

8.11 Hazardous Materials and Waste

This section describes the proposed hazardous materials and waste management system for the proposed Power Plant Replacement Project (PPRP, or the Project) at the Chevron Richmond Refinery.

Section 8.11.1, Introduction, briefly describes the proposed Project. Section 8.11.2, Affected Environment, describes the hazardous materials that will be used at the Project site and the wastes that will be generated. Section 8.11.3.1 presents a checklist of possible environmental impacts related to hazardous materials use and waste generation and details the specific impacts posed by the proposed Project. The applicable local, state, and federal laws, ordinances, regulations, and standards (LORS) are described in Section 8.11.6. Regulatory agency contacts are identified in Section 8.11.8.

8.11.1 Introduction

Chevron is proposing the PPRP to add an additional 60 megawatts (MW) net generation to its existing refinery electrical generation located within Chevron's Richmond Refinery in the City of Richmond (see Figure 1.2-1) in Contra Costa County, California. The proposed PPRP will be integrated into Chevron's plans to meet its growing refinery electrical load, and produce steam to replace an existing boiler plant that is approaching its end of life. The PPRP is a subset of the larger Richmond Refinery Renewal Project that is concurrently undergoing California Environmental Quality Act (CEQA) review by the City of Richmond. The California Energy Commission (CEC) has jurisdiction for only the PPRP portion of the Renewal Project that is the subject of this application.

The PPRP will consist of the following components:

- A nominal 43-MW net, natural gas- or liquid petroleum gas (butane)-fired cogeneration train consisting of one combustion turbine generator (CTG), a refinery fuel gas-fired heat recovery steam generator, 13.8-kV switchgear and ancillary equipment.
- Shutdown of the existing No. 1 power plant refinery steam boilers currently providing steam to the Refinery.
- A 17-MW net extraction, condensing steam turbine generator (STG), an associated cooling tower, and 12-kV switchgear installed as part of the new hydrogen production facility (the remainder of the hydrogen plant is under CEQA review as part of the Renewal Project). The new hydrogen plant will be a net generator of steam for both the STG and the refinery steam system.
- Reconductoring of approximately 4,000 feet of existing onsite double-circuit overhead 115-kV transmission line to upgrade its ampacity. The reconductoring will reuse existing transmission line structures.
- Adjacent onsite service connections for fuel, reclaimed water, water, wastewater, steam, and electricity to existing piperacks, with the exception of the reconductoring noted above.

The Cogen 3000 portion of the PPRP will occupy approximately 0.5 acre within an existing 5.2-acre cogeneration facility, and the STG and associated equipment (H₂-STG) will occupy approximately 0.5 acre within a new 7.9-acre hydrogen plant that will be built as part of the Richmond Refinery Renewal Project. The PPRP will be located well within the heart of the existing 2,900-acre Richmond Refinery. Temporary construction laydown and parking for the PPRP will be provided in various existing laydown areas within the Refinery that are currently used for ongoing maintenance and project laydown. A complete description of the PPRP is provided in Section 2.0.

8.11.2 Affected Environment

8.11.2.1 Hazardous Materials

The proposed Project will include the installation of approximately 300 feet of 2-inch and smaller piping for anhydrous ammonia. The combustion turbine will also contain hydraulic and lubricating oils. The Project will store small amounts of various water treatment chemicals in portable containers in chemical feed areas adjacent to equipment using these chemicals.

A list of hazardous materials to be used at the Project site is presented in Table 8.11-1.

TABLE 8.11-1
Hazardous Materials to be Used at the Proposed Project

Material Name	Chemical Composition	Use	Storage Location
Anhydrous Ammonia	Ammonium hydroxide	Control nitrogen oxide (NO _x) emissions through selective catalytic reduction (SCR)	West of and adjacent to the gas compressors
Synthetic lubrication oil	Oil	Lubricate rotating equipment (e.g., combustion turbine bearings)	Contained within equipment
Mineral insulating oil	Oil	Transformers	Contained within Generator Step Up Units and auxiliary transformers

8.11.2.2 Waste Generation

A summary of wastes produced at the Project site and the manner in which they will be handled is presented in Table 8.11-2.

