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4.5 Hazardous Materials and Waste Management

4.5.1 Introduction

This section describes the proposed hazardous materials and waste management system for the proposed PRP, a natural-gas-fired, simple-cycle, nominal 100-MW (net) electrical generating plant that will be constructed at the current location of the San Gabriel Facility, an existing and operating power plant in Pomona, California. This analysis considers both construction and operations of the facility.

4.5.2 Laws, Ordinances, Regulations, and Standards

The storage and use of hazardous materials and the generation of wastes at PRP are governed by federal, state, and local LORS.

4.5.2.1 Federal LORS

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act (CERCLA/SARA):

- **Section 302**—Requires one-time notification when Extremely Hazardous Substances (EHSs) are present in excess of their threshold planning quantities (TPQs). EHSs and their TPQs are found in Appendices A and B to 40 C.F.R. Part 355.
- **Section 304**—Requires immediate notification to the Local Emergency Planning Committee (LEPC) and the State Emergency Response Commission (SERC) when a hazardous material is released in excess of its Reportable Quantity (RQ). If a CERCLA-listed hazardous substance RQ is released, notification must also be given to the National Response Center in Washington, D.C. (RQs are listed in 40 C.F.R. Part 302, Table 302.4). These notifications are in addition to notifications given to the local emergency response team or fire personnel.
- **Section 311**—Requires that either Safety Data Sheets (SDSs) for all hazardous materials or a list of all hazardous materials be submitted to the SERC, LEPC, and local fire department.
- **Section 313**—Requires annual reporting of hazardous materials released into the environment either routinely or as a result of an accident.

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

Clean Water Act. The Spill Prevention, Control, and Countermeasure (SPCC) rule under CWA is designed to prevent or contain the discharge or threat of discharge of oil into navigable waters or adjoining shorelines. Regulations (40 C.F.R. Section 112) under the CWA require facilities to prepare a written SPCC plan if they store oil and its release would pose a threat to navigable waters. The SPCC rule may be applicable if a facility has a single oil aboveground storage tank (AST) with a capacity greater than 660 gallons, total petroleum storage (including ASTs, oil-filled equipment, and drums) greater than 1,320 gallons, or underground storage capacity greater than 42,000 gallons.

Resource Conservation and Recovery Act. The federal statute that controls nonhazardous and hazardous solid waste is the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. Section 6901, et seq.). RCRA's implementing regulations are found in 40 C.F.R. 260, et seq. Subtitle D assigns responsibility for the regulation of nonhazardous waste to the states; federal involvement is limited to establishing minimum criteria that prescribe the best practicable controls and monitoring requirements for solid waste disposal facilities. Subtitle C controls the generation, transportation, treatment, storage,

and disposal of hazardous waste through a comprehensive “cradle-to-grave” system of hazardous waste management techniques and requirements. It applies to all states and to all hazardous waste generators (above certain levels of waste produced). PRP will conform to this law in its generation, storage, transport, and disposal of any hazardous waste generated at the facility.

Natural Gas Pipeline Construction and Safety. Title 40 of the C.F.R., Parts 190 through 192, specifies safety and construction requirements for natural gas pipelines. Part 190 outlines pipeline safety procedures, Part 191 requires a written report for any reportable incident, and Part 192 specifies minimum safety requirements for pipelines.

4.5.2.2 State LORS

Health and Safety Code Section 25500 and Related Regulations in the California Code of Regulations. California Health and Safety Code, Section 25500, et seq., and the related regulations in Cal. Code Regs. (Title 19 Section 2620, et seq.), require local governments to regulate local business storage of hazardous materials in excess of certain quantities. The law also requires that entities storing hazardous materials be prepared to respond to releases. Those using and storing hazardous materials are required to submit a HMBP to their local Certified Unified Program Agency (CUPA) and to report releases to their CUPA and the State Office of Emergency Services.

Health and Safety Code Section 25531 (California Accidental Release Program). California Health and Safety Code, Section 25531, et seq., and the California Accidental Release Prevention (CalARP) regulate the registration and handling of regulated substances. Regulated substances are any chemicals listed by the California Environmental Protection Agency as part of its implementation of the CAA. Health and Safety Code Section 25531 overlaps or duplicates some of the requirements of SARA and the CAA. Facilities handling or storing regulated substances at or above TPQs must register with their local CUPA and may be required to prepare an RMP, formerly known as a Risk Management and Prevention Plan.

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

Safe Drinking Water and Toxics Enforcement Act (Proposition 65). This California law (Health and Safety Code Sections 25249.5 et seq.) requires the state to identify chemicals that cause cancer and reproductive toxicity, contains requirements for informing the public of the presence of these chemicals, and prohibits discharge of the chemicals into sources of drinking water. Lists of the chemicals of concern are published and updated periodically by OEHHA.

Natural Gas Pipeline Construction and Safety. The CPUC enforces GO-58-A, which specifies standards for natural gas service in the State, and GO-112-E, which specifies rules governing the design, construction, testing, operation, and maintenance of natural gas gathering, transmission, and distribution piping systems.

