

## INITIAL STUDY

*The Department of Toxic Substances Control (DTSC) has completed the following Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations).*

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I. PROJECT INFORMATIONProject Name: Chevron U.S.A. Inc., Richmond RefinerySite Address: 841 Chevron WayCity: Richmond State: CA Zip Code: 94801 County: Contra CostaContact Person: Diane AvenAddress: P. O. Box 1272City: Richmond State: CA Zip Code: 94802 Phone Number: (510) 242-5610

Project Description: Chevron U.S.A. Inc., has submitted for approval to the Department of Toxic Substances Control a Part A and Part B application for the continued treatment and storage of hazardous wastes at the Chevron U.S.A. Inc., Richmond Refinery (Facility) under the Health and Safety Code, Division 20, Chapter 6.5 and the California Code of Regulations, Title 22, Division 4.5.

The Hazardous Waste Treatment and Storage at the Facility (HWTSE) would store and treat hazardous wastes which are generated on site. The wastes would include acids, bases, and reactive chemicals. These wastes would be stored at the HWTSE for up to one year.

The HWTSE is utilized for storage and treatment of many of the Refinery's hazardous wastes. The purpose of treatment is to render the waste less hazardous or non-hazardous.

Project Activities: The HWTSE has five areas and consists of 1) Storage for Drummed Waste, 2) Neutralization, 3) Bulk Liquid Storage and Treatment, 4) Solid Waste Bin Storage and 5) Liquids/Sludge Storage and Treatment (See Figure 3 in attachment B).

#### 1. Storage for Drummed Waste Area (Area I)

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 84 drums will be stored at any time. The maximum capacity of the total storage is 4620 gallons.

#### 2. Neutralization Area (Area II)

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 will be stored in this area at any time.

Neutralization treatment technology is the treatment technology that used to treat corrosive liquid 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. Exothermic means that heat is created as a result of the

chemical reaction.

### 3. Bulk Liquid Storage and Treatment Area (Area III)

This 3,555-square foot area is used to store and treat bulk liquid waste. Waste which has not been treated is stored in 21,000 gallon vapor tight steel vessels. Treatment occurs in 16,800 gallon carbon steel vessels. Treatment includes oxidation of sulfidic wastes and metal precipitation. A maximum of five (5) vapor tight steel vessels and three (3) carbon steel vessels will be stored in this area at any time for a total of eight (8) vessels.

Oxidation treatment technology is the treatment technology that 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. Exothermic means that heat is created as a result of the chemical reaction.

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

Abrasive Blasting Media, Carbon, Catalyst: Pre-Treatment Catalyst and Post-Treatment Catalyst, Corrosive Solids: Pre-Treatment Solids and Post-Treatment Solids, Discarded or Used Commercial Products, Heat Exchanger Semi-Solids, Pre-Treatment Semi-Solid and Post-Treatment Solids, Non-RCRA Industrial Debris (such as Oily Rags and Gloves), Leaded Tank Bottoms Pre-Treatment Semi-Solid and Post-Treatment Solids, Oily Sludge: Pre-Treatment Semi-Solid and Post-Treatment Solids, RCRA Debris (such as contaminated Personal Protective Equipment), Spill Residues or Process Wastes: Pretreatment Sludge and Post-Treatment Solids

### 4. Solid Waste Bin Storage Area (Area IV)

This 4,482-square foot area is used to store solid wastes in 1.25 and 20 cubic yard 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. A maximum of two 1.25 cubic yard bins and twenty 20 cubic yard bins will be stored in this area at any time. Oxidation process is the same as Number 3 above.

### 5. Liquids/Sludge Storage and Treatment Area (Area V)

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

Zoning/Present Land Use is Heavy Industrial District.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- Initial Permit Issuance
- Permit Renewal
- Permit Modification
- Closure Plan
- Regulations
- Removal Action Plan
- Removal Action Workplan
- Interim Removal
- Other (Specify)

Program/ Region Approving Project: Standardized Permits and Corrective Action Branch, Hazardous Waste Management Program, Department of Toxic Substances Control/California Environmental Protection Agency

Contact Person: Michael Zamudio

Address: 8800 Cal Center Drive

City: Sacramento State: CA Zip Code: 95826 Phone Number: (916) 255-6535

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact."

- None Identified
- Air Quality
- Cumulative Effects
- Hydrology and Water Quality
- Noise
- Recreation
- Aesthetics
- Biological Resources
- Geology And Soils
- Land Use and Planning
- Population and Housing
- Transportation and Traffic
- Agricultural Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Mineral Resources
- Public Services
- Utilities and Service Systems

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g.: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

**1. Aesthetics**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The HWTSF is located within the Chevron Refinery complex. Chevron operates a 1.3 acre, on-site HWTSF. Hazardous wastes generated in various production areas are brought to the HWTSF for segregation, treatment and storage before shipment off-site for further treatment of disposal. This treatment reduces the volume and hazardous characteristics of the waste.

The HWTSF is a 1.3-acre site within the Refinery Complex Facility, which is a 2900-acre site. Construction of the HWTSF was completed in October 1983 (See Attachment B for maps and plot plan). 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. A zoning map is enclosed.

The HWTSF is divided into five hazardous waste treatment/storage areas in order to prevent interaction between wastes. These areas are 1) Storage for Drummed Waste, 2) Neutralization, 3) Bulk Liquid Storage and Treatment, 4) Solid Waste Bin Storage and 5) Liquids/Sludge Storage and Treatment (See Figure 3 in Attachment B).

#### 1. Storage for Drummed Waste Area (Area I)

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 84 drums will be stored at any time. The maximum capacity is total storage is 4620 gallons.

#### 2. Neutralization Area (Area II)

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#### 3. Bulk Liquid Storage and Treatment Area (Area III)

This 3,555-square foot area is used to store and treat bulk liquid waste. Waste which has not been treated is stored in 21,000 gallon vapor tight steel vessels. Treatment occurs in 16,800 gallon carbon steel vessels. Treatment includes oxidation of sulfidic wastes and metal precipitation. A maximum of five (5) vapor tight steel vessels and three (3) carbon steel vessels will be stored in this area at any time for a total of eight (8) vessels.

#### 4. Solid Waste Bin Storage Area (Area IV)

This 4,482-square foot area is used to store solid wastes in 1.25 and 20 cubic yard 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. A maximum of two 1.25 cubic yard bins and twenty 20 cubic yard bins will be stored in this area at any time. Oxidation process is the same as Number 3 above.

#### 5. Liquids/Sludge Storage and Treatment Area (Area V)

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

Analysis of Potential Impacts. The extent project activities would:

- a. Have a substantial adverse effect on a scenic vista.  
None. The Facility is located in an area zoned for heavy to light industry. The HWTSF is a small area within the Facility and is not discernible from any other site within the Facility.
- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.  
Since the HWTSF is located within the Chevron Refinery complex, the 1.3 acre, on-site HWTSF does not cause any potential impacts because there are no cultural, historical or scenic aspects to disturb at the site.
- c. Substantially degrade the existing visual character or quality of the site and its surroundings.  
Since the HWTSF is located within the Chevron Refinery complex, the 1.3 acre, on-site the HWTSF does not substantially degrade the existing visual character or quality of the site and its surroundings.
- d. Create a new source of substantial light of glare that would adversely affect day or nighttime views in the area.

No light and glare impacts because the HWTFS will not create significant light or glare. The HWTFS has existing light towers along the HWTFS perimeter fence for conducting nighttime operations. The HWTFS is routinely operated between 7 am and 4 pm when natural light is sufficient for normal operations. However, the HWTFS is equipped with 6 mercury vapor lamp light towers with a total wattage of 4,800 watts. Currently, lighting is used infrequently. The lights are designed to supply adequate lighting for the HWTFS for nighttime work. They are not designed to supply lighting for surrounding areas. Because HWTFS is small and is located within the Facility, the lighting will not impact surrounding areas such as businesses and residences.

*Specific References (List a, b, c, etc):*

Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## **2. Agricultural Resources**

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*Project activities likely to create an impact.* None

*Description of Environmental Setting:* There are no plants, animals, cultural, historical or scenic aspects to disturb at the site. The Facility is located in an area zoned for heavy to light industry. The HWTFS is a small area within the Facility and is not discernible from any other site within the Facility.

