-inch-diameter fuel-oil pipeline south of MGS Unit 2, near the water storage tanks, will be removed to make room for auxiliary equipment for P3.

The major MGS equipment and features to be repurposed for P3 are listed below:

- The existing MGS potable water and demineralized water/reverse osmosis (RO) equipment, storage tanks, and systems will be retained and used as the source for evaporative cooling water for P3's combustion turbine generator (CTG). A new 3-inch-diameter water pipeline will be installed from P3 to the point-of-contact at the existing demineralized water storage tanks.

- The existing MGS firewater pumps and tank (lower portion of the Service Water Tank) will be retained, and used to service the new facility. The firewater loop will be extended to service the new plant. The power supply to these two electric fire pumps will be changed. One pump will be connected to the new P3 switchgear, with back up from the new P3 emergency diesel generator; and one pump will be connected to MGS Unit 3, which gets its electrical feed from a separate SCE 66-kilovolt switchyard (this pump will become the emergency backup pump).

- The existing ammonia receiving and storage system and tanks will be retained and reused. The ammonia line will be extended as required to interconnect to P3's ammonia distribution system.

- A portion of the existing MGS warehouse will be reconfigured to add a control room for the new plant, including all required heating, ventilation, and air conditioning modifications.

- The existing MGS retention basins will be reused to retain stormwater from the P3 area and the rest of the MGS site, and will also store the wastewater generated from P3.

- The existing MGS administration building will continue to be used as the administration building for the new P3 facility and the existing MGS Unit 3.

- The existing MGS septic system will continue to be used.

4.14.1.3 Nonhazardous Solid Waste Disposal

Existing nonhazardous solid waste disposal facilities in the general vicinity of P3 are listed in Table 4.14-1. Several available Class III landfills listed in Table 4.14-1 accept nonhazardous wastes and inert solid wastes, including construction/demolition wastes. Liquid wastes are not accepted by these landfills. Industrial process solid waste is accepted on a case-by-case basis.

There are several soil treatment and soil recycling facilities in California that accept hydrocarbon-impacted soil that is classified by the generator as a nonhazardous waste per the Resource Conservation and Recovery Act (RCRA) and California Code of Regulations (CCR) Title 22. Acceptable levels for treatment or recycling are established by the individual facilities.

4.14.1.4 Hazardous Solid Waste Disposal

Hazardous waste generated at the P3 site will be taken off site for recycling or disposal by a permitted hazardous waste transporter to a permitted treatment, storage, and disposal facility or Class I landfill. There are several Class I landfills in California: Clean Harbors Buttonwillow Landfill in Kern County, and Chemical Waste Management's Kettleman Hills Landfill in Kings County. These landfills are described in Table 4.14-1.

4.14.1.5 Hazardous and Nonhazardous Wastewater (Noneffluent Waste Streams)

There are several California wastewater treatment and recycling facilities that accept RCRA hazardous, non-RCRA hazardous, and nonhazardous wastewater. These facilities are described in Table 4.14-1.

4.14.2 Environmental Consequences

The following sections describe the significance criteria for waste management, the wastes that are expected to be generated during construction and operation of P3, and how nonhazardous solid waste, wastewater, and hazardous solid and liquid wastes will be disposed.

4.14.2.1 Significance Criteria

The following sections evaluate the potential impacts associated with waste management from construction and operation of P3. Appendix G of the California Environmental Quality Act describes project-related effects that would normally be considered to have a significant effect on the environment. Based on this guidance, project-related waste management impacts are considered significant if the project would fail to do any of the following:

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

These criteria are evaluated below.

4.14.2.2 Construction/Demolition

P3 will generate wastes typical for the construction of natural-gas–fueled combustion power plants. Table 4.14-2 summarizes the anticipated waste streams to be generated during construction, along with appropriate management methods for treatment or disposal.

4.14.2.2.1 Demolition-Related Waste

Potential wastes generated during demolition generally include scrap metal, soil, concrete, and fuel oil residual waste. Interface with existing equipment, as well as removal of an abandoned fuel-oil pipe, will generate hazardous waste, including asbestos-containing materials (ACM) from equipment and pipeline insulation, and lead-based paint (LBP) waste from equipment and structures. As part of the remodeling for the new control room and upgrading of the administration building, windows, plumbing fixtures, and HVAC equipment will be replaced.

These wastes will be segregated, where practical, for construction and demolition (C&D) recycling. Nonrecyclable wastes will be placed in covered dumpsters and removed on a regular basis by a licensed waste-handling contractor for disposal at a Class III landfill. Nonhazardous waste generated during construction phases at the project site is not expected to significantly impact already-available landfill capacity, because landfills in the area have sufficient remaining capacity, as demonstrated in Table 14.4-1. The project will comply with federal, state, and local statutes and regulations related to solid waste. Impacts associated with the nonhazardous waste management during the construction phase would be less than significant.

4.14.2.2.2 Construction-Related Nonhazardous Solid Waste

Office waste, such as paper, aluminum, and food waste, will be generated during project construction.

Waste generated from P3 construction waste will include soil, scrap wood, excess concrete, steel, glass, plastic, paper, and insulation. Waste metals will be generated from welding/cutting operations during construction. Packing materials, and empty nonhazardous chemical containers will be generated. Aluminum waste will be generated from packing materials and electrical wiring.

These wastes will be segregated, where practical, for C&D recycling. Nonrecyclable wastes will be placed in covered dumpsters and removed on a regular basis by a licensed waste-handling contractor for disposal at a Class III landfill. As currently estimated, approximately 11,400 cubic yards will be hauled off site for reuse, recycling, and/or disposal. Disposal sites for uncontaminated soil will be selected during final design of the project's drainage plan, and may include Toland Road Landfill, Simi Landfill and Recycling Center, and/or Kettleman Hills Landfill, all of which have adequate capacity.

Nonhazardous waste generated during construction phases at the project site is not expected to significantly impact already-available landfill capacity, because landfills in the area have sufficient remaining capacity, as demonstrated in Table 14.4-1. The project will comply with federal, state, and local statutes and regulations related to solid waste. Impacts associated with the nonhazardous waste management during the construction phase would be less than significant.

4.14.2.2.3 Construction-Related Hazardous Waste

The majority of hazardous waste generated during construction/demolition will be liquid wastes such as flushing and cleaning fluids, passivating fluid (to prepare pipes for use), waste oil, and other lubricants from machinery operations; solvents used for cleaning and materials preparation; waste paints; and other material coatings, as well as residual fuel oil from the previously mentioned demolition. Some solid hazardous waste such as welding materials and dried paint from construction activities would also be generated. The quantity of welding, solvent, and paint waste is expected to be minimal.