California Vehicle Code Section 32100.5. The California Vehicle Code (Cal. Veh. Code) Section 32100.5 regulates the transportation of hazardous materials that pose an inhalation hazard. Aqueous ammonia will be delivered to the facility and transported in accordance with this section by following the designated access routes.

California Hazardous Waste Control Law. RCRA allows states to develop their own programs to regulate hazardous waste. The programs must be at least as stringent as RCRA. California has developed its own program in the Hazardous Waste Control Law (HWCL) (Health and Safety Code Section 25100, et seq.).

Because California has elected to develop its own program, HWCL performs essentially the same regulatory functions as RCRA and is the law that will regulate hazardous waste at PRP.

Porter-Cologne Water Quality Control Act. Wastewater is regulated by the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) under the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Sections 13000 et seq.).

California Integrated Waste Management Act. Nonhazardous waste is regulated by California Integrated Waste Management Act of 1989, found in Cal. Pub. Res. Code Section 40000, et seq. This law provides an integrated statewide system of solid waste management by coordinating state and local efforts in source reduction, recycling, and land disposal safety. Counties are required to submit Integrated Waste Management Plans to the state. This law directly affects Los Angeles County and the solid waste hauler and disposer that will collect PRP solid waste. It also affects PRP to the extent that hazardous wastes are not to be disposed of along with solid waste.

4.5.2.3 Local LORS

The LACFD is the designated CUPA and is responsible for administering HMBPs, Hazardous Materials Management Plans, SPCC Plans, and RMPs filed by businesses located in the county (CH2M, 2015b).

The City of Pomona Municipal Code identifies LACFD as the CUPA. The ordinance closely follows and cites the state Health and Safety Code requirements.

All hazardous materials used and wastes generated by PRP will be managed in a manner consistent with applicable LORS.

4.5.3 Environmental Setting

The project consists of installing and operating a nominal 100-MW (net) output simple-cycle power plant using one GE LMS100 gas-fired turbine. The balance of plant equipment will include natural gas compressors, water treatment facilities, emergency services, an administration/ maintenance building, and a cooling tower to provide gas turbine compressor inter-stage and auxiliary cooling.

PRP will include the removal of the existing LM5000 gas turbine currently in operation. Demolition of the existing facility will provide the space required for the construction of PRP. Demolition and construction of the power plant is expected to take approximately 20 months. PRP will use the existing supply and discharge lines for: natural gas, potable water supply, recycled water supply, process wastewater and sanitary wastewater.

PRP will use the existing 66-kV Simpson transmission line connected to SCE's 66-kV Ganesha-Simpson transmission line. The existing poles will be upgraded with about 0.2 mile of new conductors to handle the additional power generated by the LMS100.

4.5.3.1 Hazardous Materials

A list of hazardous materials to be used at the PRP site is presented in Table 4.5-1. As with the existing San Gabriel Facility, PRP will continue to use 19 percent aqueous ammonia for emission reduction. PRP will replace the existing 10,000-gallon vertical ammonia storage tank with a 10,000-gallon horizontal tank. (Figure 2.1-1 shows the location of the aboveground aqueous ammonia storage tank.) The combustion turbine will contain hydraulic and lubricating oils. In addition, the project will store small amounts of various water treatment chemicals in portable containers.

Table 4.5-1. Hazardous Materials at PRP*Small Power Plant Exemption Application for the Pomona Repower Project*

Chemical	Use	Quantity	Storage Location
Aqueous ammonia (19 percent)	Control NO _x emissions through SCR	10,000 gal	Ammonia Storage Tanks
Anti-scalant (e.g., NALCO PermaTreat® PC-191T)	Inhibit mineral scale in reverse osmosis microfiltration membranes	250 gal	Water treatment building, chemical storage tote
Battery electrolyte	UPS and emergency shutdown battery array	200 gal	Battery rooms
Cleaning chemicals/detergents	Periodic cleaning of combustion turbine	100 gal	Chemical storage tote or drums in onsite warehouse
Cleaning chemicals / detergents for membrane-based water treatment systems* (e.g., NALCO PermaClean® PC-77, NALCO PermaClean® PC-40, and NALCO PermaClean® PC-98)	Periodic cleaning of reverse osmosis (RO), microfiltration (MF), and EDI systems	250 gal	Water treatment building
Sanitization chemicals for membrane-based (MF/RO/EDI) water treatment systems (e.g., NALCO PermaClean® PC-11)	Periodic cleaning of accumulated biofilms on the membranes of the RO, MF, and EDI systems	250 gal	Water treatment building
Diesel No. 2	Fuel for onsite equipment	400 gal	Double-walled tank in appropriate location
Hydraulic fluid	Portable equipment in shop	600 gal	Shop
Laboratory reagents	Water/wastewater laboratory analysis	20 gal	Chemical storage cabinets (stored in original chemical storage containers/bags) in lab areas located in water treatment building
Lubrication oil	Lubricate rotating equipment (e.g., combustion turbine bearings)	6,250 gal	Lubricating oil reservoirs adjacent to the combustion turbine
Mineral insulating oil	Transformers	20,000 gal	Contained within transformers and drum storage in lubricant storage shed
Waste oil	Vehicle and small equipment oil changes	50 gal	Waste oil storage tank in warehouse
Sodium bisulfite (NaHSO ₃) (e.g., NALCO PermaCare® PC-7408)	Reduce oxidizers in RO feed to protect the RO membranes	250 gal	Water treatment building
Sulfuric acid (93 percent)	Cooling tower alkalinity control and polisher regeneration and scale control in brine evaporator/crystallizer unit	550 gal	Water treatment building