TABLE 8.11-2
Wastes Produced and Waste Management Methods

Source of Waste	Waste Composition	Quantity	Disposal Method
Air pollution control devices	Spent SCR and carbon monoxide (CO) catalyst	6 to 7 tons every 3 to 5 yrs	Recycled to equipment manufacturer
Chemical feed and sampling systems	No waste routinely generated; occasional spills only	No waste routinely generated	Spills pumped from secondary containment into container and reclaimed or disposed of offsite
Construction waste	Wood, metal, concrete, etc.	0.5 cubic yards per month	Transported to offsite landfill
Cooling water for H ₂ -STG	Blowdown	105 gpm	Refinery wastewater treatment plant
Electrical transformers	Waste oil	No waste routinely generated	Pumped from transformer to 55-gallon drum
Lubricating oils	Waste oil	No waste routinely generated	Pumped from equipment to 55-gallon drum
Fuel gas system	Blowdown oils	30 gal/month	Blowdown from filters flows to oily/wastewater separator; oil pumped from separator into 55-gal drums and sent for recycling
Municipal Solid waste	Paper, food, plastic, etc.	2 cubic yards per month	Transported to offsite landfill

8.11.3 Environmental Consequences

8.11.3.1 Environmental Checklist

The checklist in Table 8.11-3 is used by the CEC in its assessment of potential impacts.

8.11.3.2 Hazardous Materials Impacts

The proposed 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 Chevron Refinery and are consistently transported without incident. Therefore, the increased use of hazardous materials already onsite and a slight increase in frequency of deliveries will not represent a significant impact. These events will be managed in a similar manner to the Chevron Refinery's existing operations. 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.

TABLE 8.11-3
CEC Hazardous Materials and Waste Impact Checklist

	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 or use 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) Result in a safety hazard for people residing or working in the Project area if located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport?				X
f) Result in a safety hazard for people residing or working in the Project area if located within the vicinity of a private airstrip?				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

There will be no additional ammonia storage facilities constructed at the site. The Project will use the same ammonia storage tanks presently used by the Refinery.

The project will require approximately 300 feet of 2-inch and smaller piping to be installed to connect the existing cogen station ammonia supply to the new cogeneration train. This piping would contain approximately 250 pounds of ammonia.

Currently the Refinery stores approximately 220,000 pounds of facility-generated ammonia in three storage tanks; no new ammonia storage is required for the PPRP. The additional

amount of ammonia for this Project is a small percentage of the total amount currently stored onsite, and would require a small modification to the existing Risk Management Plan (RMP) for the Refinery. Therefore, there will be no significant increase in risk to the public or the environment.

Ammonia is currently generated during the refining process at the Refinery and would not need to be delivered to the site. Therefore, there will be no significant increase in risk of release from transport of hazardous materials.

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. The existing emergency response plan for the Chevron Refinery will be updated to include the additional chemical storage units.

Any applicable permits and plans associated with hazardous materials use or waste generation at the PPRP site will be in place prior to operation of the facility. This will include an updated hazardous materials business plan and an emergency response plan. Emergency response procedures will be prepared and maintained at the site. It is anticipated that emergency planning and response procedures will not differ appreciably from those in place for the Refinery.

There are no schools or day-care centers located within one-quarter mile of the Project site. The schools and day-care centers located within 1.5 miles of the site are: Washington Elementary School at 565 Wine Street, which is located 1.25 miles from the Project site; Peres Elementary School at 719 5th Street and the YMCA at 485 Lucas Avenue, which are both located 1.4 miles from the site; and Lincoln Elementary School at 29 6th Street, located approximately 1.5 miles from the site.

The Project site is not included on the Cortese List (Government Code Section 65962.5) and therefore does not pose a significant hazard to the public or environment (DTSC, 2007).

The proposed Project is located approximately 14.5 miles southeast of the San Rafael Airport and 8.4 miles northwest of the Oakland International Airport. An onsite helipad is present at the Refinery; however the additional structures from the Project are no different in height than other structures currently present onsite. Therefore, no resulting safety hazard would be present to people residing or working in the Project area.

Implementation of the proposed Project would have no effect on emergency response or emergency evacuation plans. As described in Section 8.11.4, Mitigation Measures, the Refinery has emergency response teams that are trained and equipped to respond to fires, rescues, hazardous material releases, and other emergencies that could occur at the Refinery. Therefore, no additional safety hazards would be present to people working in the Project area.