*Analysis of Potential Impacts.* The extent project activities would:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.  
None. This is a small, existing HWTFS located within the confines of the Facility. The project does not involve or include any construction or excavation.
- b. Conflict with existing zoning or agriculture use, or Williamson Act contract.  
None. This is an existing HWTFS located within the Facility.
- c. Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.  
None. There is no agriculture surrounding this HWTFS. This is a permit renewal to a portion of the existing Facility.

*Specific References (list a, b, c, etc):*

- a. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- b. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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### 3. Air Quality

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*Project activities likely to create an impact.* Emissions or releases of volatile organic compounds (VOCs) are monitored and controlled in accordance with the existing Bay Area Air Quality Management District (BAAQMD) permits for the following hazardous waste management storage and treatment activities:

- Oxidation of sulfidic wastes,
- Oxidation of ignitable/flammable/pyrophoric/self-heating/ material, and
- Sparging or stripping to reduce volatile organic content of the waste.

Description of Environmental Setting: The Facility is in an area that commonly has smog levels higher than other parts of the Bay Area. The major contributors to these levels are from motor vehicles exhausts which get blown in by coastal winds. The Facility is under the jurisdiction of the BAAQMD and has multiple air permits associated with operation of the Facility. Hazardous waste tanks containing organic solvents also have permits to operate from the BAAQMD. The latest status of the Chevron Richmond Refinery's Title V Permit is available on the BAAQMD website at [http://www.baaqmd.gov/pmt/title\\_v/public\\_notices.htm#A0010](http://www.baaqmd.gov/pmt/title_v/public_notices.htm#A0010).

- The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTSE or Facility will not change significantly. The portable polyethylene storage containers and the portable steel storage containers, when used in the HWTSE, and if processing volatile hydrocarbons exceeding the true vapor pressure (TVP) limits set by BAAQMD Permit requirements, will be fit with abatement devices (carbon adsorption systems) to ensure air emission quality requirements are met. Any materials exceeding a TVP of 11 psia shall not be stored in these containers. Abatement devices are required in the steel storage containers if TVP of the stored material exceeds 1.5 psia. Abatement devices will be required in the polyethylene containers if the TVP of the stored material exceeds 4 psia. In view of these controls, air quality impacts from HWTSE are expected to be insignificant.

Analysis of Potential Impacts. The extent project activities would:

- a. Conflict with or obstruct implementation of the applicable air quality plan.  
No. The project does not include any construction, excavation, new equipment, or structures. The project also does not include any substantial changes to existing operations. A net increase of emissions is not expected beyond the currently permitted levels as allowed by the BAAQMD permit to operate (PTO) 20 portable Poly tanks and 20 portable steel tanks in the hazardous waste treatment area. BAAQMD PTO's are developed and issued to assure compliance with air quality plans. Therefore, the continued operation of HWTSE is in compliance with existing BAAQMD PTO and assures no conflict or obstruction of air quality plans.
- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.  
All activities are conducted per current air permits: no violations are anticipated. VOC emissions are regulated according to applicable regulations found in 22 CFR, Articles 28 and 28.5 and all applicable air regulations as governed by BAAQMD.
- c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).  
No. The project does not include any construction, excavation, new equipment, or structures. The project also does not include any substantial changes to existing operations. Therefore, a net increase of criteria pollutants is not expected (including those for which the Bay Area is non-attainment) beyond currently permitted levels (i.e., the Facility has a BAAQMD permit to operate (PTO) 20 portable Poly tanks and 20 portable steel tanks used in the hazardous waste treatment area).
- d. Expose sensitive receptors to substantial pollutant concentrations.  
The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. The HWTSE and Facility are secure areas; the public has no access to the HWTSE or Facility except as accompanied by a Chevron employee. A 6' chain link fence surrounds the HWTSE and access is strictly

regulated. All activities are conducted per current air permits- no violations are anticipated. Volatile organic emissions are regulated according to applicable regulations found in 22 CFR, Articles 28 and 28.5 and all applicable air regulations as governed by BAAQMD.

- e. Create objectionable odors affecting a substantial number of people.  
The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. All activities are conducted per current air permits. Volatile organic emissions are regulated according to applicable regulations found in 22 CFR, Articles 28 and 28.5 and all applicable air regulations as governed by BAAQMD. Written operating procedures are designed to minimize all risks, including emissions.

The Facility is under the jurisdiction of the BAAQMD and has multiple air permits associated with operation of the Facility. Hazardous waste tanks containing organic solvents also have permits to operate from the BAAQMD.

- f. Result in human exposure to Naturally Occurring Asbestos (see also Geology and Soils, f.).  
Not applicable. It is an existing, operating site within the confines of the Facility, and the project does not involve any construction or excavation.

No air Impacts since:

Appropriate air abatement devices are used when required by BAAQMD. Volatile organic emissions are regulated according to applicable regulations found in 22 CFR, Articles 28 and 28.5 and all applicable air regulations as governed by BAAQMD.

*Specific References (list a, b, c, etc):*

- a. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- b. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.
- c. Bay Area Air Quality Management District (BAAQMD), "Meteorological Monitoring Guidance", Manual of Procedures, May 8, 1996.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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#### **4. Biological Resources**

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*Project activities likely to create an impact.* Potential releases from HWTSE operations or accidents.

*Description of Environmental Setting:* A Habitat and Impact Assessment for Biological Resources was conducted by a third party contractor. The assessment concluded that there is no habitat for wildlife or plant species present at the HWTSE. No Plant and Animal Impacts because the project does not produce emissions or no new construction that would adversely affect plants and animals in the vicinity. Treatment tanks that might produce emissions are vented to carbon filters to prevent release of emissions or nuisance odors. Endangered species which are in the area, but are more than one-half mile from the HWTSE, include the Salt-Marsh Harvest Mouse, White-Tailed Kite, Fragrant Fritillary, California Black Rail, Salt-Marsh Wandering Shrew, Bridges' Coast Range Shoulder Band (Snail) and the California Clapper Rail.

The following are the findings of the report:

On March 1, 2005, Gretchen Lebednik Project Biologist visited the Hazardous Waste Treatment and Storage Facility

(HWTSE) at the Richmond Refinery to survey the habitats in the vicinity of the site.

The Facility is located on a flat plain adjacent to San Francisco Bay. The HWTSE site is completely paved and fenced, and is surrounded by the refinery facilities. The east side of the site is bordered by buildings and another paved area that is separately fenced. The south and west sides are bordered by graveled areas and pipelines. The north side of the site is bordered by a two-lane road with frequent vehicle passage and by offices. North of the road are treatment ponds that are not part of the HWTSE.

There are two small closed storage buildings on the south side and similar small buildings on the east side of the Facility. A drain covered by gratings crosses the northern side of the site. Centered at the west end of the site is a below-surface sump that is usually completely covered by metal plates. On March 1, 2005 the sump was uncovered because the interior walls were being resealed. In approximately 14 years of operation, the sump has been uncovered once before, when some of the plates were removed to enable access to the pump for maintenance purposes.

#### HABITAT

The HWTSE is completely paved. The small closed buildings on HWTSE site have smooth walls and tight joints to the roofs. Neither these buildings nor the adjacent offices provide roosting habitat for bats. The Facility itself provides no habitat for wildlife species.

Scattered weeds are present in some of the graveled areas south and west of the HWTSE. A small grassy area with ornamental trees is associated with the buildings on the north side, but is separated from the HWTSE by one of the buildings. Ornamental trees adjacent to the HWTSE are approximately thirty to forty feet tall. The two immediately adjacent to the buildings north of the HWTSE appear to be grevillea. There are three evergreen trees to the northeast in the immediate vicinity.

North across the two-lane road from the HWTSE is a row of ornamental myoporum (*Myoporum laetum*). Immediately north of this row is an area approximately four to six feet wide, dominated by cattails (*Typha* spp.) and saltgrass (*Distichlis spicata*) that borders treatment ponds to the north. Paved and graveled areas on both the east and the west sides of the ponds separate this cattail/saltgrass zone from similar vegetation extending towards the bay.