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Chemical	Use	Quantity	Storage Location
Sodium hydroxide (NaOH) solution (20 to 50 percent)	pH neutralization and polisher regeneration	550 gal	Water treatment building
Sodium hypochlorite (12.5 percent trade)	Fire/service water storage tank biological control, MF system membrane cleaning, Wet surface air cooler biocide	4,000 gal	Near water storage tank
Hydrochloric acid	MF system membrane cleaning	550 gal	MF treatment area
Sodium nitrite	Closed loop cooling corrosion inhibitor	55 lb	Warehouse
Proprietary corrosion/scale inhibitor (e.g., NALCO 356, Tri-act 1800)	Closed loop cooling corrosion/scale inhibitor	550 gal	Warehouse
Proprietary non-oxidizing biocide (e.g., NALCO 7330)	Evaporative fluid cooler / cooling tower non-oxidizing biocide	2,000 gal	Adjacent to the evaporative fluid cooler
Propylene glycol	Closed loop wetting agent/antifreeze	7,500	Cooling loop
Sulfur hexafluoride	Circuit breakers	200 lb	Switchyards
Acetylene	Welding gas	540 cubic feet	Maintenance / warehouse building
Oxygen	Welding gas	540 cubic feet	Maintenance / warehouse building
Propane	Torch gas	150 lb	Maintenance / warehouse building
USEPA Protocol gases	Calibration gases	< 100 cubic feet	CEMS enclosures
Cleaning chemicals	Cleaning	Varies (less than 25 gallons of liquids or 100 pounds of solids for each chemical)	Admin / control building, maintenance / warehouse building
Paint	Touchup of painted surfaces	Varies (less than 25 gallons of liquids or 100 pounds of solids for each chemical)	Maintenance / warehouse building

*Water treatment system is a combination of reverse osmosis and deionization equipment.

Note:

RO = reverse osmosis

4.5.3.2 Waste Generation

A summary of wastes produced at PRP and the manner in which they will be handled is presented in Table 4.5-2.

Table 4.5-2. Waste Management Methods*Small Power Plant Exemption Application for the Pomona Repower Project*

Waste	Origin	Composition	Estimated Quantity	Classification	Disposal
Scrap wood, glass, plastic, paper, calcium silicate insulation, and mineral wool insulation	Construction	Normal refuse	15 tons	Nonhazardous	Recycle and/or dispose of in a Class II or III landfill
Scrap metals (including steel from welding/ cutting operations, packing materials)	Construction	Parts, containers	7 tons	Nonhazardous	Recycle and/or dispose of in a Class III landfill
Concrete	Construction	Concrete	10 tons	Nonhazardous	Recycle and/or dispose of in a Class III landfill
Empty liquid material containers	Construction	Drums, containers, totes	2 cu yd/week	Nonhazardous solids	Containers < 5 gallons will be disposed as normal refuse. Containers > 5 gallons will be returned to vendors for recycling or reconditioning.
Spent welding materials, i.e., welding rods	Construction	Solid	100 lb/month	Nonhazardous	Recycle with vendors or dispose at a Class I landfill if hazardous
Waste oil filters	Construction equipment and vehicles	Solid	100 lb/month	Nonhazardous	Recycle at a permitted TSDF
Used and waste lube oil	CTG and STG lube oil flushes	Hydrocarbons	15 drums/ life of project construction	Hazardous	Recycle at a permitted TSDF
Oily rags, oil sorbent excluding lube oil flushes	Cleanup of small spills	Hydrocarbons	2 to 3, 55-gal drums/life of project construction	Hazardous	Recycle or dispose at a permitted TSDF
Solvents, paint, adhesives	Maintenance	Varies	3 gal/week	Hazardous	Recycle at a permitted TSDF
Spent lead acid batteries	Construction equipment, trucks.	Heavy metals	2 batteries / year	Hazardous	Store no more than 10 batteries (up to one year) then recycle offsite
Spent alkaline batteries	Equipment	Metals	60 batteries / month	Universal Waste solids	Recycle or dispose offsite at a Universal Waste Destination Facility
Waste oil	Equipment, vehicles	Hydrocarbons	20 gal/week	Non-RCRA Hazardous Liquid	Dispose at a permitted TSDF
Sanitary waste	Portable toilet holding tanks	Sewage	1500 gal/week	Nonhazardous Liquid	Remove by contracted sanitary service

Table 4.5-2. Waste Management Methods*Small Power Plant Exemption Application for the Pomona Repower Project*