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

8.11.3.3 Waste Management Impacts

Methods that will be used to handle waste generated by the proposed Project are described above in Table 8.11-2. 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 proposed Project site will be minimal.

Environmental investigations were conducted on the Refinery site for subsurface soils beneath the proposed hydrogen plant site and the cogeneration plant site (SAIC, 2006a and 2006b). Copies of each of these investigations are included as Appendix 8.11-A. These studies indicated that samples of these media had been impacted with constituents of potential concern (COPCs) associated with historical industrial activities such as total petroleum hydrocarbons (TPH) in the gasoline and diesel ranges and metals (mercury and lead). The studies indicated that some of the soils at both facilities exceeded federal and/or state criteria for hazardous waste, which will require special handling and preclude the re-use of those soils during construction.

At the proposed hydrogen facility, it was also noted that shallow groundwater (1 to 4 feet below ground surface) had free-phase liquid hydrocarbon at nearly half of the 63 sample locations that were investigated and had several groundwater samples among five locations in which the maximum allowable contaminant limits (MACLs) established for the Refinery were exceeded (SAIC, 2006a). The results of these investigations indicate that Chevron will need to develop plans to protect future construction and site workers from exposures to COPCs and to properly handle affected environmental media (i.e., soil and groundwater).

8.11.4 Cumulative Impacts

It is not anticipated that the proposed Project will result in significant cumulative impacts that could adversely affect public health and safety or the environment. Water treatment chemicals are expected to be delivered to the Project site once a month, likely by existing suppliers.

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. 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 proposed Project site is ammonia. Pure ammonia is a volatile, acutely hazardous chemical that is stored under pressure as a liquid and becomes toxic gas if released. The ammonia to be used for the proposed Project is anhydrous ammonia. If the anhydrous 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 parts per million (ppm). However, the odor threshold of ammonia is only about 5 ppm and irritation of the nose and throat occur 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.

8.11.5 Mitigation Measures

The following subsections present measures that the Applicant would implement during Project construction and operation phases to mitigate risks in handling hazardous materials, particularly the risk of inadvertent spills or leaks that might pose a hazard to human health or the environment.

8.11.5.1 Construction Phase

During facility construction, hazardous materials stored onsite will include small quantities of paints, thinners, solvents, cleaners, sealants, lubricants, and 5-gallon emergency fuel containers. This subsection describes measures that will be taken to mitigate potential risks from hazardous material usage. Paints, thinners, solvents, cleaners, sealants, and lubricants will be stored in a locked utility building. These materials will be handled per the manufacturers' directions and will be replenished as needed. The emergency fuel containers will be DOT-approved, 5-gallon safety containers, secured to the construction equipment. The emergency fuel will be used only when regular vehicle fueling is unavailable.

Fuel, oil, and hydraulic fluids will be transferred directly from a service truck to construction equipment tanks and will not otherwise be stored onsite. Fueling will be performed by designated, trained service personnel either before or at the end of the workday. Service personnel will follow standard operating procedures (SOPs) for filling and servicing construction equipment and vehicles. The SOPs, which are designed to reduce the potential for incidents involving the hazardous materials, include the following:

- Refueling and maintenance of vehicles and equipment will occur in designated areas that are equipped with spill control features (e.g., berms, paved surfaces, spill response kits, etc.).
- Vehicle and equipment service and maintenance will be conducted by authorized personnel only.
- 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 hose.
- 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 Project 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 for offsite disposal as a hazardous waste.

- All maintenance and refueling areas will be inspected monthly. Results of inspections will be recorded in a logbook that will be maintained onsite.

Small spills will be contained and cleaned up immediately by trained, onsite personnel. Larger spills will be reported via emergency phone numbers to obtain help from offsite containment and cleanup crews. Personnel working on the Project during the construction phase will be trained in handling of and the dangers associated with hazardous materials. An onsite health and safety person will be designated to implement health and safety guidelines and contact emergency response personnel and the local hospital, if necessary.