Hazardous wastes generated during P3 construction will be handled and disposed of in accordance with applicable LORS. Hazardous wastes will either be recycled or disposed of in a licensed Class I disposal facility, as appropriate. Managed and disposed of properly, these wastes will not cause significant environmental or health and safety impacts. Most of the hazardous waste generated during construction,

such as turbine cleaning wastes and used oil, can be recycled. The small quantities of hazardous waste that cannot be recycled are not expected to significantly impact the capacity of the Class I disposal facilities in California. Therefore, impacts associated with the hazardous waste management during the construction phase would be less than significant.

4.14.2.2.4 Construction-Related Wastewater

Wastewater generated during construction will include sanitary waste, stormwater runoff, equipment washdown water, concrete washout wastewater, wastewater from pressure testing, and the gas supply line after it is constructed. These wastewaters will be classified as hazardous or nonhazardous. If hazardous, they will be collected by a licensed hazardous waste hauler for disposal at a licensed hazardous waste facility. Construction-related wastewater will be managed according to appropriate LORS. A construction SWPPP will be developed for the project. A SWPPP for construction has been prepared, and is included in Appendix A-8. Construction stormwater will be collected and disposed of according to the SWPPP for construction activities. During construction, the project will also comply with the NPDES Construction General Permit. Therefore, impacts associated with the wastewater management during the construction phase would be less than significant.

4.14.2.3 Operations

Operation of P3 will generate wastes resulting from processes, routine facility maintenance, and office activities typical of natural-gas–fueled power plant operations. The operating waste streams and management methods are summarized in Table 4.14-3, and are described in more detail below.

4.14.2.3.1 Operations-Related Nonhazardous Solid Wastes

P3 will produce maintenance and plant wastes typical of power-generating operations. The following types of nonhazardous solid waste may be generated: rags, inlet air filters, broken and rusted metal and machine parts, insulation, defective or broken electrical materials, empty containers, and other miscellaneous solid wastes, including the typical refuse generated by workers and small office operations.

Office paper, newsprint, aluminum cans, wood, insulation, yard debris, gravel, scrap metal, cardboard, glass, plastic containers, and other nonhazardous waste material will be generated during operations. Nonhazardous waste generated during operations is not expected to significantly impact already-available landfill capacity, because landfills in the area have sufficient remaining capacity, as demonstrated in Table 14.4-1. The project will comply with federal, state, and local statutes and regulations related to solid waste. Impacts associated with the nonhazardous waste management during operations would be less than significant.

4.14.2.3.2 Operations-Related Hazardous Wastes

Hazardous waste generated during P3 operation will include spent catalyst from the selective catalytic reduction (SCR) system and oxidation catalyst systems, used oil from equipment maintenance, and oil-contaminated materials such as spent oil filters, rags, or other cleanup materials. Spent catalyst will be returned to the manufacturer for metals reclamation and/or disposal, if possible. Used oil filters will be drained and disposed of at an offsite disposal facility. Used oil generated will be recycled, and hazardous wastes requiring disposal will be disposed of at a Class I waste disposal facility. Other occasional waste streams include cleanout of OWS, batteries, spent light bulbs, alkaline or acid cleaning solutions used during chemical cleaning of the CTG.

Chemical cleaning wastes consist of acid and alkaline cleaning solutions and washwater used in periodic cleaning of the CTG. These wastes, which may have elevated concentrations of metals, will be tested.

These and all other hazardous solid and liquid wastes will be disposed of in accordance with applicable LORS.

Hazardous wastes will be collected by a licensed hazardous waste hauler and disposed of at a hazardous waste facility. Hazardous wastes will be transported off site using a hazardous waste manifest. Copies of manifest reports, waste analysis, exception reports, and destruction certifications will be kept on site and accessible for inspection for 3 years. Land disposal restriction notices/certificates will be kept on site and accessible for inspection for 5 years.

Therefore, impacts associated with the hazardous waste management during P3 operations would be less than significant.

4.14.2.3.3 Operations-Related Wastewater and Stormwater

Industrial wastewater will consist of cooling tower/chillers blowdown, RO reject, condensation drains from the intercoolers, and OWS effluent. Sanitary wastewater will consist of plant and sanitary sewer waste.

Reject from the first pass RO unit will be discharged directly to the existing MGS basins, along with OWS effluent and evaporative cooler blowdown. Reject from the second pass RO will be recycled in the plant, and consequently will not generate wastewater.

The blowdown steam from the CTG evaporative cooler will be discharged to the existing MGS wastewater system. From there, it will be pumped to the existing North and South Basins and discharged to the existing outfall.

An OWS system will be installed to collect wastewater from equipment washdowns, leaks, and miscellaneous plant drains. Water from areas that may accumulate small amounts of oil and miscible chemicals will be collected in a system of floor drains, equipment drains, curbed area drains, sumps, and piping, and routed through the OWS. After passing through the OWS, water from the clear effluent chambers will be discharged to the MGS basins. OWS will be cleaned out periodically, and waste liquids and solids will be disposed of at appropriate offsite waste facilities.

The proposed project will use the existing MGS Administration Building, which has sanitary and kitchen facilities; therefore, no additional facilities are required. The existing domestic waste system collects discharge from sinks, toilets, and other sanitary facilities, and discharges to MGS' existing sanitary sewer collection system, which consists of septic tanks and leach field. The amount of domestic water used and sanitary wastewater generated is expected to support approximately the same size staff as current operations. Therefore, no modifications to the existing septic system are anticipated.

Stormwater runoff from areas that collect miscible chemicals or volatile liquids, and from areas that could collect nonmiscible oil, will be directed to a new OWS system. Oil leaks from equipment are expected to be minimal; however, all equipment that has potential for leaks of oil or hazardous chemicals will be situated in spill containment areas. The oil from the oil containment chambers of the OWS will be collected and shipped off site for recycling. After passing through the OWS, water from the clear effluent chambers will be discharged to the existing MGS basins.

The proposed project will develop approximately 3 acres of MGS property. Stormwater runoff from this northern portion of the MGS property currently does not drain into the retention basins. As shown in the preliminary site grading and drainage plan (see Figure 2.8-1), stormwater from curbed areas of the plant site will be directed to the existing North Basin and South Basin.