#### WILDLIFE

No wildlife was observed at the HWTSE or in its vicinity during this survey. The ornamental trees separated from the HWTSE by buildings and pavement could provide nesting habitat for birds. However, the HWTSE and its immediate vicinity provide no foraging habitat for birds. No evidence of raptor use of these trees was observed during the March 1, 2005 survey. If any birds do subsequently nest in these trees, they are unlikely to utilize the HWTSE itself.

#### SPECIAL STATUS SPECIES

Review of the California Natural Diversity Data Base (CNDDDB, CDFG 2004) and U.S. Fish and Wildlife Service (USFWS) lists for the San Quentin quad and Contra Costa County (USFWS 2005) indicated that several special status species occur in the project region and therefore, are potentially present in this area. No special status species were observed during the March 8, 2005 survey. The Biologists concluded Negative findings for all of the species on the CNDDDB and USFWS lists for the area.

#### IMPACT ASSESSMENT

Because no habitat for wildlife or plant species is present at the HWTSE, no impacts to special status species are expected to occur during normal operations.

The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTSE or Facility will not change significantly (See also Air Quality, Description of Environmental Setting section for changes or modifications explanation). There are no plants or animals to disturb at

the site. A 6' chain link fence surrounds the HWTSF and it is completely paved with run-off and run-on protection to prevent contamination of soil, storm water, or groundwater.

Analysis of Potential Impacts. The extent project activities would:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.  
There are no plants or animals to disturb at the site. None of these species or their habitat exists within the HWTSF.
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.  
There are no plants or animals to disturb at the site. The project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.
- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.  
The project area has no wetlands. The project does not involve or include any construction, excavation, or new equipment or structures. The HWTSF is completely paved with run-off and run-on protection to prevent contamination of soil, storm water, or groundwater.
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.  
No. There are no plants or animals to disturb at the site. The project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility.
- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.  
No. The project does not involve or include any construction or excavation.
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

There are no specific, ongoing HWTSF activities that might impact the biological resources of the area. Local plants and animals will not be disturbed as the result of HWTSF operations. Refer to the Description of Environmental Setting the appropriate survey completed to ensure that sensitive species are not impacted during operation. There are no plants or animals to disturb at the site. The project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility.

*Specific References (list a, b, c, etc):*

- a. Habitat and Impact Assessment for Biological Resources at the Hazardous Waste Treatment and Storage Facility, April 14, 2005.
- b. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- c. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 5. Cultural Resources

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:* No Cultural Resources impacts are expected because the HWTSE exists, and will not increase its capacity and it is located within the Facility. The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTSE or Facility will not change significantly. The HWTSE is not discernible from off-site locations. Therefore, no cultural, historical or scenic aspects to disturb at the site.

Analysis of Potential Impacts. The extent project activities would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5. There are no cultural, historical or scenic aspects to disturb at the site.
- b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5. There are no cultural, historical or scenic aspects to disturb at the site.
- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. There are no cultural, historical or scenic aspects to disturb at the site.
- d. Disturb any human remains, including those interred outside of formal cemeteries. There are no cultural, historical or scenic aspects to disturb at the site.

*Specific References (list a, b, c, etc):*

- a. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- b. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 6. Geology and Soils

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*Project activities likely to create an impact:* A Geotechnical Evaluation for Seismic Conditions Report was conducted by a third party contractor, and they concluded that the potential for ground rupture, sand boils and loss of bearing support due to liquefaction of the silty fine sand pockets in the hydraulic fill is low at the HWTSE, and no impacts are expected to occur at the HWTSE during normal operations.

The failures of any of the storage or treatment containers have the potential to impact the geology or soil in the area. The failure of any of the storage containers or tanks or lines which transfer the material has the potential to impact the geology or soils in the area. There are sufficient engineering controls to prevent a release to the geology or soils in the area. Engineering controls include, but are not limited to, leak detection monitoring, high level alarms, coated secondary containment vaults, and daily visual inspections. All pipelines are secured by secondary containment in the form of pipe-in-pipe construction. Please refer to the Operation Plan Section XV for a more detailed description.

*Description of Environmental Setting:* The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. The HWTSE has been in existence since 1983 and the Facility since 1902. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to

existing operations. The HWTsf is completely paved with run-off and run-on protection to prevent contamination of soil, storm water, or groundwater.

The HWTsf or project is 3.7 miles from the Hayward Fault and may experience an earthquake. The HWTsf is designed in order to minimize the potential for release of hazardous materials during an earthquake due to the construction and maintenance of the containment and equipment.

The Richmond Refinery (Facility) and its appurtenant tank fields are located on the peninsula of the Potrero-San Pablo Ridge, which is composed of steeply dipping Franciscan Complex. The refining of the petroleum products generally occurs on the bay fill areas northeast of the ridge.

Past fluctuations in sea level created a complex sedimentary sequence of interfingering estuarine and alluvial fan deposits overlying the Franciscan Complex bedrock. The uppermost deposits are artificially placed bay fill, ranging from ~3 feet to ~30 feet in depth. The fill materials overlie bay muds which consist of silt and silty clay with abundant plant matter or peat. The bay muds overlap onto the Franciscan bedrock and thicken bayward.

Analysis of Potential Impacts. The extent project activities would:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42).

There are no activities or operations planned for the site which would expose people or structures to adverse seismic effects

- Strong seismic ground shaking.

There are no activities or operations planned for the site which would expose people or structures to adverse seismic effects

- Seismic-related ground failure, including liquefaction.

There are no activities or operations planned for the site which would expose people or structures to adverse seismic effects

The HWTsf is an existing and operating HWTsf and all structures are single story only. The maximum allowable capacities are not changed by this permit renewal. The HWTsf's contingency plan and post earthquake inspections are designed to minimize impact from any seismic activity. The HWTsf is completely paved with run-off and run-on protection. The Facility has its own Fire Department and Emergency Medical Technicians (EMTs) to respond to emergencies within the Facility.

The HWTsf's secondary containment is designed to hold 10% of the total maximum volume allowed to be stored in the HWTsf at any time. Each area of the HWTsf handles a specific waste type or group of wastes, such that all wastes within a given area are compatible with each other. Each area is designed to contain any spills or storm water such that they do not contact waste in other areas.

- Landslides.

As stated above, the failure of any of the storage containers or tanks or lines which transfer the material has the potential to impact the geology or soils in the area. There are sufficient engineering controls to prevent a release to the geology or soils in the area. Engineering controls include, but are not limited to, leak detection monitoring, high level alarms, coated secondary containment vaults, and daily visual inspections. All pipelines are secured by secondary containment in the form of pipe-in-pipe construction. Please refer to the Facility Operations description in this document for a more detailed description

A Geotechnical Evaluation for Seismic Conditions Report was conducted by a third party contractor, and they concluded that the potential for ground rupture, sand boils and loss of bearing support due to liquefaction of the silty fine sand pockets in the hydraulic fill is low at the HWTSE, and no impacts are expected to occur at the HWTSE during normal operations.

None anticipated since the closest hill side is more than 1000 feet away from the HWTSE.

- b. Result in substantial soil erosion or the loss of topsoil.  
No, this is an existing site and the project does not involve any construction or excavation. The HWTSE is completely paved with run-off and run-on protection.
- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.  
No, this is an existing site and the project does not involve any construction or excavation. The HWTSE is completely paved with run-off and run-on protection.
- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.  
No the project is not located on expansive soil.
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of water.  
The HWTSE has no septic tanks and is equipped with a waste water system that may discharge to the city/county waste water treatment system, and the project does not involve any construction or excavation.
- f. Be located in an area containing naturally occurring asbestos (see also Air Quality, f.).  
There are no naturally occurring asbestos in the HWTSE, and the HWTSE is completely paved with run-off and run-on protection.

This is an existing and operating site within the confines of the Facility, and the project does not involve any construction or excavation.

Specific References (list a, b, c, etc):

- a. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- b. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.
- c. Bay Area Air Quality Management District (BAAQMD), "Meteorological Monitoring Guidance", Manual of Procedures, May 8, 1996.
- d. Geotechnical Evaluation for Seismic Conditions, Hazardous Waste Treatment and Storage Facility, Chevron Richmond Refinery, January 2005.
- e. Division of Mines and Geology Special Publication 42.

