

NEGATIVE DECLARATION

Submitting: Draft
 Final
 Mitigated Negative Declaration

Project Title: Chevron U.S.A. Inc., Richmond Refinery

State Clearinghouse Number: 2006042054

Contact Person: Michael Zamudio Phone # (916) 255-6535

Project Location (*Include County*):

841 Chevron Way, Richmond, CA 94801, Contra Costa County. The hazardous waste storage and treatment facility (HWTSF) is located within the Chevron Refinery complex (facility). The project is a 1.3-acre site within the facility, which is a 2900-acre site. Construction of the HWTSF was completed in October 1983. The first permit was issued September 10, 1992. The HWTSF is bounded on all 4 sides by the facility. The fence line is ¼ mile from the nearest public thoroughfare. The nearest residences are over ½ mile away.

Project Description:

Issuance of a permit for continued treatment and storage of hazardous wastes onsite at the Chevron U.S.A., Inc. Richmond Refinery under the Health and Safety Code, Division 20, Chapter 6.5 and the California Code of Regulations, Title 22, Division 4.5. The facility stores and treats hazardous wastes which are generated onsite in a permitted hazardous waste treatment and storage facility. The wastes would include acids, bases, and reactive chemicals. These wastes can be stored at the facility for up to one year. The storage and treatment facility has five areas and consists of Storage for Drummed Waste, Neutralization, Bulk Liquid Storage and Treatment, Solid Waste Bin Storage and Liquids/Sludge Storage and Treatment.

1. Storage for Drummed Waste Area

This 1,198-square foot area would continue to be used to store hazardous waste in 55 and 85-gallon steel or polyethylene drums. The drums are stored in six rooms in two large storage buildings. Each room is self contained with built-in fire extinguishing systems. The drums are segregated according to the characteristic of the waste. Wastes which will be stored include corrosives, ignitables, oxidizers, Polychlorinated Biphenyls (PCBs), reactives and toxics. A maximum of 4,620 gallons of hazardous waste can be stored at any time.

2. Neutralization Area

This 1,144-square foot area consists of a 20-foot by 52-foot long reinforced concrete vault. There are two drainage sumps which transfer collected liquids to the main sump. This area is used to treat corrosive liquids in 6,500-gallon polyethylene containers. A maximum of two containers can be stored in this area at any time.

Neutralization treatment technology is the treatment technology that is used to treat corrosive liquids or solid wastes. This requires the addition of a neutralizing reagent to change the pH of the liquid to between 6 and 11. For example, the process begins by adding a chemical in accordance with parameters established by bench scale testing. And pH readings are taken as the treatment process changes the pH at regular intervals until a pH of 6-11 is reached. If bench-scale tests determine that this reaction is exothermic, it will be necessary to monitor the temperature of this reaction as it progresses and halt the chemical added if the temperature exceeds 150°F.

3. Bulk Liquid Storage and Treatment Area

This 3,555-square foot area is used to store and treat bulk liquid waste. Treatment includes oxidation of sulfidic wastes and metal precipitation. Steel vessels are used for treatment or storage. These vessels/tanks are rectangular in shape and are 11 feet high, 8 feet wide and 40 feet in length (See section V, attachments V-4 and V-5 of the Approved Permit Application for diagrams of Bi-level Tank and Baker Tank). The maximum container size is 21,000-gallons. These vessels are rented as needed, and must meet minimum yield point of 36,000 pounds per square inch (psi) and tensile strength of 58,000 psi. These vessels can vary in size because the vendor may change size standards. The untreated waste is stored in steel vessels. Treated waste will be shipped from the Facility for disposal or for further treatment. The maximum capacity of this area is 147,000 gallons.

Oxidation treatment technology is the treatment technology that is used to treat Sulfidic, Ignitable, Flammable, Pyrophoric, and Self-Heating properties of liquid or solid wastes. This requires the addition of an oxidizing reagent to change the chemical properties. For example, the process begins by adding a chemical in accordance with parameters established by bench scale testing. The pH and other parameter readings are taken as the treatment process changes the chemical properties. If bench-scale tests determine that this reaction is exothermic, it will be necessary to monitor the temperature of this reaction as it progresses, so that the temperature is kept within 10 to 100°F.

Wastes that may be treated in this area are listed in the Chevron Richmond Refinery Hazardous Waste Treatment and Storage Permit (Operation Plan), dated August 2001, see Table VIII-1 of listed Waste Streams in Section VIII of the Operation Plan (See Attachment A, Reference 2).

4. Solid Waste Bin Storage Area

This 4,482-square foot area is used to store solid wastes in drop bins. The bins are also used to treat wastes. Treatment processes include oxidation of pyroforic materials, stabilization of semi-solid waste and neutralization of corrosive solids. Ten 40-cubic-yard bins and two 2.5-cubic-yard storage bins, or twenty 20-cubic-yard bins and two 2.5-cubic-yard storage bins. The maximum capacity is 81,800 gallons or 405 cubic-yards.

5. Liquids/Sludge Storage and Treatment Area

This 5,022-square foot area is used to store and treat liquid process wastes. The treatment process is used in phase separation. A maximum of ten 21,000-gallon vapor tight steel vessels can be used for storage of waste.

Phase Separation treatment technology is the treatment technology that is used to treat materials that contain free oil and/or water. This requires the use of decanting or mechanical means to reduce the waste volume. For example, the equipment that is typically used in this processes are centrifuges, plate-and-frame filter presses and belt-filter presses.

There is no construction required by this project. All units are presently in place at the facility. The Zoning/Present Land Use is Heavy Industrial District.

Findings of Significant Effect on Environment:

(A copy of the Initial Study which supports this finding should be attached.)

The California Environmental Protection Agency, Department of Toxic Substances Control finds that the project will have no significant deleterious effects on the environment. See the attached Initial Study for determination of no significant effects on the environment.

Mitigation Measures:

DTSC concluded that the project, as proposed, will not have any significant deleterious effects on the environment. The Chevron permit application and the DTSC permit would prescribe specific requirements with regard to the treatment procedures, storage conditions, security, inspections, contingency plan, required safety equipment, aisle space, record

keeping, reporting and financial responsibility to ensure the protection of public health and safety, and the environment. These include but are not limited to fire suppression equipment in the container storage rooms and secondary containment for wastes stored and treated at the facility.

DTSC has determined that no additional mitigation measures would be required beyond those incorporated as part of the project to ensure that impacts would be less than significant.

DTSC Branch Chief Signature

Date

Mohinder Sandhu
DTSC Branch Chief Name

Supervising HSE II
DTSC Branch Chief Title

(916) 255-3716
Phone #