If a spill involves hazardous materials equal to or greater than the specific reportable quantity, all federal, state, and local reporting requirements will be followed. The California Water Code, Section 13272(f), establishes a reportable quantity of 42 gallons for spills of petroleum products in water bodies. In the event of a fire or injury, the Plant Protection Department of the Richmond Refinery operates as the Chevron Fire Department. The City of Richmond Fire Department responds to fire and emergency medical events at the Refinery only when called by the Chevron Fire Department.

8.11.5.2 Operation Phase

During Project operation, some hazardous materials will be stored onsite. Listed below are management and mitigation measures for minimizing the risks of hazardous material handling during facility operation.

8.11.5.2.1 Sulfuric Acid

Sulfuric acid will be fed into the circulating water system in proportion to makeup water flow for alkalinity reduction; this will be done to control the scaling tendency of the circulating water within an acceptable range. The acid feed equipment will consist of an acid storage tank and chemical metering pumps. A sulfuric acid storage tank will be located near the cooling tower circulating water pumps in a concrete containment area; the area will have sufficient capacity to contain the full tank contents plus accumulated rainfall for 24 hours during a 25-year storm.

8.11.5.2.2 Hydrogen

Hydrogen gas will be stored outdoors in compressed gas cylinders. It will be used for cooling the steam turbine generator. Because it is highly flammable and potentially explosive, it will be stored in a separate area away from sources of ignition and heat and from oxidizing materials.

8.11.5.2.3 Other Hazardous Materials

Of the other hazardous materials that are continuously used onsite, one merits additional discussion because of the quantity of material stored. Water treatment chemicals will be added to the circulating water. These systems will consist of a storage tank and chemical metering pumps. The tanks will be located above concrete containment areas with sufficient capacity to contain the largest tank contents plus accumulated rainfall for 24 hours during a 25-year storm.

All hazardous materials will be handled and stored in accordance with applicable codes and regulations. All containers used to store hazardous materials will be inspected regularly for signs of leaking or failure. Incompatible materials will be stored in separate storage and

containment areas. Areas susceptible to potential leaks and/or spills will be paved and bermed. Containment areas may drain to a collection area, such as an oil/water separator or a waste collection tank. Piping and tanks will be protected from potential traffic hazards by concrete or pipe-type traffic bollards and barriers.

If a spill involves hazardous materials equal to or greater than the specific reportable quantity, all federal, state, and local reporting requirements will be followed. The California Water Code, Section 13272(f), establishes a reportable quantity of 42 gallons for spills of petroleum products in water bodies.

The Chevron Refinery maintains an emergency response program designed to protect worker and public safety, as well as the environment. As part of the Emergency Response Program, there is a written plan for responding to accidental chemical releases, including procedures for notifying the public and local emergency response agencies. The program also includes the maintenance, inspection, and testing of emergency response equipment.

All plant personnel will be trained in emergency procedures, including plant evacuation and fire prevention. In addition, designated personnel will be trained as members of a plant hazardous material response team; team members will receive the first responder and hazardous material technical training. The Chevron Refinery has emergency response teams that are trained and equipped to respond to fires, rescues, hazardous material releases, and other emergencies that could occur at the Refinery. These teams are managed by the Supervisor of Fire Protection, whose responsibility it is to ensure that the Emergency Response Plan is implemented and followed in the preparation for, and response to, plant emergencies.

As part of the Emergency Response Program, the Chevron Richmond Refinery works with local emergency responders in preparing for and responding to emergencies. This includes conducting emergency drills with the Richmond Fire Department and/or Contra Costa County Health Services on potential fires and/or hazardous materials releases.

8.11.5.3 Transportation/Delivery of Hazardous Materials

Hazardous materials will be delivered periodically to the Project site. Transportation will comply with the applicable regulations for transporting hazardous materials, including DOT, U.S. Environmental Protection Agency (USEPA), California Department of Toxic Substances Control (DTSC), California Highway Patrol (CHP), and California State Fire Marshal. Under the California Vehicle Code, the CHP has the authority to adopt regulations for transporting hazardous materials in California. The CHP can issue permits and specify the route for hazardous material delivery.

8.11.5.4 Hazardous Materials Plans

Hazardous materials handling and storage, and training in the handling of hazardous materials, will be set forth in more detail in hazardous materials plans that will be developed by the Applicant.

