

## ATTACHMENT A-2

Permit Number 41618

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### ANNUAL EMISSIONS

This table lists the maximum allowable annual emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum annual rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

#### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u> Tons per Year **
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#### TERMINAL STORAGE TANKS, TANK FARM VENT FLARE, AND SCRUBBERS

STA 3.5-1 to STA 3.5-8, STA 6-3 to STA 6-5, STA 7.5-5 to STA 7.5-12, STA 12-5 to STA 12-13, STA 15-1 to STA 15-16, STA 20-1, STB 25-1, STB 30-1, STB 30-2, STB 30-4 to STB 30-8, STD 7-1 to STD 7-3, STD 7.5-13 to STD 7.5-15, STD 10-1 to STD 10-3, STD 15-17 to STD 15-28, STD 20-2, STD 20-3, STD 30-9, STD 30-10, STE 12-14 to STE 12-26, STF 6-1, STF 6-2, STF 7.5-1 to STF 7.5-4, STF 12-1 to STF 12-4, STP 15-29 to STP 15-35, STP 40-1 to STP 40-3, STP 50-1 to STP 50-5, STS 100-1 to 100-4, TVFL (Tank Farm Vent Flare), SCR-1 and SCR-2 (Caustic Scrubbers)	Storage Tanks	VOC	104.24
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**TERMINAL RAILCAR, TANK TRUCK, MARINE, AND ISO CONTAINER LOADING FACILITIES**

RACK R-1, RACK R-2, RACK T-3, RACK T-4, RACK T-5, and RACK T-6	Railcar Loading/Unloading Racks R-1 and R-2, Tank Truck Loading/Unloading Racks T-3, T-4, T-5, and T-6	VOC	17.30
RACK R-3	Railcar Loading/Unloading Rack R-3	VOC	2.52
SHIP DOCK 2 and SHIP DOCK 3	Ship Dock 2/3 (6)	Methacrylic Acid Propionic Acid	0.01 0.04
BARGE DOCK C	Barge Dock C (6)	Methacrylic Acid Propionic Acid	0.03 0.09

**VESSEL CLEANING/INTERMODAL LOADING STATION**

RACKS R-4 and T-7	VOC	Railcar, Tank Truck, and ISO 1.49	
	Container Cleaning/Intermodal Loading Racks R-4 and T-7	Non-VOC	0.04
WASH-1 and WASH-2	Cleaning Station Wash Water Storage Tank Nos. 1 and 2	VOC Non-VOC	0.06 0.05
CAS-1	Carbon Adsorption System (T-7 and R-4)	VOC Non-VOC	0.05 0.04

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**TERMINAL FLARES**

TVFL	Tank Farm Vent Flare (7) (T-6, R-2, and "D" Tank Farm (25 tanks))	CO	21.64
		NO <sub>x</sub>	2.52
FL-1	McGill Loading Flare (R-1, R-3, T-3, and T-4)	CO	2.89
		NO <sub>x</sub>	0.34
		VOC	1.84
MLFR	Marine Loading Flare (Ship Docks 2/3 and Barge Dock C)	CO	8.77
		VOC	NO <sub>x</sub> 1.75 5.61
FL-4	Railcar, Tank Truck, and ISO Container Cleaning/Intermodal Loading Flare (R-4 and T-7)	CO	1.51
		NO <sub>x</sub>	0.76
		Non-VOC	1.78
		SO <sub>2</sub>	4.89
		VOC	2.18

**TERMINAL BOILERS**

BLR-1	Boiler BLR-1 (29 MMBtu/Hour)	CO	10.46
		NO <sub>x</sub>	12.45
		PM	0.95
		SO <sub>2</sub>	0.07
		VOC	0.68
BLR-2	Boiler BLR-2 (32.7 MMBtu/Hour) Cleaver-Brooks Model CB-LE	CO	21.48
		NO <sub>x</sub>	10.03
		PM	1.43
		SO <sub>2</sub>	0.14
		VOC	0.79

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**ENGINES**

FIRE-PUMP	Rack R-4 Fire Water Pump Engine (5)	CO	0.06
		NO <sub>x</sub>	0.30
		PM	0.02
		SO <sub>2</sub>	0.02
		VOC	0.02

**EQUIPMENT LEAK FUGITIVE EMISSIONS**

FU	Piping Fugitive Emissions (4)	VOC	18.56
		Non-VOC	0.80

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources use area name or fugitive source name.
- (3) CO - carbon monoxide  
NO<sub>x</sub> - total oxides of nitrogen  
PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.  
PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter equal to or less than 10 microns in emitted.  
SO<sub>2</sub> - sulfur dioxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only and are not considered as a maximum allowable emission rate.
- (5) Rack R-4 Fire Water Pump is covered under Permit by Rule § 106.511. The Engine was installed in November 2000 and did not require registration
- (6) Additional chemicals handled at Ship Docks 2/3 and Barge Dock C and their associated emission rates are authorized according to: (1) the permitted product transfer scenarios of Permit Attachments B and C, (2) the transfer operations specified within the Special Conditions of the permit, (3) applicable Permits By Rule of 30 TAC Chapter 106, and (4) the agency guidance for marine based operations conducted prior to the September 1, 2001 effective date for 30 TAC Chapter 116 applicability to emissions from dockside marine vessels as described in the TCEQ draft publication Dockside Vessel Emissions dated September 2001. A permit amendment in

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accordance to Special Condition Number 12 must be submitted to the TCEQ by October 1, 2003.

(7) Low Pressure Storage Tank P-50-6 is authorized via Permit By Rule Registration Number 54010 to also vent to this flare.

- \* Annual emissions are based on a 12-month rolling average. Emission rates are based on, and the facilities are limited by, the following maximum operating schedule:

Hrs/day 24 Days/week 7 Weeks/year 52

- \*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated April 15, 2003