Waste	Origin	Composition	Estimated Quantity	Classification	Disposal
Stormwater	Rainfall	Water	41,000 gal based on a 0.75-inch storm event	Nonhazardous Liquid	Discharge to existing permitted outfalls
Fluorescent, mercury vapor lamps	Lighting	Metals and PCBs	100 lb/yr	Universal Waste solids	Recycle or dispose offsite at an Universal Waste Destination Facility
Passivating and chemical cleaning fluid waste	Pipe cleaning and flushing	Varies	200,000 gal	Hazardous or nonhazardous liquid	Sample and characterize – if clean, dispose of in sanitary sewer; otherwise, manage appropriately offsite
Lubricating oil/oil sorbents	From the gas turbine lubricating oil system	Petroleum hydrocarbons	55 gal/ month	Hazardous	Clean up area using sorbent and rags and disposed of material through a certified oil recycler.
Lubricating oil filters	From the gas turbine lubricating oil system	Paper, metal, and petroleum hydrocarbons	Quantities will vary according to equipment manufacturer recommendations (300 lb/yr)	Hazardous	Recycle filters through a certified oil recycler.
Hydraulic Oil	From the gas turbine control valves	Petroleum hydrocarbon	Small quantities from equipment leaks and spills (240 lb/yr)	Hazardous	Clean up area using sorbent and rags and dispose of material through a certified oil recycler
Solvents, paint, adhesives	Maintenance	Varies	20 lb/month	Hazardous	Recycle at a permitted TSDF
Laboratory analysis waste	From the chemical analysis reagents	Various	NA	Hazardous	Recycle material through a certified recycler or dispose of as a hazardous material.
SCR catalyst units	SCR system (Warranty is 3 years; use tends to be 3 to 5 years)	Metal and heavy metals (high levels of vanadium)	150 lb/3-5 yr	Hazardous	Recycled by SCR manufacturer or disposed of in Class I landfill
Cooling Tower Sludge	Deposits in cooling tower basin	Dirt from air and other chemical deposits (e.g., arsenic in water)	Generates approximately 100 to 200 lb/yr	May be hazardous (usually not)	Dispose of in Class II landfill if nonhazardous and Class I landfill if hazardous.
Spent lead acid batteries	Electrical room, equipment	Metals	2 to 4 batteries per year	Hazardous	Store no more than 10 batteries (up to one year) then recycle offsite

Table 4.5-2. Waste Management Methods*Small Power Plant Exemption Application for the Pomona Repower Project*

Waste	Origin	Composition	Estimated Quantity	Classification	Disposal
Spent alkaline batteries	Equipment	Metals	200 batteries per year	Universal waste solids	Recycle or dispose offsite at an Universal Waste Destination Facility
Fluorescent tubes	Lighting of maintenance areas	Metals	50 lb/yr	Universal waste solids	Recycle or dispose offsite at an Universal Waste Destination Facility
Electronic Components	Distributed control system, plant computers, instruments	Metals	50 lb/yr	Universal Waste Solids	Recycle with an approved facility
Oily rags	Maintenance, wipe down of equipment, etc.	Hydrocarbons, cloth	100 lb/yr	Hazardous	Recycle through a certified oil recycler or dispose of as a hazardous material.
Chemical feed area drainage	Spillage, tank overflow, area washdown water	Water with water treatment chemicals	Minimal	May be hazardous if corrosive	Discharged to sewer if nonhazardous; shipped offsite for disposal if hazardous
Wood, glass, plastic, paper, calcium silicate insulation, and mineral wool insulation	Demolition	Normal refuse	15 tons	Nonhazardous	Recycle and/or dispose of in a Class II or III landfill
Scrap Metals	Demolition	Parts, containers	14 tons	Nonhazardous	Recycle and/or dispose of in a Class III landfill
Concrete	Demolition	Concrete	650 tons	Nonhazardous	Recycle and/or dispose of in a Class III landfill

Note:

TSDF = treatment, storage, and disposal facility

4.5.4 Impacts

Potential impacts to hazardous materials and waste management are described below.

4.5.4.1 CEQA Environmental Checklist

The checklist in Table 4.5-3 assesses the significance of potential impacts.

Table 4.5-3. CEQA Checklist to Assess Potential Impacts

Small Power Plant Exemption Application for the Pomona Repower Project

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
HAZARDOUS MATERIALS AND WASTE—Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		X		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		X		
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
i) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
j) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

4.5.4.2 Discussion of Impacts

Hazardous Materials Impacts. The project will have a less than significant impact on the public or the environment through the routine transport and use of hazardous materials because most of these materials are already in use at the existing facility or other facilities in the area and are consistently transported without incident. Transport of hazardous materials will be done in vehicles that have been designed for such transport to minimize a release, should a transportation accident occur. Facilities in the vicinity of the project that use hazardous materials include: a duct work and steel fabrication manufacturer (Superior Duct Fabrication), a paper products distributor (Allen Company Roll Division), an SCE substation, and several recycling facilities (Precision Scrap Handling Systems and Ecoplast).