*Findings of Significance:*

- Potentially Significant Impact
- Potentially Significant Unless Mitigated
- Less Than Significant Impact
- No Impact

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## **7. Hazards and Hazardous Materials**

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*Project activities likely to create an impact.*

1. The failures of any of the storage containers or tanks or lines which transfer hazardous waste have the potential to impact the geology or soils in the area:
2. Transport of hazardous materials in and out of the Facility.
3. Accidental release of a hazardous material.

*Description of Environmental Setting:* No Hazards and Hazardous Materials impacts are anticipated because the HWTSE is completely contained. The HWTSE is completely paved with run-off and run-on protection. The project does not involve or include any new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTSE or Facility will not change significantly. See the permit for details on wastes and treatment chemicals that may be found in the HWTSE.

The HWTSE's secondary containment is designed to hold 10% of the total maximum volume allowed to be stored in the HWTSE at any time. Each area of the HWTSE handles a specific waste type or group of wastes, such that all wastes within a given area are compatible with each other. Each area is designed to contain any spills or storm water such that they do not contact waste in other areas. The HWTSE is completely paved with run-off and run-on protection. In addition, the HWTSE drains to its own sump for segregation and analytical testing. The Facility has its own Fire Department and Emergency Medical Technicians (EMTs) to respond to emergencies within the Facility.

**Fire Department:** The Facility is equipped with its own Fire Department since it is a large Facility. The Facility is capable of handling an emergency in case of an accidental fire or spill.

**Contingency Plan:** There is a Contingency Plan specifically for the HWTSE and it is included in Facility-wide emergency response and evacuation plans. The Facility has its own Fire Department and Emergency Medical Technicians (EMTs) to respond to emergencies within the Facility.

The Security Control Center is manned 24 hours a day and maintains contact with field security officers. Facility entry is controlled to prevent unauthorized entry. The Facility is patrolled 24 hours a day. The entire Facility perimeter is surrounded by a fence. The Facility also maintains an emergency Contingency Plan. This plan describes the actions to be taken by the Facility in response to fires, explosions, or other significant releases of hazardous waste to air, soil or surface water. The plan is designed to minimize hazards to human health or the environment resulting from a hazardous waste incident. Contingency Plan copies are maintained at the Facility and are submitted to local police departments, fire departments, hospitals, state and local emergency response teams that may be called upon to provide emergency services. In addition, the City of San Jose Police Department and Fire Department conduct familiarization tours on a periodic basis.

**Possibility of releases:** There is a potential for releases from HWTSE operations or accidents from hazardous waste management storage and treatment activities. The HWTSE's contingency plan and inspections are designed to minimize impact from release. The HWTSE is completely paved with run-off and run-on protection. The Facility has its own Fire Department and Emergency Medical Technicians (EMTs) to respond to emergencies within the Facility.

The failure of any of the storage containers or tanks or lines which transfer the material has the potential to impact the geology or soils in the area. There are sufficient engineering controls to prevent a release to the geology or soils in the area. Engineering controls include, but are not limited to, leak detection monitoring, high level alarms, coated secondary containment vaults, and daily visual inspections. All pipelines are secured by secondary containment in the form of pipe-in-pipe construction. Please refer to the Facility Operations description in this document for a more detailed description.

**Explosion:** Wastes are segregated into separate storage area, to prevent any explosion. Incompatible waste storage areas are design to prevent the wastes from commingling. Floors are reinforced concrete and stored in separate rooms. All containers are transported in a closed and/or sealed condition. Containers are only opened to inspect or sample or for consolidation/blending purposes. Containers are tracked as they move through the Facility to ensure compliance with regulatory waste holding times for hazardous wastes.

The failure of any of the storage containers or tanks or lines which transfer the material has the potential to impact the geology or soils in the area. There are sufficient engineering controls to prevent a release to the geology or soils in the area. Engineering controls include, but are not limited to, leak detection monitoring, high level alarms, coated secondary containment vaults, and daily visual inspections. All pipelines are secured by secondary containment in the form of pipe-in-pipe construction. Please refer to the Facility Operations description in this document for a more detailed description.

**Berms and Secondary Containment:** The HWTSF's secondary containment is designed to hold 10% of the total maximum volume allowed to be stored in the HWTSF at any time. Each area of the HWTSF handles a specific waste type or group of wastes, such that all wastes within a given area are compatible with each other. Each area is designed to contain any spills or storm water such that they do not contact waste in other areas. The HWTSF is completely paved with run-off and run-on protection. In addition, the HWTSF drains to its own sump for segregation and analytical testing. The Facility has its own Fire Department and Emergency Medical Technicians (EMTs) to respond to emergencies within the Facility.

**Structural Integrity:** All construction and vessels on the HWTSF meet the Environmental Principal Planner of the Department of Planning, Building and Code Enforcement.

**Tank Certification and Inspection:** The Facility maintains Facility Inspection Checklists and Schedules for tanks, vessels, piping, and sumps. Tanks, piping, valves, pumps and instrumentation are inspected daily. The bulk organic waste tanks primarily contain organic solvents. These chemicals are typically non-reactive individually or in combination with each other. Waste streams are segregated to assist to prevent unsafe conditions that may occur due to incompatibility and to provide for cost-effective solvent reclamation. All of the bulk waste collection tanks are provided with overfill protection with high-level alarms and are monitored by personnel within the building. Containers stored within the area are inspected Monday through Friday. The inspection includes checking for leaks and evidence of deterioration. Damaged containers will have their contents transferred to new containers or over packed into larger containers. Empty containers are also managed in this area. Storage and handling procedures are designed to maximize employee safety. The areas are protected from direct sunlight but provided with ventilation and air circulation to reduce buildup of explosive gas mixtures. Aisle space is maintained between container rows to allow access to containers and for inspections.

**Health and Safety Plan:** All personnel in the Operations Departments, Security Department, Emergency Coordinator support Hazardous Waste Management Response operations routinely handling, storing, using or disposing hazardous waste materials are trained to recognize and avoid the potential safety and health hazards related to their assignments. Training includes but is not limited to the following elements:

Safety awareness and safety rules;

Safe work practices;

Use of Material Safety Data Sheets;

Departmental procedures;

Emergency procedures;

Daily equipment inspection;

Process equipment start-up and emergency shutdown procedures;

Ongoing internal education;

Hazard communication (Occupational Safety and Health , Title 40, Code of Federal Regulations, Section 1910.120);

Site Specific Treatment Storage Disposal Operations;

Site Specific Emergency Response;

Chemical Safety;

Hazard Recognition;

Emergency evacuation plans, Preparedness/ Earthquake Safety;

Personal Protective Equipment;

Defensive Driving and Safe Vehicle Operations;

Respiratory Protection;

Confined Space Entry and Rescue;

Electrical Safety & Lock-Out/Tag Out;

Chemical Safety;

Forklift Trucks;

Hazardous Waste Handling,

Hazardous Materials Transportation;

Storm Drain Discharges, Environmental Issues;

Electric Trucks.

**Operational procedures:** Operational procedures are fully described in the attached draft RCRA-equivalent Hazardous Waste Facility Permit (Exhibit B).

Hazardous wastes generated from these processes are either treated on-site or transported off-site for recycling or disposal at an authorized hazardous waste Facility. Treatment processes at the Facility include both chemical and physical treatment

Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.

The existing processes and procedures utilized in the HWTSE are designed to minimize or eliminate any hazards from affecting workers or environment. The HWTSE is designed with full containment for solid or liquid wastes. The HWTSE and Facility are secure areas; the public has no access to the HWTSE or Facility except as accompanied by a Chevron employee. A 6' chain link fence surrounds the HWTSE and access is strictly regulated.

Please refer to the Environmental Setting above for Health and Safety Plan.

The HWTSE is utilized for storage and treatment of many of the hazardous wastes generated in various production areas of the Facility.

Waste which has been treated on-site is trucked off-site for disposal, and waste which is only stored at the HWTSE is trucked off-site for disposal.

- 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.

There are sufficient engineering controls to prevent a release to the geology or soils in the area. Engineering controls include, but are not limited to, leak detection monitoring, high level alarms, coated secondary containment vaults, and daily visual inspections. All pipelines are secured by secondary containment in the form of pipe-in-pipe construction. Please refer to the Facility Operations description in this document for a more detailed description

The existing processes and procedures utilized in the HWTSE are designed to minimize or eliminate any hazards from affecting the workers or environment. The HWTSE is designed with full containment for solid or liquid wastes. The HWTSE and Facility are secure areas; the public has no access to the HWTSE or Facility except as accompanied by a Chevron employee. A 6' chain link fence surrounds the HWTSE and access is strictly regulated.