With the retirement of MGS Units 1 and 2, process wastewater will no longer be discharged into the retention basins. The North and South basins will be repurposed for use as retention basins. Ultimately, the collected stormwater will be discharged to the ocean via the existing outfall in accordance with MGS' existing NPDES permit. During construction, the project will also comply with the NPDES Construction General Permit.

Therefore, impacts associated with the wastewater and stormwater management during P3 operations would be less than significant.

4.14.2.4 Abandonment/Closure

Facility closure can be temporary or permanent. Temporary closure consists of a cessation in operations for a period of time greater than the time required for normal maintenance, including overhauls or replacements of major equipment. Permanent closure consists of a cessation in operations with no intent to restart operations. Temporary and permanent facility closure activities are discussed in Section 2.11. Closure activities would be conducted to ensure public health and safety; protection of the environment; and conformance with all applicable LORS. With the implementation of procedures described in Section 2.11, waste management impacts associated abandonment/closure would be less than significant.

4.14.3 Cumulative Impacts Analyses

The cumulative impact analysis area for waste management is Ventura County. Small amounts of construction waste will be generated during construction of the project, and incremental amounts of hazardous and nonhazardous waste will be generated during operation. Most of the hazardous and nonhazardous waste generated during construction and operation will be recycled. The nonhazardous waste that cannot be recycled will be disposed of in Class I and Class III landfills in California (Table 4.14-1), consistent with applicable LORS. The recycling and disposal capacities of the landfills are adequate to handle the waste generated at the project. Hazardous waste generated during construction and operations phases at P3 is not expected to significantly impact available landfill capacity, because landfills in the area have sufficient remaining capacity, as demonstrated in Table 14.4-1.

The project will generate nonhazardous solid waste that will add to the total waste generated in Ventura County and in California. However, adequate recycling and landfill capacities exist to handle the waste generated by the project, as well as additional projects in Ventura County. The majority of the waste generated during construction and operation will be recycled. The solid waste anticipated to be generated at P3 during construction and operation will be disposed as indicated in Tables 4.14-2 and 4.14-3. Approximately 514,264 tons of solid waste were reported to have been placed in landfills in Ventura County in 2014 (CalRecycle, 2015). There is considerable available capacity at area landfills, as shown in Table 4.14-4; therefore, cumulative impacts on solid waste disposal capacity are not expected to be significant, and the project's impact on cumulative solid waste disposal capacity during construction and operation will be less than significant.

The project also will generate hazardous waste that will add to the total waste generated in Ventura County and in California. Most hazardous waste generated by the project will be recycled. Hazardous waste treatment and disposal capacity in California is adequate to handle the hazardous waste generated by the project, as well as additional past, present, and reasonably foreseeable projects in Ventura County. Therefore, the project's incremental impact on cumulative hazardous waste recycling, treatment, and disposal capacity will be less than significant.

4.14.4 Mitigation Measures

The analysis of P3's effect on waste management indicates that the project will have no significant effect on waste management, and no mitigation measures are required. The Applicant, however, proposes the

following conditions of certification to minimize potential impacts and to ensure that P3 conforms to all LORS.

WM-1 Hazardous Waste-Related Training

Prior to the initiation of the project construction phase, construction employees will receive hazardous-waste-related training, focusing on the recognition of potentially hazardous building materials, subsurface soil contamination, and contingency procedures to be followed to protect worker safety and the public.

WM-2 Waste Management Program

A detailed waste management plan for all waste generated during construction will be prepared at least 60 days prior to rough grading to assure proper storage, labeling, packaging, recordkeeping, manifesting, waste minimization principles, and disposal or recycling of all hazardous materials and waste. A waste management plan will be updated for operation of P3, and will include:

- A description of each hazardous waste stream;
- Waste classification procedures;
- Waste container and label requirements;
- Accumulation, handling, transport, treatment, and disposal procedures for each waste;
- Waste minimization and recycling procedures;
- Preparedness, prevention, contingency, and emergency procedures, including in the event of an unplanned closure or planned temporary facility closure; and
- All facility employees will receive awareness training for hazardous waste segregation, accumulation, and labeling; inspection of satellite accumulation areas; spill contingencies; and waste minimization procedures in accordance with CCR Title 22.

WM-3 Hazardous Waste Storage

All hazardous wastes will be stored on site for less than 90 days (or other accumulation periods as allowed by CCR Title 22, Section 66262.34 for hazardous waste generators) and will be managed in accordance with state and federal hazardous waste generator requirements. Hazardous wastes, as well as hazardous materials that are spilled or otherwise become unsuitable for use, will be stored in an appropriately segregated hazardous waste storage area surrounded by a containment structure to control leaks and spills. The containment area will be constructed according to local codes and requirements. The hazardous waste storage area will be inspected and maintained at least weekly, as required.

WM-4 Waste Management Program

The project will comply with federal, state, and local statutes and regulations related to hazardous and nonhazardous waste. P3 will obtain a United States Environmental Protection Agency (USEPA) identification number for shipment of hazardous waste. Hazardous wastes will be collected by a licensed hazardous waste hauler and disposed of at a hazardous waste facility. Copies of manifests, waste analysis, exception reports, and destruction certifications will be kept on site and accessible for inspection for 3 years. Land disposal restriction notices/certificates will be kept on site and accessible for inspection.

WM-5 Spill Control and Management

Spill control and management procedures will be included in the facility emergency response procedures developed for the proposed P3 prior to operation. The purpose of the spill control and management procedures is to avoid accidental mixing of incompatible chemicals and spills during transfer of chemicals. The design of spill control and management procedures will include the containment, collection, and treatment systems. The spill response procedures are further discussed in Section 4.5, Hazardous Materials Handling.

WM-6 Hazardous Materials Training

P3 employees will receive hazardous materials training as required by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard. Additionally, employees will be trained in hazardous waste procedures, spill contingencies, and waste minimization procedures in accordance with CCR Title 22. Hazardous waste training includes the following subjects:

- Hazardous waste characteristics;
- Use and management of containers;
- Waste packing;
- Marking and labeling;
- Accumulation/storage areas;
- Inspections;
- Emergency equipment preparedness and prevention;
- Contingency plan;
- Emergency response procedures;
- Spill response and containment;
- Hazardous waste manifesting and transportation requirements; and
- Waste minimization practices.

Employees responsible for waste management will receive appropriate Department of Transportation, 29 and 40 Code of Federal Regulations (CFR) training.