The existing San Gabriel Facility uses 19 percent aqueous ammonia in an SCR system for air emissions control. There will be a new 10,000-gallon 19 percent aqueous ammonia tank in secondary containment located on the east side of the property. This new 10,000-gallon tank will replace the 10,000-gallon ammonia tank currently in use. The ammonia tank will be connected to the SCR units. The piping will be made of materials and will contain safety features that will reduce the potential for ammonia releases at the site, as specified by Pipeline Safety Laws (49 U.S.C. 60101 et seq.). Therefore, there will be no significant increase in risk to the public or the environment.

During operations, the project will average about 7,400 gallons per month of 19 percent aqueous ammonia. Therefore, it is anticipated that the plant will receive up to 15 ammonia truck deliveries per year. This will not pose a substantial increase in risk of releases from use or transport of hazardous materials. Currently, the existing San Gabriel Facility receives about 3 deliveries of 19 percent aqueous ammonia per year.

All hazardous materials will be stored in containers or tanks approved by the U.S. Department of Transportation (DOT) and the local fire department. Incompatible materials will be stored separately. A hazardous materials inventory for the PRP facility will be prepared and submitted to the LACFD prior to startup of operations. Any applicable permits and plans associated with hazardous materials use or waste generation at the PRP site will be in place prior to operation of the facility. Emergency response procedures will be prepared and maintained at the site.

The risk of the proposed project contributing to wildland fires is very low, due to the industrial nature of the area surrounding the site.

Three schools are located within one-quarter mile of PRP: St. Joseph Elementary School, Pomona Alternative School, and Park West High School. The San Gabriel Facility is currently operating at the location of PRP. Infrastructure and delivery routes have been in use for 30 years and there have been no issues. There will be no significant increase in risk to the public or environment from siting PRP at the same location as the existing San Gabriel Facility.

PRP is located approximately 1.8 nautical miles (2.1 statute miles) south of the Brackett Field runways (a County-owned general aviation airport) and approximately 7.5 nautical miles (8.6 statute miles) west of ONT. The San Gabriel Facility has been operating in that location for about 30 years without any incidents to aircraft. Therefore, no resulting safety hazard would be expected to people residing or working in the project area. PRP submitted FAA Form 7460-1, Notice of Proposed Construction or Alteration, for the exhaust stack to request that the FAA review PRP for any potential hazards to air navigation. The FAA issued a Determination of No Hazard to Air Navigation on January 7, 2016. (See Section 4.12.4.6 in the Traffic and Transportation Section for additional information.)

PRP will comply with applicable laws and regulations for the storage of hazardous materials, and will conduct emergency response planning to address public health concerns regarding hazardous materials storage and use. Therefore, no resulting safety hazard would be present to people residing or working in the project area.

Waste Management Impacts. Methods that will be used to handle waste generated by the project are described previously in Table 4.5-2. In addition, during construction activities there will be other wastes generated on a temporary basis, such as solvents, adhesives, and paints. These wastes will be handled appropriately by the construction contractors. Any hazardous waste produced will be transported by a licensed hazardous waste transporter and will be disposed of by a licensed hazardous waste disposal facility. Therefore, the impacts from waste management at the project site will be minimal.

An Environmental Due Diligence (EDD) Evaluation of the project site was performed in September 2014 by AECOM. The EDD evaluation consisted of a Phase 1 Environmental Site Assessment and an Environmental Compliance Review. AECOM did not observe evidence of recognized existing environmental issues at the site as a result of past or present land use practices. AECOM did observe *de minimus* conditions at the site (oil staining inside concrete secondary containment). The results of the assessment of the onsite and offsite actual and/or potential contamination are summarized below.

Onsite Summary. The project site is occupied by a 44.5 MW natural gas-fired cogeneration plant consisting of three industrial buildings on an approximately 2-acre property. Operations include energy and distilled water production via a natural gas-powered turbine. Ancillary operations include CEMS, equipment maintenance, and wastewater treatment. Key features of the property include an aboveground concrete cooling water pond, associated cooling towers, a natural gas compressor yard, a heat recovery steam generator boiler and associated reverse osmosis unit area, an AST area, a boiler chemical and oil/chemical/empty drum/waste storage area, and a distilled water tank. No visual evidence of USTs, potable water wells, monitoring wells, dry wells, clarifiers, septic tanks or leach fields was observed on the subject property.

Historical research indicates that the site consisted mainly of agricultural land (likely citrus orchards) from at least the late 1920s. By the late 1930s the site was part of a larger paper mill (Potlatch Forest Inc., Northwest Paper Company, and Simpson Paper Company). By the mid-1940s, a wastewater pond had been developed in the northern portion of the site. In 1985, the site was developed as the current cogeneration facility and operated as part of the Simpson Paper Company until the paper plant was shut-down in 2007.

The Simpson Paper Company facility contained several USTs. One UST was abandoned in place. The remaining USTs were removed from the ground between 1986 and 1996. According to the UST removal reports, confirmation sampling did not detect constituents above regulatory closure limits during the removal of the USTs located on the eastern part of the property. The facility was identified with a leaking underground storage tank (LUST) incident during the removal of one 10,000-gallon vegetable oil UST located on the exterior south side of Building 27 (currently warehouse building to the south of the subject property occupied by Allan Company). The impacted soils were excavated and disposed of and the incident status was listed as Completed – Case Closed in February of 1997.