The hazardous waste is transported in the Facility by six vacuum trucks. In addition, a flatbed truck makes approximately two trips per day into the HWTSE. A forklift is used to transfer drums from the flatbed truck to the small quantity container waste storage area

Storage and treatment is conducted in one of the five areas, and each area is designated for a particular waste; so that compatible wastes are kept in the designated area.

The five hazardous waste management units are named (See Figure 3 Plot Plan):

Area I	Storage for Drummed Waste
Area II	Neutralization
Area III	Bulk Liquid Storage and Treatment
Area IV	Solid Waste Bin Storage
Area V	Liquids/Sludge Storage and Treatment

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

Please refer to the Environmental Setting above. Facility inspections occur daily in Facility areas where hazardous materials and wastes are handled. No emissions from the Facility are expected to have adverse impacts on existing or proposed schools.

The nearest school is more than one-half mile from this HWTSE. Washington School is 2200 feet away from the Facility and a mile away from the HWTSE.

- 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 public or the environment. Although the site is listed pursuant to Government Code 65962.5, the activities authorized by this permit renewal are no different from those previously permitted at the site which did not create any significant hazard.

For an explanation as to why this Facility is on this list, please refer to Government Code Section 65962.5 for clarification of code and purpose.

- e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.  
No, there is a Contingency Plan specifically for the HWTSF and it is included in Facility-wide emergency response and evacuation plans. The Facility has its own Fire Department and Emergency Medical Technicians (EMTs) to respond to emergencies within the Facility.

*Specific References (list a, b, c, etc):*

- a. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- b. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 8. Hydrology and Water Quality

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:*

The HWTSF currently discharges treated wastewater into the Facility wastewater treatment system where it is mixed with the Facility waste and is further treated. This project does not use or discharge significant amounts of water. The HWTSF is provided with secondary containment, which prevents the hazardous wastes from coming in contact with the ground water. The project would not affect public water supplies because none are present or near the Facility. The only process, which requires water, is the oxidation of pyroforic materials, where the water is used to regulate the temperature of the material as it reacts.

The HWTSF is completely paved with run-off and run-on protection. The maximum allowable capacities are not changed by this permit renewal. The HWTSF's secondary containment is designed to hold 10% of the total maximum volume allowed to be stored in the HWTSF at any time. Each area of the HWTSF handles a specific waste type or group of wastes, such that all wastes within a given area are compatible with each other. Each area is designed to contain any spills or storm water such that they do not contact waste in other areas.

The HWTSF main sump is used to collect spills and rainwater run-off from the site in general and Areas II and V. Spills in these areas flow freely by gravity to this sump, where they will be analyzed to determine compliance with hazardous waste regulations and the Refinery's National Pollutant Discharge Elimination System (NPDES) permit. If wastewater tests clean, it may be discharged via two HWTSF sump pumps to the effluent treatment system. If the amount of liquid exceeds the capacity of the HWTSF main sump, the wastewater is pumped immediately to a designated vessel for completion of sampling and analysis to determine proper management.

The site consists of an asphalt pad underlain by a 4-inch sub-base. Due to overlaying, the pad itself is at least 4 inches thick. Because the continuity and integrity of the asphalt surface is not compromised by cracks, deep indentations, or excessive wear of the surface, the asphalt surface is judged to be suitable containment. The asphalt is compatible with most of the hazardous wastes found at the HWTSF, with the exception of wastes in Areas I and II. Spills are removed from the asphalt surface immediately. The asphalt pavement is designed with a slope from the curb at the periphery of

the site toward three storm drain inlets in the center. These drain inlets discharge into a 12 inch drain pipe which conveys storm water to the HWTSE main sump at the west side of the HWTSE. The water flows freely by gravity and is normally non-contaminated rainwater. Contents of the main sump are discharged to the Refinery's effluent treatment system via two sump pumps.

Containment of the HWTSE is maintained by a sealed concrete curb which surrounds the site, except at the southeast corner where an asphalt concrete dike acts in conjunction with the curb to provide containment. The concrete curb varies in height from 6 to 12 inches. The curb provides adequate containment for the 10% of total volume of Areas III, IV and V, plus run-off for the entire site.

Wash water is typically generated by decontamination of equipment, containers, and vessels. It is collected in a container or vessel for analysis. Wash water that is generated by decontamination of personnel outside of the decontamination trailer is contained in small pools and discharged to the main sump for analysis.

If it is to be discharged to the Refinery's effluent treatment system, it is analyzed for compliance with hazardous waste regulations and the Refinery's NPDES permit. Analytical methods will depend on the anticipated potential contaminants in the water, and will be conducted in accordance with the Waste Analysis Plan requirements, detailed in Section VIII. If tested clean, the water is discharged to the main sump to await discharge to the Refinery's effluent treatment system. If not clean, the water may be additionally treated as allowed by Section IX.

The Facility is surrounded by a Ground Water Protection system comprised of a bentonite barrier wall to prevent off-site migration of contaminated water.

Three hydro geologic zones have been identified within the top 150 feet of sediments in the flat lying areas of the site, the A-Zone, C-Zone, and the B-Zone, in order of increasing depth.

The A-Zone is the first water bearing zone and consists of artificial fill and the naturally occurring peat-rich bay mud. The water table elevation for this zone is within 2 to 10 feet of the ground surface and generally discharges to the Bay.

The C-Zone is an 80 to 90-foot thick water bearing zone of inter fingered alluvial and estuarine sediments. These sediments generally have low hydraulic conductivity, but sandy, more permeable units occur as channels and lenses. The sand units have not been shown to be contiguous across the site, but do appear to be hydraulically connected. However, based on 13 years of chemical data, there is no indication that the C-Zone groundwater has been significantly impacted. Chevron has concluded that the bay mud has been an effective hydraulic barrier between the A- and C-Zone. These results and conclusions were presented to the RWQCB in 1991 and continue to be supported by groundwater monitoring data collected pursuant to the Facility-wide Self-Monitoring Program.

The B-Zone is a relatively permeable unit at ~100 feet below the ground surface. It ranges from 5 to 15 feet thick and contains potable water, but has limited production capacity. The B-Zone occurs under artesian conditions and appears to be hydraulically separate from the overlying zones.

The average depth to groundwater at the HWTSE is ~2 to 5 feet below the ground surface. Groundwater elevation data is collected from nearby Monitoring Wells 140A, 141A, and 142A, shown on Map #4 in the permit renewal application.

Analysis of Potential Impacts. The extent project activities would:

- a. Violate any water quality standards or waste discharge requirements.  
No. The HWTSE is completely paved with run-off and run-on protection.

The HWTSE main sump is used to collect waste water and storm water from the site in general. Waste water and storm water in these areas flow freely by gravity to this sump, where they will be analyzed to determine compliance with hazardous waste regulations and the Refinery's NPDES permit. If wastewater tests clean, it may be discharged via two HWTSE sump pumps to the effluent treatment system. If the amount of liquid exceeds the capacity of the HWTSE main sump, the wastewater is pumped immediately to a designated vessel for completion of sampling and analysis to determine proper management.

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production

rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

No. This project does not, in any way, involve withdrawal or discharge to groundwater.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

No. The site of this project does not have any streams or water bodies.

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

No. The site of this project does not have any streams or water bodies. The HWTsf is completely paved with run-off and run-on protection. The maximum allowable capacities are not changed by this permit renewal. The HWTsf's secondary containment is designed to hold 10% of the total maximum volume allowed to be stored in the HWTsf at any time. Each area is designed to contain any spills or storm water such that they do not contact waste in other areas.

- e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

No. The HWTsf is completely paved with run-off and run-on protection. The maximum allowable capacities are not changed by this permit renewal. The HWTsf's secondary containment is designed to hold 10% of the total maximum volume allowed to be stored in the HWTsf at any time. Each area of the HWTsf handles a specific waste type or group of wastes, such that all wastes within a given area are compatible with each other. Each area is designed to contain any spills or storm water such that they do not contact waste in other areas.