WM-7 Procedures to Minimize Hazardous Waste Generation

Procedures to minimize hazardous waste generation will be implemented. P3 employees will continue to be trained in procedures to reduce the volume of hazardous wastes generated at P3. The procurement of hazardous materials will be controlled to minimize surplus materials on site and to prevent unused materials from becoming "off-spec." Nonhazardous materials will be used in lieu of hazardous materials whenever possible. Hazardous wastes will be recycled whenever possible. P3 will update the waste management procedures for the site and implement them for operations at P3. In addition, the Applicant will continue to implement procedures and requirements as outlined in the Hazardous Materials Business Plan. These procedures and programs will minimize potential operations-related impacts.

WM-8 Soil Management Plan

A Soil Management Plan will be developed and implemented for the construction activities of P3. The objective of the Soil Management Plan would be to provide guidance for the proper identification, handling, onsite management, and disposal of impacted soil or groundwater that may be encountered during construction activities (ground disturbance). The plan will outline guidelines for the following:

- Contaminated soil identification;
- Contaminated soil assessment;

- Construction and maintenance of contaminated soil storage areas;
- Dust control;
- Soil/waste segregation criteria; and
- Waste management procedures.

The plan will include practices that are consistent with the California Title 8, Occupational Safety and Health Administration (Cal-OSHA) regulations, as well as appropriate remediation standards that are protective of the public and the environment. Appropriately trained professionals will be on site during construction activities to monitor soil and groundwater conditions encountered. If impacted soil and/or groundwater are encountered during demolition work, work will be halted and necessary actions would be completed according to applicable LORS.

A hazardous materials consultant or trained professional such as a Professional Geologist or Professional Engineer, with suitable and applicable experience, will be available during earthwork activities to monitor soil and groundwater conditions encountered, to evaluate the absence or presence of hazardous substances associated with previous land uses. If impacted soil and/or groundwater are encountered, samples will be collected to identify the extent of contamination. In the event that contaminated soil and/or groundwater are encountered during construction, the suspect excavated soil will be stockpiled and covered on site. As required, the Certified Unified Program Agency (CUPA) and the DTSC will be notified to evaluate whether further assessment is warranted, and specify procedures for handling and disposing of contaminated soil. Contaminated soil will be removed by a licensed waste hauler to a landfill permitted to receive this type of waste.

WM-9 Demolition Hazardous Building Materials Management Plan

Prior to the commencement of any grading or demolition activity on the project site, a written Demolition Hazardous Building Materials Management Plan will be developed to include the following:

- **Lead-Based Paint Abatement and Management Plan.** Prior to demolition work that may disturb LBP, an LBP Survey and Abatement Plan will be prepared and implemented in areas that may contain LBP that would be disturbed. Elements of the plan may include the following: containment of all work areas to prohibit migration of paint chip debris; removal or encapsulation of all peeling and stratified LBP on building surfaces and on nonbuilding surfaces to the degree necessary to properly complete demolition activities per the recommendations of the survey; proper containment and disposal of intact LBP on all equipment to be cut and/or removed during demolition; provision of onsite air monitoring during abatement activities as applicable, and perimeter monitoring to ensure no contamination of work of adjacent areas, collection, segregation, and profiling waste for disposal determination; and appropriate disposal of all waste.

- **Asbestos-Containing Materials Survey and Abatement and Management Plan.** Prior to demolition work that will disturb identified ACMs, an ACM Survey and Abatement and Management Plan will be prepared. Asbestos abatement will be conducted during demolition activities, consistent with OSHA and air quality regulations, as discussed in Section 4.14.5, Laws Ordinances, Regulations, and Standards. The Management Plan will include detailed information regarding ACM classification, ACM hazard assessment (the possibility of fiber release from ACMs is based on the materials' condition, such as friability), ACM inventory information, training and qualification for workers, demolition-handling procedures, waste management and disposal procedures, and emergency response procedures (in case of a release of friable materials). A licensed asbestos abatement removal contractor will remove the ACMs under the oversight of a California Certified Asbestos Consultant. All identified ACMs will be removed and appropriately disposed of by a state-certified asbestos contractor. The proposed project will include notification of demolition activities to the Air Quality Management District.

- **Universal Waste Abatement and Management Plan.** Prior to demolition, potential mercury-containing thermostats and switches, potential polychlorinated biphenyl–containing items (i.e., light ballasts and switches), exit signs, air conditioning systems, lead-acid batteries, batteries associated with emergency lighting systems, and Freon-containing refrigeration systems may need to be removed and properly recycled or disposed by a licensed contractor.

Environmental impacts related to waste management issues caused by operation of P3 are expected to be minimal. Therefore, extensive monitoring programs are not required. Monitoring of generated waste volumes and characteristics during construction and operation of P3 will be conducted in accordance with monitoring and reporting requirements in the appropriate permits that will be obtained for operation**.**

4.14.5 Laws, Ordinances, Regulations, and Standards

P3 will be constructed and operated in accordance with all LORS applicable to waste management. Federal, state, and local LORS applicable to waste management are discussed below and summarized in Table 4.14-4, Summary of LORS-Waste Management.

4.14.5.1 Federal

4.14.5.1.1 The Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 to 6992k

RCRA provides the basic framework for federal regulation of solid wastes (nonhazardous and hazardous waste), landfills, underground storage tanks, and certain medical wastes. RCRA's Subtitle D establishes state responsibility for regulating nonhazardous wastes, including provisions for the design and operation of solid waste landfills. Subtitle C controls the generation, transportation, storage, and disposal of hazardous waste through a comprehensive "cradle to grave" system of hazardous waste management techniques and requirements. Title 40 CFR, Subchapter I, Solid Wastes, was established to implement the provisions of the RCRA statute. The regulations establish the criteria for classification of solid waste disposal facilities (landfills) hazardous waste characteristic criteria and regulatory thresholds, hazardous waste generator requirements, and requirements for the management of used oil and universal waste. USEPA is responsible for implementing the law, and the implementing regulations are set forth in 40 CFR §§ 260, et seq. The law allows USEPA to delegate the administration of the RCRA programs to the various states, provided that the state programs meet the federal requirements. California's program was authorized by the USEPA on August 1, 1992, and the DTSC is responsible for administering the program.

4.14.5.1.2 Title 49 Code of Federal Regulations, Parts 172 and 173

Title 49 CFR, Parts 172 and 173 address the United States Department of Transportation-established standards for transport of hazardous materials and hazardous wastes. The standards include requirements for labeling, packaging, and shipping of hazardous materials and hazardous wastes, as well as training requirements for personnel completing shipping papers and manifests. Section 172.205 specifically addresses use and preparation of hazardous waste manifests in accordance with CFR Title 40 § 262.20.