The site is identified in RCRA – Small Quantity Generator, Facility Index System, Emissions Inventory, and HAZNET databases. These listings are compliance-related and not indicative of an environmental release, leak, or other issue at the site.

Offsite Summary. The EDD evaluation revealed that the paper mill consisted of an approximately 26-acre facility that included the 2-acre site currently being used by the San Gabriel Facility. The paper mill facility historically contained several USTs and was identified with a LUST incident, mentioned above. No other offsite potential sources of concern were identified during AECOM's EDD evaluation. Based on information developed during this assessment, the offsite locations reviewed by AECOM have been remediated and granted case closure and are not believed to pose an environmental threat to the site (AECOM, 2014). A recent EDR evaluation was reviewed and no new information was discovered in the recent report (EDR, 2015). Therefore, development of the site should not cause any disturbance of known contaminated soils or other wastes.

A copy of the EDD evaluation is included in Appendix 4.5A.

4.5.5 Cumulative Effects

It is not anticipated that PRP will result in significant cumulative impacts that could adversely affect public health and safety or the environment.

The primary potential cumulative impact from the use and storage of hazardous materials would be a simultaneous release from two or more sites of a chemical that will migrate offsite. Potentially, the two or more migrating releases could combine, thereby posing a greater threat to the offsite population than a single release by any single site. According to the knowledge of those working at the San Gabriel Facility, there are no hazardous chemicals used by, or stored by, adjoining facilities that could migrate to the PRP site. Hazardous materials that do not migrate, such as sulfuric acid, will not present a potential cumulative impact. The hazardous material with the most potential to migrate offsite from the project site is ammonia. Pure ammonia is a volatile, acutely hazardous chemical that is stored under pressure as a liquid. The ammonia to be used for PRP is aqueous ammonia—a solution of ammonia (19 percent) and water (81 percent). If the aqueous ammonia were to leak or spill, the ammonia would gradually evaporate as a gas to the atmosphere. At high concentrations, ammonia gas causes severe impacts, even death, at concentrations above 2,500 ppm. However, the odor threshold of ammonia is only about 5 ppm and irritation of the nose and throat occurs at 30 to 50 ppm. Therefore, any releases will be readily detectable at concentrations well below severe hazard levels. Facility workers will be provided with safety equipment and trained in hazardous materials handling and emergency response.

4.5.6 Mitigation Measures

The following sections present measures to mitigate potential public health and environmental effects of handling hazardous materials and regulated substances during construction and operation.

4.5.6.1 Demolition and Construction Phases

The hazardous materials that would be used during demolition and construction present a relatively low public health risk, but could contaminate surface water or groundwater if a release occurred. Use of best management practices (BMPs) would reduce the potential for the release of construction-related fuels and other hazardous materials to stormwater and receiving waters as discussed in Section 4.14, Water Resources. BMPs prevent sediment and stormwater contamination from spills or leaks, control the amount of runoff from PRP, and require proper disposal or recycling of hazardous materials.

Construction and demolition service personnel will follow general industry health, safety, and environmental BMPs for filling and servicing construction equipment and vehicles. The BMPs are designed to reduce the potential for incidents involving the hazardous materials. They include the following:

- Refueling and maintenance of vehicles and equipment will occur only in designated areas that are either bermed, covered with concrete, or other impervious surfaces (e.g., catch pans) to control potential spills. Workers will be present during refueling activities.
- Vehicle and equipment service and maintenance will be conducted only by authorized personnel.
- Refueling will be conducted only with approved pumps, hoses, and nozzles.
- Catch-pans will be placed under equipment to catch potential spills during servicing.
- All disconnected hoses will be placed in containers to collect residual fuel from the hoses.
- Vehicle engines will be shut down during refueling.
- No smoking, open flames, or welding will be allowed in refueling or service areas.

- Refueling will be performed away from bodies of water to prevent contamination of water in the event of a leak or spill.
- When refueling is completed, the service truck will leave the site.
- Service trucks will be provided with fire extinguishers and spill containment equipment, such as absorbents.
- Should a spill contaminate soil, the soil will be put in containers and disposed of as appropriate. All containers used to store hazardous materials will be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas will be inspected monthly. Results of inspections will be recorded in a logbook that will be maintained onsite.

In the unlikely event of a spill, the spill may need to be reported to the appropriate regulatory agencies and cleanup of contaminated soil could be required. Small spills will be contained and cleaned up immediately by trained, onsite personnel. Larger spills will be reported via emergency phone numbers and may require assistance from offsite containment and cleanup crews. Personnel working on PRP during the demolition and construction phases will be trained in handling hazardous materials and the dangers associated with hazardous materials. An onsite health and safety person will be designated to implement health and safety guidelines and to contact emergency response personnel and the local hospital, if necessary.