- f. Otherwise substantially degrade water quality.

No (See discussion of Ground Water Protection System contained in the Description of Environmental Setting section).

- g. Place within a 100-year flood hazard area structure, which would impede or redirect flood flows.

No, this project is not within the 100-year flood plain.

- h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

HWTsf activities are not expected to result in the additional exposure of people or structures to flooding. The HWTsf is not located near a dam or levee which would result in flooding and located in an area that is not subject to flooding.

- i. Inundation by seiche, tsunami or mudflow.

HWTsf activities are not expected to result in the inundation of the HWTsf. The HWTsf is located in an area where it was never subject to inundation by seiche, tsunami or mudflow.

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**9. Land Use and Planning**

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*Project activities likely to create an impact.* None

*Description of Environmental Setting:* 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 Facility bounds the HWTsf on all 4 sides. The fence line is ¼ mile from the nearest public thoroughfare. The nearest residences are over ½ mile away. The Facility is located in an area zoned for heavy to light industry.

Land Use and Planning impacts are not expected since the project is consistent with existing Land Use or Zoning Plans. The proposed project is situated in a Heavy Industrial District, and is consistent with the Richmond Municipal Code. The project is for the renewal of a permit for an existing and operating HWTsf within the confines of the Facility.

Analysis of Potential Impacts. The extent project activities would:

- a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.  
None. The project is for the renewal of a permit for an existing and operating HWTsf within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.
- b. Conflict with any applicable habitat conservation plan or natural community conservation plan.  
None. The project is for the renewal of a permit for an existing and operating HWTsf within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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## 10. Mineral Resources

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:* This project is not located on or near mineral resources such as oil, natural gas, or ores. It is located on Bay Mud within the confines of the Facility. This project does not include or involve any construction or excavation.

No Natural Resources impacts are expected because the HWTsf would not require significant natural resources.

Analysis of Potential Impacts. The extent project activities would:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.  
This project is not located on or near mineral resources such as oil, natural gas, or ores. It is located on Bay Mud within the confines of the Facility. This project does not include or involve any construction or excavation.
- b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.  
This project is not located on or near mineral resources such as oil, natural gas, or ores. It is located on Bay Mud within the confines of the Facility. This project does not include or involve any construction or excavation.

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**11. Noise**

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The project is for an existing HWTSF which stores and treats hazardous wastes. The Facility is governed by a municipal noise ordinance which requires the Facility to keep noise levels within the Zoning Ordinance set by City of Richmond, Municipal Code for Zoning and Land Use.

The project does not include equipment which is louder than that which is used in the surrounding facility. Hearing protection is not required in the HWTSF.

The HWTSF is routinely operated between 7 am and 4 pm. It may be operated year-round on a 24-hour basis. Operation of portable equipment may increase local noise level periodically, but does not carry beyond the project vicinity. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.

Analysis of Potential Impacts. The extent project activities would:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Treatment may utilize portable equipment that can exceed the OSHA PEL for noise. The HWTSF uses vessels and container to treat and storage waste; for examples of portable equipment that the HWTSF uses (See PROJECT INFORMATION, Section I under Project Activities). Mitigating factors are proper training in and use of hearing protective devices for workers within the exposed areas. None. The HWTSF is centrally located within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.
- b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels. None. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Operation of portable equipment may temporarily increase local noise level periodically, but does not carry beyond the project vicinity. Facility activities including portable equipment will not result in excessive ground vibrations or ground noise levels.
- c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project. None. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Operation of portable equipment may temporarily increase local noise level periodically, but does not carry beyond the project vicinity.
- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. None. The HWTSF is located within the confines of the Facility. The Facility is governed by a municipal noise ordinance. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Operation of portable equipment may increase local noise level periodically, but does not carry beyond the project vicinity. No new equipment beyond that which is currently in use at the HWTSF will be used and, therefore, no new sources of noise will impact existing ambient noise levels.

*Specific References (a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

**12. Population and Housing**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The project is the continuation of existing processes which stores and treats hazardous wastes that are generated on site.

There is no housing in the area of this project. The HWTSE and Facility are secure areas; the public has no access to the HWTSE or Facility except as accompanied by a Chevron employee. The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTSE or Facility will not change significantly. Therefore, the Department has determined that no further analysis is necessary for population and housing:

Analysis of Potential Impacts. The extent project activities would:

- a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).  
N/A
- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.  
N/A
- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.  
N/A

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

**13. Public Services**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* There are no public services in the area of this project. The project is for the renewal of a permit for an existing and operating HWTSE within the confines of the Facility.

Analysis of Potential Impacts. The extent project activities would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could

cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- Fire protection  
None
- Police protection  
None
- Schools  
None
- Parks  
None
- Other public facilities  
None

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

#### **14. Recreation**

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* There are no public recreational facilities or activities in the area of this project. The project is for the renewal of a permit for an existing and operating HWTsf within the confines of the Facility.

*Analysis of Potential Impacts.* The extent project activities would:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the Facility would occur or be accelerated.  
N/A. See above.
- b. Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.  
N/A. See above.

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

## 15. Transportation and Traffic

*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The Refinery is located close to the Richmond Parkway. There is already considerable traffic, including trucks, on the Parkway because it is the major connection between Interstate 80 to Highways 101 and 580.

### 1. Traffic Patterns and Control

The daily maximum traffic that is expected is shown in the following table:

Truck Type	Max. Daily Volume	Max. Loaded Weight	Max. Waste Volume
Vacuum Trucks	10	40 Tons	130 Barrels
Small Flatbed	5	13 Tons	24 Barrels
Roll-off Trucks	8	26 Tons	20 Yd <sup>3</sup>
Pick-up Truck	20	N/A	N/A

Waste which has been treated on-site is trucked off-site for disposal, and waste which is only stored at the HWTFSF is trucked off-site for disposal. Trucks hauling wastes from the HWTFSF to off-site facilities turn east onto Channel Street, travel about 1000 feet and turn right onto Xylene Street for about 500 feet, and then leave the Facility area by exiting through controlled access Gate 31 onto Castro Street. No stacking lanes are required to facilitate traffic moving past or to or from the HWTFSF.

Access roads to the HWTFSF are asphalt paved and designed and constructed to accommodate all truck wheel loads that may legally be used on public highways of California without special permits.

### 2. Estimated Volume of Traffic

Normal daily traffic within the HWTFSF includes vacuum trucks. In addition, a flatbed truck makes approximately two trips per day into the HWTFSF. A forklift is used to transfer drums from the flatbed truck to the small quantity container waste storage area (Area I).

On average 2 vehicles will enter the HWTFSF twice a day, but a maximum of 15 vehicles will be on-site every six months (Also, see table above for daily traffic). The traffic is infrequent and short term.

During non-routine conditions, e.g., major unit shutdowns, traffic patterns to and from the HWTFSF, but still within the Facility, may significantly change. Up to 1,000 barrels of spent catalyst may be moved to the HWTFSF in 24 to 80 drum loads. This results in an increase of from 13 to 40 additional vehicles over a period of a few days. If the material is being handled in bulk, the HWTFSF may experience an increase of 5 to 15 vehicles carrying catalyst bins.

Analysis of Potential Impacts. The extent project activities would:

- a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).  
No additional traffic will be generated as a result of approving this project and current traffic levels to and from the HWTFSF will not change.

There is no planned increase in volume of wastes generated and, therefore, no increase in the need for transport off-site. Transport of materials will continue at current levels.

This project will have no significant impact on traffic on public roadways. The Facility is located close to the Richmond Parkway. There is already considerable traffic, including trucks, on the Parkway because it is the major connection between Interstate 80 to Highways 101 and 580.

- b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.  
No. This project will have no significant impact on traffic on public roadways. Also, this project involves an existing operating HWTsf centrally located within the Facility. No increases in the production volumes of waste necessitating an increase in transport (i.e. truck trips) off-site.
- c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).  
This project involves an existing operating HWTsf centrally located within the Facility.
- d. Result in inadequate emergency access.  
No. This project makes no significant changes to operations or conditions at the HWTsf or Facility, including emergency access. Additionally, the Facility has its own Fire Department and EMTs.
- e. Result in inadequate parking capacity.  
No. This project is located totally on-site, centrally located, within the Facility. There is no public parking involved with this HWTsf.
- f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).  
None.