4.14.5.1.3 The Clean Water Act of 1971, 33 United States Code, §§ 1251 et seq.

The Clean Water Act (CWA) provides the regulatory framework for managing the discharge of wastewater to surface waters of the United States. The USEPA has nationwide authority to implement the CWA, but states may be authorized to administer various aspects of the NPDES, as well as pretreatment programs. The State of California is authorized under the CWA to administer the NPDES program, implement publicly owned treatment works' pretreatment programs, oversee federal facilities, and issue general permits.

4.14.5.1.4 Asbestos Regulations and Requirements

Federal OSHA regulates asbestos as a worker health and safety issue through the Asbestos Standards for the Construction Industry (ASCI). USEPA regulations concerning the identification, handling, management, and abatement of ACMs is found in the Asbestos Hazard Emergency Response Act (AHERA) and the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Asbestos Standard for the Construction Industry

The ASCI (29 CFR 1926.1101; 8 CCR 1529), administered by OSHA and Cal-OSHA, regulates asbestos exposure in the workplace for abatement workers and contractors. The ASCI specifies how workers and the public are to be protected during removal; provides medical surveillance requirements for workers; provides detailed requirements for how asbestos is to be removed; and defines training requirements for abatement personnel.

Building materials containing at least 1 percent asbestos are considered ACMs, and should be managed according to OSHA requirements.

AHERA Act 40 CFR 763, as implemented by USEPA, primarily pertains to the assessment and management of Kindergarten through 12-grade nonprofit schools. However, many of the procedures, training requirements, and certifications defined by AHERA have become the industry standard for all facilities.

National Emission Standard for Hazardous Air Pollutants 40 Code of Federal Regulations 61

The NESHAP is an asbestos standard that protects the general public from asbestos exposure due to demolition or demolition activities. The NESHAP requires surveys for suspect materials, notification of intent to renovate or demolish or remove regulated ACMs before demolition or demolition activities, and proper management of asbestos-containing waste.

4.14.5.1.5 Lead-Based Paint Regulations and Requirements

Federal OSHA and Cal-OSHA regulate worker exposure during construction activities that impact LBP. The Interim Final Rule found in 29 CFR Part 1926.62 covers construction work where employees may be exposed to lead during activities such as demolition and removal.

4.14.5.2 State

4.14.5.2.1 California Integrated Waste Management Act, Public Resources Code, Division 30, §§ 40000 et seq.

Nonhazardous solid waste is regulated by the California Integrated Waste Management Act (CIWMA). The CIWMA addresses the solid waste landfill diversion requirement and provides a solid waste management system to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible in an efficient and cost-effective manner that will conserve natural resources, protect the environment, and improve landfill safety. Local agencies are required to develop and establish recycling programs, reduce paper waste, purchase recycled products, and implement integrated waste management programs that conform to the state's requirements. The California Department of Resources Recycling and Recovery is responsible for managing California's solid waste stream, and protects public health and the environment by regulating waste management facilities. The City of Oxnard, Public Works Department Environmental Resources Division has the authority to verify the proper storage and disposal of solid waste.

4.14.5.2.2 California Hazardous Waste Control Law, California Health and Safety Code, §§ 25100 et seq.

RCRA allows states to develop their own programs to regulate hazardous waste. California developed its own program by passage of the California Hazardous Waste Control Law (CHWCL). The law provides the framework under which hazardous wastes must be managed in California. This law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA program. It also provides for the designation of hazardous wastes defined in California beyond the scope of RCRA, and the development of standards that are equal to, or in some cases, more stringent than federal requirements. In addition, the law specifies two hazardous waste criteria (soluble threshold limit concentration and total threshold limit concentration) that are not required under RCRA.

4.14.5.2.3 California Code of Regulations Title 22 Division 4.5

This code establishes requirements for the management and disposal of hazardous waste in accordance with the CHWCL and deferral RCRA. As with the federal requirements, waste generators must determine if their wastes are hazardous according to specified characteristics or lists of hazardous wastes. Hazardous waste generators must obtain identification numbers; prepare manifests before transporting hazardous waste off site; and use only permitted treatment, storage, and disposal facilities. Generator standards also include requirements for recordkeeping, reporting, packaging, and labeling. Additionally, California requires that hazardous waste is transported by licensed hazardous waste transporters.

4.14.5.2.4 California Health and Safety Code, Chapter 6.11

This code establishes the CUPA, which consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for hazardous materials and hazardous waste management.

4.14.5.2.5 California Code of Regulations Title 22 § 66262.34

Primary authority for the statewide administration and enforcement of California's hazardous waste laws rests with the DTSC. However, the City of Oxnard Fire Department is the CUPA for this project, and provides most regulatory functions covering hazardous waste generators. Accumulation of hazardous waste on site is regulated under this code. Hazardous waste cannot be accumulated on site for more than 90 days, so any hazardous waste stored at the project would have to be appropriately transported for recycling or disposal within that time period.

4.14.5.2.6 Porter-Cologne Water Quality Control Act, California Water Code, §§ 13000 et seq.

Wastewater is regulated under California's Porter-Cologne Water Quality Control Act, which established a statewide system for water pollution control. The State of California Water Resources Control Board and the nine RWQCBs are the principal agencies responsible for control of water quality and issuing permits under the NPDES program.

4.14.5.2.7 California Fire Code, Article 80

This article includes provisions for storage and handling of hazardous materials. Considerable overlap exists between this code and Chapter 6.95 of the California Health and Safety Code. However, the fire code contains independent provisions regarding fire protection and neutralization systems for emergency venting (§ 80.303, D, Compressed Gases). Other articles that may be applicable include Article 4, Permits; and Article 79, Flammable and Combustible Liquids.

4.14.5.3 Local

4.14.5.3.1 The City of Oxnard Demolition and Recycling, Construction and Demolition Ordinance

The C&D Ordinance requires the Applicant to minimize materials being landfilled by developing and implementing an Environmental Resources Management and Recycling C&D Plan, and to divert from disposal at least 50 percent of materials generated at the project through reuse and recycling methods. The Applicant shall include the following information in the C&D Plan: material type to be recycled, reused, salvaged, or disposed; estimated quantities to be processed; management method used; and destination of material, including the hauler name and facility location. The Environmental Resources Management and Recycling C&D Plan must be submitted and approved prior to issuance of a building permit. After completion of construction and/or demolition, the Applicant will complete the Environmental Resources Management and Recycling C&D Report and provide legible copies of weight tickets, receipts, or invoices for materials sent to disposal or reuse/recycling facilities. For other discarded or salvaged materials, the Applicant must provide documentation, on letterhead, identifying where the materials were taken, type of materials, and tons or cubic yards disposed, recycled, or reused; and identify the project generating the discarded materials. The Environmental Resources Management and Recycling C&D Report must be submitted and approved prior to issuance of a certificate of occupancy. C&D forms must be submitted to the City of Oxnard, Public Works Department, Environmental Resources Division.

