

**Covered Source Permit Review Summary (Renewal)**

**Application File No.:** 0330-03

**Permit No.:** 0330-01-C

**Applicant:** Tesoro Hawaii Corporation

**Facility Title:** Barbers Point Harbor Loading Facility  
Kapolei, Hawaii 96707  
UTM 591.000E 2358.390N

**Mailing Address:** Tesoro Hawaii Corporation  
91-325 Komohana Street  
Kapolei, Hawaii 96707-1713

**Responsible Official:** Mr. Frank D. Clouse  
Vice President - Refining  
(808) 479-0508

**Point of Contact:** Ted Metrose  
Manager, Refinery Environmental Affairs  
(808) 479-9886

**Application Dates:** November 22, 2006

**Proposed Project:**

SICC 4491 (Marine Cargo Handling)

This is a renewal application for Covered Source Permit No. 0330-01-C which expires on November 24, 2007.

Tesoro Hawaii Corporation produces and stores petroleum products at its refinery in Campbell Industrial Park. Various petroleum products are transported via pipeline to certain customers and distribution points. One of those distribution points is the wharf at Barbers Point Deep Draft Harbor. Pipelines installed in a leased easement terminate at pier side valve boxes from which petroleum products are loaded into ships and inter-island barges. Petroleum products are loaded onto ships and/or barges from piers No. 5 and 6 at the Barbers Point Deep Draft Harbor. Petroleum products currently include gasoline, naphtha, diesel, jet kerosene and fuel oil. Normal operation of the Barbers Point Harbor Loading Facility includes the loading of petroleum product into marine barges and/or ships. Operating hours for the terminal are estimated at 24 hours per day, 365 days per year, for a total of 8,760 hours of operation per year.

**Equipment:**

Marine Tank Vessel Loading Terminal consisting of pipeline easements and valve boxes at Barbers Point Harbor Piers Nos. 5 and 6 that load petroleum products and marine tank vessels (ships and inter-island barges).

1. Petroleum products - gasoline, naphtha, diesel, jet kerosene, fuel oil, crude oil.
2. Throughput limits - 10 million barrels per year of gasoline (petroleum products, RVP >4.0 psia) and 200 million barrels per year of crude oil

**Air Pollution Control Description:**

The facility does not operate any air pollution control devices.

**Applicable Requirements:**

Hawaii Administrative Rules (HAR)

Title 11, Chapter 59	Ambient Air Quality Standards
Title 11, Chapter 60.1	Air Pollution Control
Subchapter 1	General Requirements
Subchapter 2	General Prohibitions
HAR 11-60.1-31	Applicability
Subchapter 5	Covered Sources
Subchapter 6	Fees for Covered and Noncovered Sources, and Agricultural Burning
HAR 11-60.1-111	Definitions
HAR 11-60.1-113	Application Fees for Covered Sources
HAR 11-60.1-114	Annual Fees for Covered Sources
HAR 11-60.1-115	Basis of Annual Fees for Covered Sources
Subchapter 9	Hazardous Air Pollutant Sources
HAR 11-60.1-171	Definitions
HAR 11-60.1-172	List of Hazardous Air Pollutants
HAR 11-60.1-173	Applicability

Federal Requirements

40 CFR Part 63	National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT)
40 CFR 63.565(l)	Subpart Y, National Emission Standards for Marine Tank Vessel Loading Operations, Emission estimation procedures
40 CFR 63.567(j)(4)	Subpart Y, National Emission Standards for Marine Tank Vessel Loading Operations, Emission estimation reporting and recordkeeping procedures

**Non-applicable Requirements:**

Hawaii Administrative Rules (HAR)

Title 11, Chapter 60.1	Air Pollution Control
Subchapter 7	Prevention of Significant Deterioration Review
Subchapter 8	Standards of Performance for Stationary Sources

Federal Requirements

40 CFR Part 52.21	Prevention of Significant Deterioration of Air Quality
40 CFR Part 60	Standards of Performance for New Stationary Sources (NSPS)
40 CFR Part 61	National Emission Standards for Hazardous Air Pollutants

(NESHAPS)

**Prevention of Significant Deterioration (PSD):**

This source is not a major stationary source nor are there modifications proposed that constitute a major stationary source that is subject to PSD review. Therefore, PSD is not applicable.

**Best Available Control Technology (BACT):**

A Best Available Control Technology (BACT) analysis is required for new covered sources or significant modifications to covered sources that have the potential to cause a net increase in pollution emissions above significant levels as defined in HAR 11-60.1-1. There are no proposed modifications to this existing source for this renewal application, therefore a BACT analysis is not required.