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**16. Utilities and Service Systems**

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*Project activities likely to create an impact:* None

*Description of Environmental Setting:* The project is for the renewal of a permit for an existing and operating HWTsf within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTsf or Facility will not change significantly. The HWTsf has adequate sanitary sewer, compressed air, steam, utility water, firewater (water used to distinguish fire), potable water, and electricity to operate the HWTsf.

No Utilities and Public Services impacts because the HWTsf currently requires minimal amounts of energy and will not require new or modified utilities and will not require significant public services.

*Analysis of Potential Impacts.* The extent project activities would:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.  
No. The project is for renewal of permit for an existing HWTsf.
- b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.  
No. The project is for renewal of permit for an existing HWTsf.

- c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.  
No. The project is for renewal of permit for an existing HWTsf.
- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.  
No. The project is for renewal of permit for an existing HWTsf.
- e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.  
No. The project is for renewal of permit for an existing HWTsf.
- f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.  
N/A
- g. Comply with federal, state, and local statutes and regulations related to solid waste.  
Yes, this is a federally RCRA Permitted HWTsf that complies with all applicable federal, state, and local laws.

*Specific References (list a, b, c, etc):*

Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

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**17. Mandatory Findings of Significance**

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Analysis of Potential Impacts. Describe to what extent project activities would:

- a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.  
No, the project is for the renewal of a permit for an existing and operating HWTsf within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.

Due to the HWTsf engineering controls described in Air, Biological, Hazards, and Noise sections of this Initial Study, it is unlikely that the normal HWTsf operations will have a substantial adverse effect on the animals or plant communities or historical resources listed above.

Please refer to the response in Air Quality Section and Initial Study References A for changes or modifications to permit renewal. These are:

- The addition of Subpart CC for compliance for managing air emissions. This Subpart CC regulation is new to the previous permit granted at the HWTsf. It requires the HWTsf to comply with the Bay Area Air Quality Management District (BAAQMD) regulations for volatile organic emissions as regulated according to applicable regulations found in 22 CFR, Articles 28 and 28.5., and all applicable air regulations as governed by BAAQMD. The HWTsf must use the appropriate air abatement devices with all procedures under this regulation.
- Reduce analytical requirements by relying on generator knowledge.
- Increase storage and treatment capacity of units.

- b. Have impacts that are individually limited but cumulatively considerable. [As used in the subsection, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.]  
No, the project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.
- c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.  
No, the project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations.

*Specific References (list a, b, c, etc):*

- a. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
- b. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.
- c. Bay Area Air Quality Management District (BAAQMD), "Meteorological Monitoring Guidance", Manual of Procedures, May 8, 1996.
- d. Geotechnical Evaluation for Seismic Conditions, Hazardous Waste Treatment and Storage Facility, Chevron Richmond Refinery, January 2005
- e. Habitat and Impact Assessment for Biological Resources at the Hazardous Waste Treatment and Storage Facility, April 14, 2005.

*Findings of Significance:*

- Potentially Significant Impact  
 Potentially Significant Unless Mitigated  
 Less Than Significant Impact  
 No Impact

V. FINDING OF DE MINIMIS IMPACT TO FISH, WILDLIFE AND HABITAT

Prepared only if a Finding of De Minimis Impact to fish, wildlife and habitat is proposed in lieu of payment of the Department of Fish and Game Notice of Determination filing fee required pursuant to section 711.4 of the Fish and Game Code.)

The following provides (or references relevant portions of the Initial Study that provide) substantial evidence of **no potential adverse effect** to the resources listed below, as required by title 14, California Code of Regulations, section 753.5.

(Note: "No potential adverse effect" is a higher standard than "no significant impact" and the information requested is not identical in either its standard or content to that in other parts of the Initial Study.)

- a) Riparian land, rivers, streams, watercourse, and wetlands under state and federal jurisdiction.  
The HWTSF is centrally located within the confines of the Facility. Facility land includes wetlands, but they are not adjacent to HWTSF.
- b) Native and non-native plant life and the soil required to sustain habitat for fish and wildlife.  
The HWTSF has been in existence since 1983 and the Facility since 1902. The project does not involve or include any construction or excavation. The HWTSF does not provide habitat for fish and wild life.
- c) Rare and unique plant life and ecological community's dependent on plant life.  
There are no plants or animals to disturb at HWTSF. The HWTSF is completely paved with run-off and run-on protection to prevent contamination of soil, storm water, or groundwater.
- d) Listed threatened and endangered plant and animals and the habitat in which they are believed to reside.

The HWTSF is entirely paved and hence does not provide habitat for plant or animal life. On March 1, 2005, Gretchen Lebednik Project Biologist visited the Hazardous Waste Treatment and Storage Facility (HWTSF) at the Richmond Refinery to survey the habitats in the vicinity of the site. The assessment concluded that there is no habitat for wildlife or plant species present at the HWTSF.

- e) All species of plant or animals as listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulation adopted there under.

The HWTSF is entirely paved and hence does not provide habitat for plant or animal life. Chevron does not know or have reason to know of endangered or threatened species for which the proposed project acts as habitat.

- f) All marine and terrestrial species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.

The project area has no wetlands. The project does not involve or include any construction, excavation, or new equipment or structures. The HWTSF is completely paved with run-off and run-on protection to prevent contamination of soil, storm water, or groundwater.

- g) All air and water resources the degradation of which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air and water.

The HWTSF has been in existence since 1983 and the Facility since 1902. The project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility.

#### Explanation and Supporting Evidence:

On March 1, 2005, Gretchen Lebednik, the Project Biologist, visited the Hazardous Waste Treatment and Storage Facility (HWTSF) at the Richmond Refinery to survey the habitats in the vicinity of the site. The assessment concluded that there is no habitat for wildlife or plant species present at the HWTSF.

The project is for the renewal of a permit for an existing and operating HWTSF within the confines of the Facility. The project does not involve or include any construction, excavation, new equipment or structures, or any substantial changes to existing operations. Conditions at the HWTSF or Facility will not change significantly. There are no plants or animals to disturb at the site. A 6' chain link fence surrounds the HWTSF and it is completely paved with run-off and run-on protection to prevent contamination of soil, storm water, or groundwater.

#### Findings:

On November 14, 2005, DTSC contacted DFG to request a Finding of De Minimis Impact to fish, wildlife and habitat, and on November 22, 2005, Marcia Grefsrud responded that this project would qualify for Finding of De Minimis Impact to fish, wildlife and habitat because there are no construction, grading, vegetation removal, or any activity that changes the environment.

Based on the explanation and supporting evidence provided above, DTSC finds that the project will have no potential for adverse effect, either individually or cumulatively on fish and wildlife, or the habitat on which it depends, as defined by section 711.2 of the Fish and Game Code.

#### VI. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Initial Study:

I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED DECLARATION will be prepared.

I find that the proposed project MAY HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

\_\_\_\_\_  
DTSC Project Manager Signature

\_\_\_\_\_  
Date

Michael Zamudio  
DTSC Project Manager Name

Hazardous Substances Engr.  
DTSC Project Manager Title

( 946 ) 255-6535  
Phone #

\_\_\_\_\_  
DTSC Branch/Unit Chief Signature

\_\_\_\_\_  
Date

Mohinder Sandhu  
DTSC Branch/Unit Chief Name

Supervising HSE II  
DTSC Branch/Unit Chief Title

( 916 ) 255-3716  
Phone #

**ATTACHMENT A**  
**INITIAL STUDY REFERENCE LIST**

For

Chevron U.S.A., Inc.