If there is a large spill from a service or refueling truck, contaminated soil will be placed into barrels or trucks by service personnel for offsite disposal at an appropriate licensed facility in accordance with current LORS. If a spill involves hazardous materials quantities equal to or greater than the specific RQ (42 gallons for petroleum products), all federal, state, and local reporting requirements will be followed. In the event of a fire or injury, 9-1-1 and/or the local fire department will be called.

4.5.6.2 Operation Phase

During facility operation, various hazardous materials will be stored onsite as shown in Table 4.5-2. The following sections list mitigation measures for minimizing the public health risks associated with hazardous material and regulated substance handling during facility operation.

Hazardous Materials. All hazardous materials will be handled and stored in accordance with applicable codes and regulations specified in Section 4.5.2. Specific requirements of the California Fire Code that reduce the risk of fire or the potential for a release of hazardous materials that could affect public health or the environment include:

- Provision of an automatic sprinkler system for indoor hazardous material storage areas.
- Provision of an exhaust system for indoor hazardous material storage areas.
- Separation of incompatible materials by isolating them from each other with a noncombustible partition.
- Spill control in all storage, handling, and dispensing areas.
- Separate secondary containment for each chemical storage system. The secondary containment is required to hold the entire contents of the tank plus the volume of water for the fire suppression system that could be used for fire protection for a period of 20 minutes in the event of a catastrophic spill.

In addition, a Business Emergency/Contingency Plan (i.e., HMBP) is required by Cal. Code Regs. Title 19, and the Health and Safety Code (Section 25504). In accordance with these regulations, the HMBP will

include an inventory and location map of hazardous materials onsite and an emergency response plan for hazardous materials incidents. Specific topics addressed in the plan will include:

- Facility identification
- Emergency contacts
- Chemical inventory information (for every hazardous material)
- Site map
- Emergency notification data
- Procedures to control actual or threatened releases
- Emergency response procedures
- Training procedures
- Certification

As was done for the San Gabriel Facility, the HMBP will be filed with the LACFD, the designated CUPA for the site, and will be updated in accordance with applicable regulations.

In accordance with emergency response procedures specified in the HMBP, designated personnel will be trained as members of a plant hazardous material response team, and team members will receive the first responder and hazardous material technical training to be developed in the HMBP, including training in appropriate methods to mitigate and control accidental spills. In the event of a chemical emergency, plant personnel will defer to the LACFD.

Aqueous Ammonia. Ammonia is a regulated substance under the federal CAA pursuant to 40 C.F.R. Section 68 (Subpart G) and the CalARP pursuant to Health and Safety Code Sections 25331 through 25543.3. The California program is similar to the federal program but is more stringent in some areas.

In accordance with CalARP regulations, an RMP will be prepared for the ammonia tank, if needed. The RMP will be filed with the LACFD, the designated CUPA for the PRP site. The RMP will include a hazard assessment to evaluate the potential effects of an accidental release, a program for preventing an accidental release, and a program for responding to an accidental release to protect human health and the environment. The specific components of an RMP include:

- Description of the facility
- Accident history of the facility
- History of equipment used at the facility
- Design and operation of the facility
- Site map(s) of the facility
- Piping and instrument diagrams of the facility
- Seismic analysis
- Hazard and operability study
- Prevention program
- Consequence analysis
- Offsite consequence analysis
- Emergency response
- Auditing and inspection
- Record keeping
- Training
- Certification

A Process Safety Management plan will not be required under the Occupational Safety and Health Act, because the regulations apply only to aqueous ammonia solutions above 44 percent (29 C.F.R. Part 199).

Petroleum Products. Federal and California regulations require a Spill Prevention Control and Countermeasure (SPCC) plan if petroleum products above certain quantities are stored. Both federal and state laws apply only to petroleum products that might be discharged to navigable waters. If stored quantities are equal to, or greater than, 660 gallons for a single container; or equal to, or greater than, 1,320 gallons total (including ASTs, oil-filled equipment, and drums), an SPCC plan must be prepared. Because the facility will store more than 1,320 gallons of petroleum products, an SPCC plan will be required.

Transportation/Delivery of Hazardous Materials and Regulated Substances. Hazardous materials will be delivered periodically to the facility. As discussed in Section 4.12, Traffic and Transportation, transportation of hazardous materials will comply with all California Department of Transportation (Caltrans), California EPA, California Department of Toxic Substances Control (DTSC), California Highway Patrol (CHP), and California State Fire Marshal regulations. Under the Cal. Veh. Code, the CHP has the authority to adopt regulations for transporting hazardous materials in California. Aqueous ammonia will be delivered to the facility, and transported in accordance with Cal. Veh. Code Section 32100.5, which regulates the transportation of hazardous materials that pose an inhalation hazard. In addition, ammonia will only be transported along approved transportation routes.

Waste Management. The handling and management of waste generated by PRP will follow the hierarchical approach of source reduction, recycling, treatment, and disposal. The first priority will be to reduce the quantity of waste generated through pollution prevention methods (for example, high-efficiency cleaning methods). The next level of waste management will involve reusing or recycling wastes (for example, used oil recycling). For wastes that cannot be recycled, treatment will be used, if possible, to make the waste nonhazardous (for example, neutralization). Finally, offsite disposal will be used for residual wastes that cannot be reused, recycled, or treated.