8.11.5.4.1 Hazardous Materials Business Plan

A Hazardous Materials Business Plan (HMBP) is required by Title 19 California Code of Regulations (CCR) and the Health and Safety Code (Section 25504). The Chevron Refinery

already has an existing HMBP on file with the Contra Costa County Environmental Health Department which will be updated with the chemicals to be used by the Project.

8.11.5.4.2 Risk Management Plan

The requirements for an RMP are found in California's Accidental Release Prevention Program (CalARP) pursuant to Health and Safety Code Sections 25331 through 25543.3 and in CCR Title 19, Section 2735.1 et seq. The California program is similar to the federal RMP program. An RMP is required for regulated substances listed in 19 CCR 2770.5 that exceed designated threshold levels (known as Threshold Quantities or TQs). The Chevron Refinery already has an existing RMP on file with the Contra Costa County Environmental Health Department which will be updated with the chemicals to be used by the Project.

8.11.5.4.3 Spill Prevention Control and Countermeasure Plan

Federal and California regulations require a Spill Prevention, Control, and Countermeasures (SPCC) Plan if petroleum products above certain quantities are stored in aboveground storage tanks. 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 tank, or equal to or greater than 1,320 gallons total, an SPCC Plan must be prepared. The Chevron Richmond Refinery already has an existing SPCC plan onsite which will be updated with the chemicals to be used by the Project.

8.11.5.4.4 Proposition 65

The facility will use lubricating and turbine oils and diesel fuel. These materials are included in the State of California's Prop 65 list of chemicals known to the state to cause cancer. The site will be appropriately labeled for all chemicals on the Proposition 65 list.

8.11.5.5 Monitoring

An extensive monitoring program will not be required because environmental effects during the construction and operation phases of the facility are expected to be minimal. However, sufficient monitoring will be performed during the construction and operation phases to ensure that the proposed mitigation measures are satisfied and that they are effective in mitigating any potential environmental effects.

8.11.6 Laws, Ordinances, Regulations, and Standards

The storage and use of hazardous materials and the generation of wastes at the Project site are governed by federal, state, and local laws, ordinances, regulations and standards (LORS). The applicable LORS are summarized in Table 8.11-4.

TABLE 8.11-4
Federal and State Laws, Ordinances, Regulations, and Standards (LORS) Applicable to Hazardous Materials and Waste

LORS	Applicability
Federal	
Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendment and Reauthorization Act (CERCLA/SARA) Section 302	Requires certain planning activities when Extremely Hazardous Substances (EHS) are present in excess of their Threshold Planning Quantity (TPQ). The Project will have sulfuric acid in excess of the TPQ of 1,000 pounds.
CERCLA/SARA Section 304	Requires notification when there is a release of hazardous material in excess of its Reportable Quantity (RQ).
CERCLA/SARA Section 311	Requires a Material Safety Data Sheet (MSDS) for every hazardous material to be kept onsite and submitted to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC), and the local fire department.
CERCLA/SARA Section 313	Requires annual reporting of releases of hazardous materials.
Clean Air Act (CAA)	Requires a Risk Management Plan (RMP) if listed hazardous materials are stored at or above a Threshold Quantity (TQ).
Clean Water Act (CWA)	Requires preparation of a Spill Prevention Control and Countermeasures (SPCC) plan if oil is stored above certain quantities.
CWA	Controls discharge of wastewater to the surface waters of the U.S.
Resource Conservation and Recovery Act (RCRA) Subtitle C	Controls storage, treatment, and disposal of hazardous waste.
State	
Hazardous Materials Release Response Plans and Inventory Act (Health and Safety Code, Section 25500, et seq.)	Requires preparation of a Hazardous Materials Business Plan (HMBP) if hazardous materials are handled or stored in excess of threshold quantities
California Accidental Release Prevention (CalARP) Program. Health and Safety Code, Section 25531 through 25543.4	Requires registration with local Certified Unified Program Agency (CUPA) or lead agency and preparation of an RMP if acutely hazardous materials are handled or stored in excess of TPQs.
Aboveground Petroleum Storage Act	Requires entities that store petroleum in aboveground storage tanks (AST) in excess of certain quantities to prepare an SPCC Plan.
Safe Drinking Water and Toxics Enforcement Act (Proposition 65)	Requires warning to persons exposed to a list of carcinogenic and reproductive toxins and protection of drinking water from same toxins.
CA Hazardous Waste Control Law (HWCL)	Controls storage, treatment, and disposal of hazardous waste.
Porter-Cologne Water Quality Control Act	Controls discharge of wastewater to the surface and groundwaters of California. Will apply only if the facility discharges wastewater to surface or groundwater.
Local	
Uniform Fire Code	Controls storage of hazardous materials and wastes and the use and storage of flammable/combustible liquids.
Contra Costa County Code – Construction and Demolition Debris Recovery (418-14)	Requires owners of all construction or demolition projects that are 5,000 sq ft. in size or larger to demonstrate a 50% diversion for construction and demolition debris. Diversion could be either reuse or recycling.