**Consolidated Emissions Reporting Rule (CERR):**

40 CFR Part 51, Subpart A - Emission Inventory Reporting Requirements, determines CER based on the emissions of each criteria air pollutants from Type B point sources (as defined in 40 CFR Part 51, Subpart A), that emit at the CER triggering levels as shown in the table below:

Pollutant	Type B CER Triggering Levels <sup>1</sup> (tpy)	Pollutant	In-house Total Facility Triggering Levels <sup>2</sup> (tpy)	Total Facility Emissions <sup>3</sup> (tpy)
NO <sub>x</sub>	≥100	NO <sub>x</sub>	≥25	
SO <sub>x</sub>	≥100	SO <sub>x</sub>	≥25	
CO	≥1000	CO	≥250	
PM <sub>10</sub> /PM <sub>2.5</sub>	≥100/100	PM/PM <sub>10</sub>	≥25/25	
VOC	≥100	VOC	≥25	203
		HAPS	≥5	

<sup>1</sup> Based on actual emissions

<sup>2</sup> Based on potential emissions

<sup>3</sup> Based on actual emissions (average) from 2004 and 2005

This facility does not have any point sources that emit at the CER triggering levels. The VOC emissions from this facility are considered fugitive. Therefore, CER requirements are not applicable.

Although CER for the facility is not triggered, the Clean Air Branch requests annual emissions reporting from those facilities that have facility-wide emissions of a single air pollutant exceeding in-house triggering levels. Annual emissions from these facilities are used within the Department and are not inputted into the AIRS database. Since the total emissions of VOC within the facility is greater than 25 tons per year, annual emissions reporting for the facility will be required for in-house recordkeeping purposes. In addition, annual emissions reporting is required since this is a covered source.

**Compliance Assurance Monitoring (CAM):**

Compliance Assurance Monitoring (CAM) is not applicable since the facility is not subject to an emission limitation or standard for the applicable pollutant (VOC).

**Synthetic Minor Source:**

Not applicable, this facility emits more than 100 tpy of VOC and thus is a major source.

**Insignificant Activities:**

The facility does not have any insignificant sources.

**Alternate Operating Scenarios:**

The applicant did not propose any alternate operating scenarios.

**Project Emissions:**

The applicant included in their application tabular summaries of the actual loading data for calendar years 2004 and 2005. The table below shows the highest monthly values for throughput, VOC, and HAPS for each year. The table also shows that the facility is a major source of VOCs with the largest HAP emission being hexane. The facility plans to monitor and control its shipments to prevent the facility from becoming a major source for HAPs.

MARINE TANK VESSEL LOADING TERMINAL EMISSIONS

Year	Product	Throughput (bbbls/rolling 12 mo.)	VOCs (lbs/rolling 12 mo.)	benzene (lbs/rolling 12 mo.)	ethylbenzene (lbs/rolling 12 mo.)	n-hexane (lbs/rolling 12 mo.)	toluene (lbs/rolling 12 mo.)	m-xylene (lbs/rolling 12 mo.)	p/o xylene (lbs/rolling 12 mo.)	Total HAPs (lbs/rolling 12 mo.)
2004	Gasoline -87	1,886,168	195,884	2,149.75	178.15	4,126.12	4,384.44	512.63	434.44	12,448
	Gasoline -92	366,058	40,094	498.53	50.69	365.37	1,197.61	144.19	121.21	2,252
	Naphtha	772,505	178,996	2,812.58	9.43	14,342.58	235.10	29.54	22.61	21,413
	Diesel	3,738,868	1,276							0.00
	Jet	1,739,530	804							0.00
	Fuel Oil	3,777,282	12							0.00
2005	Gasoline -87	1,804,513	190,177	1,712.83	168.71	4,118.40	4,042.08	480.43	415.56	11,662
	Gasoline -92	364,254	39,777	360.92	50.66	366.75	1,194.11	144.46	121.18	2,255
	Naphtha	708,650	164,050	1,763.17	7.94	13,314.90	187.11	21.44	16.60	18,220
	Diesel	4,084,294	1,338							0.00
	Jet	1,800,447	831							0.00
	Fuel Oil	3,350,887	11							0.00

**Air Quality Assessment:**

The only emissions from this facility are fugitive VOCs from the product transfer operations and any HAPs associated with these VOCs. An ambient air quality impact analysis was not performed for the following reasons: 1) VOCs do not have an ambient air quality standard, and 2) the Department of Health air modeling guidance *generally* exempts an applicant from performing an ambient air quality impact analysis for fugitive sources.

**Significant Permit Conditions:**

There are no new significant permit conditions for this permit renewal.

**Conclusion:**

Recommend issuing the renewal for the subject covered source permit as there are no significant changes to the permit. A 30-day public comment period and 45-day EPA review period are also required.

Reviewer: Darin Lum  
Date: 6/07