Nonhazardous Wastes. Wastewater from facility sinks, toilets, and showers will be disposed of to the sanitary sewer.

Nonhazardous waste will be collected and deposited in a local landfill. Whenever practical, recycling will be implemented throughout the facility to minimize the quantity of nonhazardous waste that must be disposed of in a landfill.

Hazardous Wastes. To avoid the potential effects on human health and the environment from handling and disposing of hazardous wastes, procedures will be developed to ensure proper labeling, storage, packaging, recordkeeping, and disposal of all hazardous wastes. The following general procedures will be used:

- PRP will be classified as a hazardous waste generator and will obtain a site-specific USEPA identification number that will be used to manifest hazardous waste from the PRP facility. Hazardous waste from the PRP facility will be stored onsite for less than 90 days before offsite disposal, treatment, or recycling.
- Hazardous wastes will be accumulated at the generating facility according to Cal. Code Regs. Title 22 requirements for satellite accumulation.
- Hazardous wastes will be stored in appropriately segregated storage areas surrounded by berms to contain leaks and spills. The bermed areas will be sized to hold the full contents of the largest single container and, if not roofed, will be sized for an additional 20 percent to allow for rainfall. These areas will be inspected daily.
- Hazardous wastes will be collected by a licensed hazardous waste hauler using a hazardous waste manifest. Wastes will be shipped only to authorized hazardous waste management facilities. Biennial hazardous waste generator reports will be prepared and submitted to the DTSC. Copies of

manifests, reports, waste analyses, and other documents will be kept onsite and will remain accessible for inspection for at least 3 years.

- Employees will be trained in hazardous waste procedures, spill contingencies, and waste minimization.
- Procedures will be developed to reduce the quantity of hazardous waste generated. Nonhazardous materials will be used instead of hazardous materials whenever practical, and wastes will be recycled whenever practical.

Specifically, hazardous waste handling will include the following practices. Handling of hazardous wastes in this way will minimize the quantity of waste deposited to landfills:

- Waste lubricating oil will be recovered and recycled by a waste oil recycling contractor.
- Spent oil filters and oily rags will be recycled.

Spent SCR and oxidation catalysts will be recycled by the supplier, if possible, or disposed of in a Class I landfill.

4.5.7 Agencies and Agency Contacts

Table 4.5-4 lists the local agencies involved in hazardous materials management and waste for the project and a contact person at each agency. The LACFD is the CUPA and administers the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plan and Inventory Program (i.e., the HMBP program) and CalARP. The City of Pomona Solid Waste Division provides oversight of the Commercial Solid Waste Franchise System.

Table 4.5-4. Agency Contacts

Small Power Plant Exemption Application for the Pomona Repower Project

Agency	Address	Phone Number
Los Angeles County Certified Unified Program Agency Los Angeles County Fire Department Health Hazardous Materials Division	5825 Rickenbacker Road Commerce, CA 90040	(323) 890-4000
Los Angeles County Certified Unified Program Agency Los Angeles County Fire Department Health Hazardous Materials Division East County	5110 North Peck Road El Monte, CA 91732	(626) 450-7450
City of Pomona Solid Waste Division	505 South Garey Avenue Pomona, CA 91766	(909) 620-2241

4.5.8 Permits and Permit Schedules

The LACFD Hazardous Materials Program requires that project developers obtain the permit listed in Table 4.5-5 before storing hazardous materials onsite.

Table 4.5-5. Permits and Permit Schedule for Hazardous Materials Handling
Small Power Plant Exemption Application for the Pomona Repower Project

Permit	Agency Contact	Schedule
Annual Unified Program Facility Permit	Los Angeles County Fire Department – CUPA/Hazardous Materials Program CalARP Unit 5825 Rickenbacker Road Commerce, CA 90040 (323) 890-4000	Approximately 30 days before any regulated substance comes onsite, a HMBP and RMP will be submitted through the online California Environmental Reporting System. The permit includes the CALARP, hazardous materials disclosure program, hazardous waste generator program, and the aboveground petroleum storage act.

4.5.9 References

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CH2M HILL, Inc. (CH2M). 2015a. Telephone Conversation Record – Assistant Fire Chief James Robinson, Los Angeles County Fire Department. November 11.

CH2M. 2015b. Telephone Conversation Record – Assumpta Desilva, Los Angeles County Fire Department Health Hazardous Materials Division. December 23.

CH2M. 2016. Telephone Conversation Record – Assumpta Desilva, Los Angeles County Fire Department Health Hazardous Materials Division. March 11.

City of Pomona. 2015. <http://www.ci.pomona.ca.us/>. December.

Environmental Data Resources, Inc. (DER). 2015. EDR Radius Map Report for San Gabriel Cogeneration Facility. December 16.

Los Angeles County Fire Department, Health Hazardous Materials Division (CUPA). 2015. <http://www.fire.lacounty.gov/hhmd/>. December.

Waste Management, Inc. (WM). 2015. <http://kettlemanhillslandfill.wm.com/facility-expansion/index.jsp>. September.