TABLE 8.11-4
Federal and State Laws, Ordinances, Regulations, and Standards (LORS) Applicable to Hazardous Materials and Waste

LORS	Applicability
Contra Costa County Integrated Waste Management Plan and Source Reduction and Recycling Element	Establishes waste management goals, objectives and policies for solid waste disposal.
City of Richmond Municipal Code Article XV Zoning and Subdivisions, Commercial and Industrial Provisions, Hazardous Materials 15.04.820.020	Establishes a basis for the issuance of conditional use permits for projects and activities which could significantly and/or adversely affect public health or the environment and which generate, store, transport, treat or dispose of significant amounts of hazardous materials.
City of Richmond Industrial Safety Ordinance	Enacts measures to prevent and reduce the probability of accidental releases of regulated substances that have the potential to cause significant harm to the public health and increase participation by industry and the public to improve accident prevention. Measures include submission of a safety plan to the city, public review of the safety plan, an expansion of the list of regulated substances beyond those covered by the Federal and State Risk Management Program regulations and authorization for the City to expand audits and inspections to all units within the stationary source. In addition, a root cause analysis shall be required for all major chemical accidents or releases and a public outreach and information program shall be established.

8.11.7 Permits Required

For informational purposes, the list of applicable permits, including permits that would be required but for the CEC's exclusive siting jurisdiction, are shown in Table 8.11-5.

TABLE 8.11-5
Permits Required and Permit Schedule for Hazardous Material Handling

Permit	Schedule	Applicability	Agency Contact
Hazardous Materials Inventory and Emergency Business Plan	Update 30 days prior to start of operations.	Applies to all hazardous materials exceeding reporting thresholds	Contra Costa County Environmental Health Division 50 Douglas Drive Martinez, CA 94553
California Accidental Release Prevention (CalARP) Program (Risk Management Plan)	Update 90 days prior to start of operations.	Applies to aqueous ammonia because it will exceed the Threshold Quantity (TQ) of 500 pounds	Contra Costa County Environmental Health Division 50 Douglas Drive Martinez, CA 94553

8.11.8 Involved Agencies and Agency Contacts

Table 8.11-6 lists the local agencies involved in hazardous materials management for the Project and a contact person at each agency. The Contra Costa County Environmental Health Division (CCCEHD) is the Certified Unified Program Agency (CUPA) and administers the Hazardous Waste Generator Program. The CCCEHD administers the

Hazardous Materials Release Response Plan and Inventory Program (i.e., the Hazardous Materials Business Plan program) and CalARP.

TABLE 8.11-6
List of Hazardous Material Agency Contacts for the Proposed Project

Agency	Name/Title	Address	Phone Number
Contra Costa County Environmental Health Division	Richard Lee/Assistant Director	50 Douglas Drive Martinez, CA 94553	925-646-5225, ext. 200
Richmond Fire Department	Michael Banks, Fire Chief	Richmond City Hall 1401 Marina Way South, Richmond, CA 94804	510-307-8031

8.11.9 References

California Department of Toxic Substances Control (DTSC). 2007. DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List):

http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm Referenced January 4, 2007.

Science Applications International Corporation (SAIC). 2006a. *Capital Projects: Hydrogen Plant Project Site Soil Pre-Characterization Results*. HW Job #: S2996. Chevron Richmond Refinery. April 28. See Appendix 8.11-A.

_____. 2006b. *Capital Projects: COGEN Project Site Soil Pre-Characterization Results*. HW Job #: S2997. Chevron Richmond Refinery. May 9. See Appendix 8.11-A.