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1. Environmental Information (DTSC Form 1176) submitted by Chevron U. S. A., Inc. on October 2003.
  2. Chevron U. S. A., Inc., Operation Plan, August 2001, revised October 2003, July 2004, November 18, 2004 and April 18, 2005.
  3. Geotechnical Evaluation for Seismic Conditions, Hazardous Waste Treatment and Storage Facility, Chevron Richmond Refinery, January 2005
  4. Habitat and Impact Assessment for Biological Resources at the Hazardous Waste Treatment and Storage Facility, April 14, 2005.
  5. Bay Area Air Quality Management District (BAAQMD), "Meteorological Monitoring Guidance, " Manual of Procedures, May 1996
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**ATTACHMANT B**  
**MAPS AND PLOT PLAN**

For

**Chevron U.S.A., Inc.**

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1. Figure 1, Area Map
  2. Figure 2, USGS Topographical Map
  3. Figure 3, HWTSF Plot Plan
  4. Exhibit A, Draft Hazardous Waste Treatment and Storage Permit for Chevron U.S.A., Inc.
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Figure 1: Area Map

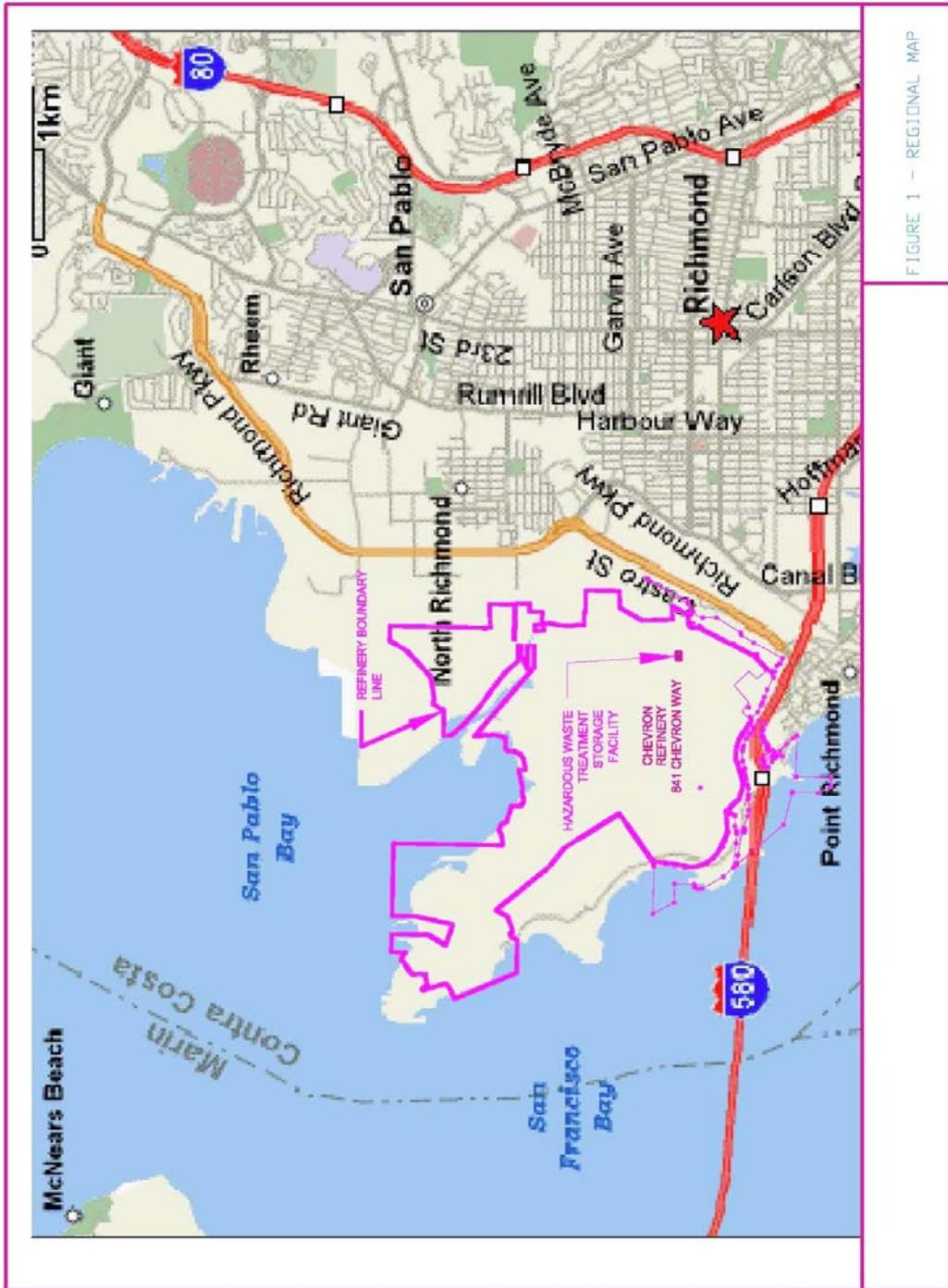


Figure 2: USGS Topographical Map

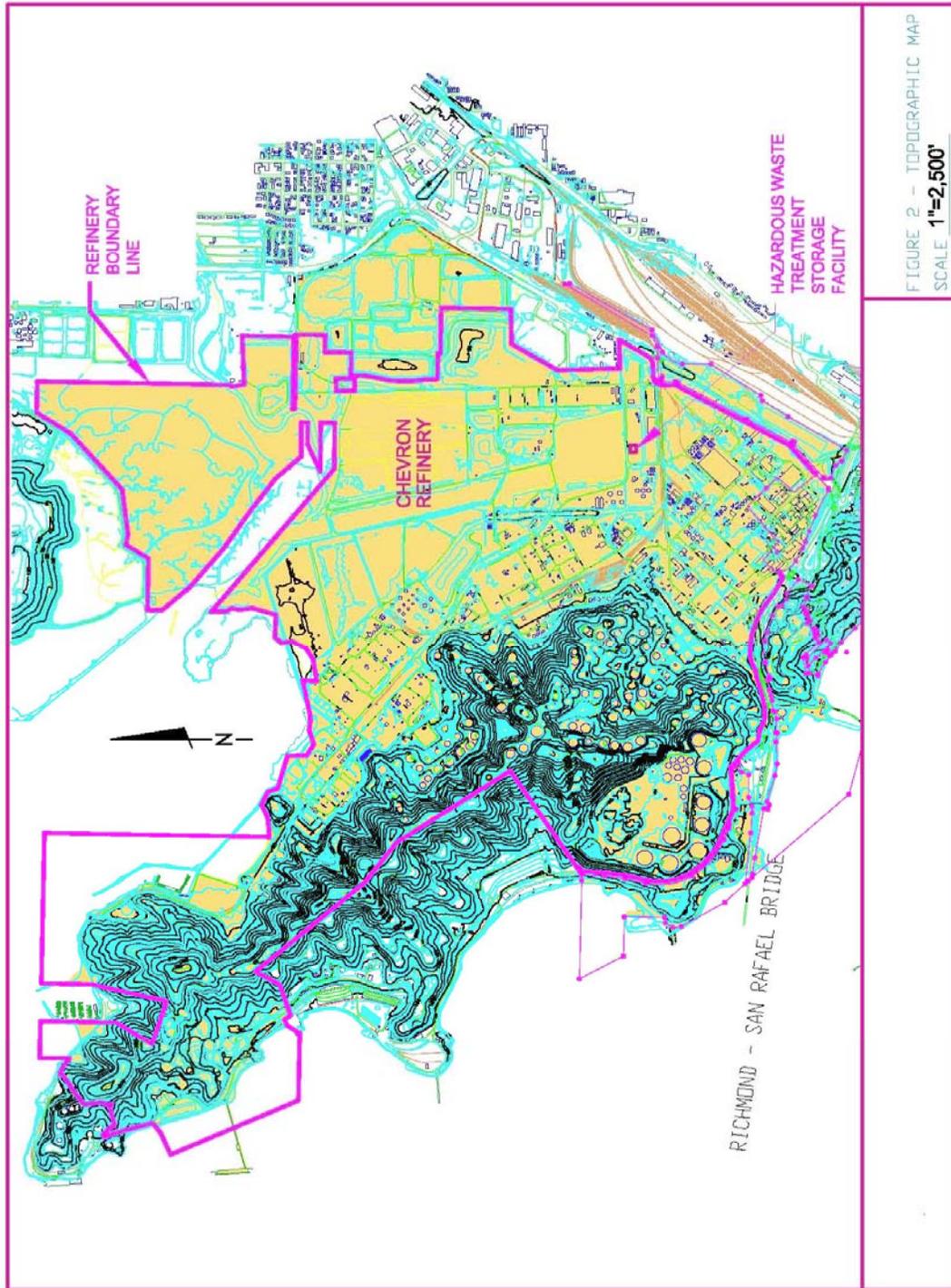


Figure 3: HWTSF Plot Plan