4.14.5.3.2 The Ventura County CUPA

For hazardous waste, the designated CUPA for the project area is the Ventura County CUPA. The Ventura County CUPA will be contacted in the event of a release of hazardous wastes or materials to the environment. The Ventura County CUPA assumes enforcement responsibility for the implementation of Title 22 of the CCR, and regulates the generation and storage of hazardous waste for the project area. The Ventura County CUPA has a countywide Hazardous Materials (HazMat) team consisting of firefighters who have completed formal training in hazardous materials incident response. The HazMat team responds to emergencies in Ventura County to identify the type and source of hazardous material, oversee evacuation, and assist in confining the spill.

4.14.6 Involved Agencies and Agency Contacts

Agencies with jurisdiction to issue applicable permits or enforce LORS-related waste management are shown in Table 4.14-5.

4.14.7 Permits Required and Permit Schedule

P3 will apply for the following permits/approvals: Hazardous Waste Generator ID Number with DTSC; a Hazardous Material Business Plan with Ventura County CUPA; and an Environmental Resources Management and Recycling C&D Plan with the City of Oxnard, Public Works Department Environmental Resources Division. A summary of applicable permits and related reporting requirements is presented in Table 4.14-6.

4.14.8 References

AECOM, 2015. Phase I Environmental Site Assessment. March.

CalRecycle (California Department of Resources Recycling and Recovery), 2015. Information from the Solid Waste Information System (SWIS) Database. Available online at: http://www.calrecycle.ca.gov/swfacilities/directory/Search.aspx.

LARWQCB (Los Angeles Regional Water Quality Control Board), 2001. Information regarding MGS' NPDES permit from State SWRCB website. Available online at: http://www.swrcb.ca.gov/losangeles/.

NRG, 2014. Stormwater Pollution Prevention Plan for the Mandalay Generating Station.

Table 4.14-1
Waste Recycling/Disposal Facilities

Solid Recycling/Waste Disposal Site	Title 23 Class	Permitted Throughput	Permitted Capacity	Remaining Capacity	Estimated Closure Date	Enforcement Action Taken?
Toland Road Landfill 3500 North Toland Road, Santa Paula, CA	III	1,500 tons/day	30 million cubic yards	21.983 million cubic yards	2027	No
Simi Valley Landfill and Recycling Center 2801 Madera Road, Simi Valley, CA	III	9,250 tons/day	119.6 million cubic yards	119.6 million cubic yards	2052	No
Chemical Waste Management Kettleman Hills Landfill (Industrial Waste) 35251 Old Skyline Road Kettleman City, CA 93239	III	2,000 tons/day	18.4 million cubic yards	17.469 million cubic yards	Not Available	No
Clean Harbors Buttonwillow Landfill (Solid Disposal) 2500 West Lokern Road Buttonwillow, CA 93206	I	10,500 tons/day	13,250 cubic yards	Not Available	2040	No
Del Norte Regional Recycling and Transfer Station 111 S. Del Norte Boulevard Oxnard, CA 93030	Not Applicable	Not Available	Not Available	Not Applicable	Not Available	No
American Remedial Technologies (Solid Recycling) 2680 Seminole Avenue Lynwood, CA 90262	Not Applicable	Not Available	Not Available	Not Applicable	Not Available	No
Soil Safe-Adelanto 12328 Hibiscus Avenue Adelanto, CA 92301	Not Applicable	Not Available	Not Available	Not Applicable	Not Available	No
DeMenno/Kerdoon (Liquid Recycling) 2000 North Alameda Street Compton, CA 90222	Not Applicable	Not Available	Not Available	Not Applicable	Not Applicable	No

Source: CalRecycle, Solid Waste Information System Database, 2015

Table 4.14-2
Summary of Anticipated Construction Waste Streams and Management Methods

Waste Stream	Anticipated Waste Stream Classification	Estimated Quantity	Estimated Frequency of Generation	Waste Management Method	
				Onsite	Offsite Treatment
Demolition					
Soil from excavations	Nonhazardous	11,400 cubic yards	Once during demolitions	Stockpile/Load in Trucks	Recycle and/or Class II/III landfill disposal
Residual fuel oil from pipeline	Hazardous	3,000 to 5,000 gallons	Once during demolition	Accumulate for less than 90 days	Recycle
Abandoned 10-inch-diameter fuel oil pipeline	Hazardous/ Nonhazardous	500 linear feet	Once during demolition	Accumulate for less than 90 days	Dispose at Class I or Class II landfill
Demolition waste from control room administration building (i.e., windows, plumbing fixtures, and HVAC equipment)	Hazardous/ Nonhazardous	TBD	Once during demolition	Accumulate for 90 days or recycle	Dispose at Class I, II, or III landfill, or recycle
Waste ACM	Hazardous	TBD[1]	Once during demolition	Accumulate for less than 90 days	Dispose at Class I landfill
Waste LBP	Hazardous	TBD[1]	Once during demolition	Accumulate for less than 90 days	Dispose at Class I landfill
Construction					
Scrap wood, steel, glass, plastic, paper, calcium silicate insulation, mineral wool insulation, cardboard, and corrugated packaging.	Nonhazardous solids	60 cubic yards	Weekly	Containerize, housekeeping	Recycle and/or Class II/III landfill disposal
Empty hazardous material containers	Hazardous solids	Less than 1 cubic yard	Weekly	Store for less than 90 days	Recycle and/or Class I/II landfill disposal

Table 4.14-2
Summary of Anticipated Construction Waste Streams and Management Methods (Continued)

Waste Stream	Anticipated Waste Stream Classification	Estimated Quantity	Estimated Frequency of Generation	Waste Management Method	
				Onsite	Offsite Treatment
Spent welding materials	Hazardous solid	Less than 1 cubic yard	Monthly	Containerize	Dispose at Class I landfill
Drained waste oil filters	Hazardous solid	75 pounds	Monthly	Containerize	Dispose at Class II landfill
Used and waste lube oil during CTG lube oil flushes	Hazardous or nonhazardous liquids	20,000 gallons	360 drums over life of construction	Store for less than 90 days	Oil will be used for first fill after CTG flushes are complete.
Oil rags and oil absorbent generated during normal construction activities, excluding lube oil flushes	Hazardous solids	Less than 2 cubic yards	Monthly	Store for less than 90 days	Oily rags would be recycled. Class I landfill disposal for other solids.
Solvents, paint, adhesives and aerosols	Hazardous liquids	2 drums	Monthly	Store for less than 90 days	Recycle or disposal at TSDF.
Spent lead acid batteries	Hazardous solids	2 batteries	Yearly	Store for less than 1 year	Recycle

Notes:

[1] Quantities of waste ACM and LBP are expected to be minimal.

ACM = asbestos-containing material
CTG = combustion turbine generator
HVAC = heating, ventilation, and air conditioning
LBP = lead-based paint
N/A=not applicable
TSDF = treatment, storage, and disposal facility

Table 14.4-3
Summary of Anticipated Operating Waste Streams and Management Methods

Waste Stream	Waste Stream Classification	Estimated Amount	Estimated Frequency of Generation	Waste Management Method	
				Onsite	Offsite Treatment
Used lubricating oil/oil solvents from small leaks and spills from turbine lubricating oil system	Hazardous liquid	800 pounds	Yearly	Store for less than 90 days	Recycle
Used lubricating oil filters from turbine lubricating oil system	Hazardous solids	1,100 pounds	Yearly	Store for less than 90 days	Disposal of drained filters to a Class II landfill
Used lubricating oil from maintenance of turbine equipment	Hazardous liquid	4,400 pounds	Yearly	Store for less than 90 days	Recycle
Solvents, paint and adhesives	Hazardous liquid	60 pounds	Monthly	Store for less than 90 days	Disposal to a licensed TSDF
Laboratory analysis waste from water treatment	Hazardous solids	60 gallons	Yearly	Store for less than 90 days	Disposal to a licensed TSDF
Spent SCR catalyst (heavy metals, including vanadium)	Hazardous solids	50 to 55 tons	Every 7 to 10 years	Removed to truck by licensed contractors	Recycled by SCR manufacturer or disposed in Class I landfill
Spent CO catalyst (heavy metals)	Hazardous solids	9 to 10 tons	Every 7 to 10 years	Store for less than 90 days	Recycled by manufacturer
RO water treatment – first pass reject	Nonhazardous solids	774,000 gallons	Yearly	Stored in North and South Basins	Discharged per MGS NPDES permit to Pacific Ocean

Table 14.4-3
Summary of Anticipated Operating Waste Streams and Management Methods
(Continued)

Waste Stream	Waste Stream Classification	Estimated Amount	Estimated Frequency of Generation	Waste Management Method	
				Onsite	Offsite Treatment
Spent lead acid batteries	Hazardous solids	6 batteries	Lead Acid – Yearly	Store for less than 1 year	Recycle
Spent alkaline batteries	Hazardous solids	10 pounds	Alkaline – Monthly	Store for less than 1 year	Disposal to a licensed TSDF
Unbroken fluorescent bulbs, mercury vapor lamps	Hazardous solids	15 pounds 30 pounds	Yearly	Store for less than 1 year	Reclaim mercury; disposal to a licensed TSDF
Broken fluorescent bulbs	Hazardous solids	Less than 10 pounds	Monthly	Store for less than 90 days	Disposal to a licensed TSDF
Waste oil from oil-water separator	Hazardous liquid	Less than 2 U.S. gallons	Daily	Store for less than 90 days	Recycle
Oily rags, oil absorbent from CTG and other users of hydraulic actuators and lubricants	Hazardous solids	100 pounds (approximately 250 rags)	Weekly	Store for less than 90 days	Oily rags would be recycled Class I landfill disposal for other solids
Chemical feed area drainage (spillage, tank overflow, or area washdown water)	May be hazardous if high or low pH	Minimal	Yearly	If contamination is suspect, immediately contain. Store onsite for less than 90 days or trucked offsite.	Test prior to discharge. If nonhazardous, discharge to ZLD. If hazardous, drummed or tanker trucked to a licensed TSDF

Table 14.4-3
Summary of Anticipated Operating Waste Streams and Management Methods
(Continued)

Waste Stream	Waste Stream Classification	Estimated Amount	Estimated Frequency of Generation	Waste Management Method	
				Onsite	Offsite Treatment
CTG used air filters	Nonhazardous solids	Several hundred filters	Every 5 years	Store for less than 90 days	Recycle/Class II/III landfill disposal
CTG water wash	Hazardous or nonhazardous liquids	2,500 U.S. gallons	Quarterly	Sample. Store hazardous portion for less than 90 days	Test prior to discharge. Dispose to a TSDF if hazardous
Hydraulic Fluid	Hazardous	<50 gallons	Yearly	Store for less than 90 days	Recycle
Sanitary wastewater	Nonhazardous liquids	1,440 U.S. gallons	Daily	N/A	Discharge to MGS septic system
Stormwater	Nonhazardous liquids	220,000 U.S. gallons	For a once in 2 year, 24-hour storm event (based on 3-acre P3 site)	Stormwater program	Stormwater collected from curbed areas of P3, conveyed to retention basins and discharged to Pacific Ocean

Notes:

CO = carbon monoxide
CTG = combustion turbine generator
MGS = Mandalay Generating Station
NPDES = National Pollutant Discharge Elimination System
P3 = Puente Power Project
RO = reverse osmosis
SCR = selective catalytic reduction
TBD = to be determined
TSDF = treatment, storage, and disposal facility
ZLD = zero liquid discharge

Table 4.14-4
Summary of LORS – Waste Management

Laws, Ordinances, Regulations, and Statutes	Administering Agency	Applicability	Application for Certification Section
Federal			
RCRA Subtitle C and D; 42 USC §§ 6901 to 6992k, § 6.12.2.1.	Cal/EPA, DTSC	Regulates solid waste (nonhazardous and hazardous wastes). Regulates design and operation of solid waste landfills and underground storage tanks. The statute also addresses program administration, implementation, and delegation to states, enforcement actions, as well as research, training, and grant funding provisions.	4.14.5.1
40 CFR § 260 et seq.	DTSC	Implementing regulations for RCRA Subtitle C law. Implemented through USEPA delegation to the state.	4.14.5.1
49 CFR, Parts 172 and 173	DOT	Regulates the DOT-established standards for transport of hazardous materials and hazardous wastes.	4.14.5.1
CWA of 1971, 33 USC § 1251 et seq.	RWQCB	Regulates wastewater discharges to surface waters of the U.S. The NPDES program is administered at the state level.	4.14.5.1
ASCI (29 CFR 1926.1101); 8 CCR 1529	OSHA and Cal-OSHA	Regulates asbestos exposure in the workplace for abatement workers and contractors.	4.14.5.1
AHERA Act 40 CFR 763	USEPA/APCD	Industry standard for assessment and management of asbestos.	4.14.5.1
NESHAP 40 CFR 61	USEPA/APCD	An asbestos standard that protects the general public from asbestos exposure due to demolition or demolition activities.	4.14.5.1
Interim Final Rule 29 CFR Part 1926.62	OSHA and Cal-OSHA	Regulates worker exposure during construction activities that impact LBP during activities such as demolition and removal.	4.14.5.1
State			
Warren-Alquist State Energy Resources Conservation and Development Act, California PRC § 25000, et seq.	CEC	Gives the CEC licensing authority in lieu of state, regional, and local permits and requirements.	4.14.5.2

Table 4.14-4
Summary of LORS – Waste Management (Continued)

Laws, Ordinances, Regulations, and Statutes	Administering Agency	Applicability	Application for Certification Section
CEQA California PRC, Division 13, §§ 21000-21177, as amended 2010.	CEC	Requires state and local agencies to identify and reduce, if feasible, the significant negative environmental impacts of land use decisions.	4.14.5.2
CIWMA, PRC § 40000 et seq.	CalRecycle	Implements RCRA regulations for nonhazardous waste. The CIWMA addresses the solid waste landfill diversion requirement, and provides a solid waste management system to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible, in an efficient and cost-effective manner that will conserve natural resources, protect the environment, and improve landfill safety.	4.14.5.2
CHWCL, California Health and Safety Code §§ 25100 et seq.	DTSC	Creates the framework under which hazardous waste must be managed in California. Regulates hazardous waste handling, storage, and disposal.	4.14.5.2
22 CCR Division 4.5	Ventura County CUPA – City of Oxnard Fire Department	These regulations establish requirements for the management and disposal of hazardous waste in accordance with the provisions of CHWCL and federal RCRA requirements. Hazardous waste generators must obtain identification numbers; prepare manifests before transporting hazardous waste off site; and use only permitted TSDFs. Generator standards also include requirements for recordkeeping, reporting, packaging, and labeling. Additionally, California requires that hazardous waste be transported by licensed hazardous waste transporters.	4.14.5.2
CHSC, Chapter 6.11 Unified Hazardous Waste and Hazardous Materials Management Regulatory Program	Ventura County CUPA – City of Oxnard Fire Department	The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for hazardous materials and hazardous waste.	4.14.5.2

Table 4.14-4
Summary of LORS – Waste Management (Continued)

Laws, Ordinances, Regulations, and Statutes	Administering Agency	Applicability	Application for Certification Section
Porter-Cologne Water Quality Control Act of 1998, Water Code §§ 13000 et seq.	SWRCB	Regulates wastewater discharges to surface water and groundwater of California. NPDES program implemented by SWRCB.	4.14.5.2
California Fire Code	City of Oxnard Fire Department	Controls the storage of hazardous materials and wastes.	4.14.5.2
Local			
Demolition and Recycling, C&D	City of Oxnard, Public Works Department Environmental Resources Division	Requires applicant to minimize materials being landfilled by developing and implementing an Environmental Resources Management and Recycling C&D Plan.	4.14.5.3
CUPA	Ventura County CUPA-City of Oxnard Fire Department	Assumes enforcement responsibility for the implementation of Title 22 of the CCR and regulates the generation and storage of hazardous waste for Ventura County.	4.14.5.3

Notes:

AHERA = Asbestos Hazard Emergency Response Act
APCD = Air Pollution Control District
ASCI = Asbestos Standards for the Construction Industry
C&D = Construction and Demolition
Cal/EPA = California Environmental Protection Agency
Cal-OSHA = California OSHA
CalRecycle = California Department of Resources Recycling and Recovery
CCR = California Code of Regulations
CEC = California Energy Commission
CEQA = California Environmental Quality Act
CHWCL = California Hazardous Waste Control Law
CHSC = California Health and Safety Code
CIWMA = California Integrated Waste Management Act
CUPA = Certified Unified Program Agency
CWA = Clean Water Act
DOT = United States Department of Transportation
DTSC = Department of Toxic Substances Control
LBP = lead-based paint
NESHAP = National Emission Standard for Hazardous Air Pollutants
NPDES = National Pollutant Discharge Elimination System
OSHA = Occupational Health and Safety Administration
PRC = Public Resources Code
RCRA = Resource Conservation and Recovery Act
RWQCB Regional Water Quality Control Board
SWRCB = State of California Water Resources Control Board
TSDF = treatment, storage, and disposal facilities
USC = United States Code
USEPA = United States Environmental Protection Agency

Table 4.14-5
Involved Agencies and Agency Contacts

Issue	Agency	Contact/Title	Telephone	E-mail
Hazardous Waste Generator Requirements	Department of Toxic Substances Control (DTSC)	DTSC Duty Officer – Andre Amy-Chatsworth Office	(818) 717-6581	aamy@dtsc.ca.gov
Hazardous Materials Business Plan	Ventura County Certified Unified Program Agency – City of Oxnard Fire Department	Miguel Trujillo	(805) 385-8364	oxnard_fire@ci.oxnard.ca.us
Environmental Resources Management and Recycling Construction and Demolition Plan	City of Oxnard, Public Works Department, Environmental Resources Division	Jay Duncan, Recycling Manager	(805) 385-8059	Jay.duncan@ci.oxnard.ca.us

Table 4.14-6
Waste Management Permits Required and Permit Schedule

Responsible Agency	Permit/Approval	Schedule
Department of Toxic Substances Control	Hazardous Waste Generator ID Number	30 days prior to construction
City of Oxnard, Public Works Department Environmental Resources Division	Environmental Resources Management & Recycling C&D Plan	Prior to issuance of building permit
City of Oxnard, Public Works Department Environmental Resources Division	Resources Management & Recycling C&D Report	Prior to occupancy
Ventura County CUPA –City of Oxnard Fire Department	Hazardous Materials Business Plan	30 days prior to construction
Ventura County CUPA – City of Oxnard Fire Department	Emergency Response Contingency Plan Form	30 days prior to construction