

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 to STB 30-8, STB 30-11, STB 30-12 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 15-42, STP 25-2 to STP 25-3, STP 40-1 to STP 40-3, STP 50-1 to STP 50-6, STS 100-1 to 100-4, STQ 12-31 to STQ 12-37, STQ 12-43 to STQ 15-51, STQ 20-7, STQ 30-13 to STQ 30-15, STV 2-1 to STV 2-4,	Storage Tanks	VOC	142.5
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STAE 3.5-9,
 STAE 7.5-16 to STAE 7.5-17
 STAE 12-27 to STAE 12-30,
 STAE 20-4 to STAE 20-6,
 STAE 50-7 to STAE 50-8
 STCE 12-38 to STCE 12-43,
 STCE 15-52 to STCE 15-57,
 STDE 30-16 to STDE 30-23,
 STEE 15-58 to STEE 15-66,
 STEE 30-24 to STEE 30-27,
 STFE 15-67 to STFE 15-72,
 STFE 30-28 to STFE 30-30,
 STGE 7.5-18,
 STGE 12-44 to STGE 12-54,
 STGE 15-73 to STGE 15-84

TVFL (Tank Farm Vent Flare),
 SCR-2 (Caustic Scrubber)

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TERMINAL RAILCAR, TANK TRUCK, MARINE, AND ISO CONTAINER LOADING FACILITIES

RACK R-1 THROUGH RACK R-8, RACK T-3 THROUGH T-10	Railcar Loading/Unloading Racks R-1 through R-8 Tank Truck Loading/Unloading Racks T-3 through T-10	VOC	17.30
		VOC	2.52
SHIP DOCK 2/3 and SHIP DOCK 10/11		Ship Dock 2/3, 10/11	
BARGE DOCK C and E	Barge Dock C, E	VOC TOTAL	27.35

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	0.06
		Non-VOC	0.05
TERMINAL FLARES			
TVFL	Tank Farm Vent Flare (7) (T-6, R-2, and "D" Tank Farm (25 tanks))	CO	21.64
		NO _x	2.52
FL-1	McGill Loading Flare (R-1, R-3, T-3, and T-4)	CO	2.89
		NO _x	0.34
		VOC	1.84

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FL-5	Land Loading Flare FL-5		
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MLFR	Marine Loading Flare (Ship Docks 2/3 and Barge Dock C)	CO	8.77
		NO _x	1.75
		VOC	5.61

MLFR-2	Marine Loading Flare (Ship Docks 10/11 and Barge Dock E)		
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FL-4	Railcar, Tank Truck, and ISO Container Cleaning/Intermodal Loading Flare (R-4 and T-7)	CO	1.51
		NO _x	0.76
		Non-VOC	1.78
		SO ₂	4.89
		VOC	2.18

	TOTAL VOC		15.96
	TOTAL CO		41.76
	TOTAL NO_x		6.18

TERMINAL BOILERS

BLR-1	Boiler BLR-1 (29 MMBtu/Hour)	CO	10.46
		NO _x	12.45
		PM	0.95
		SO ₂	0.07
		VOC	0.68

BLR-2	Boiler BLR-2 (32.7 MMBtu/Hour)	CO	21.48
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Cleaver-Brooks Model CB-LE	NO _x	10.03
	PM	1.43
	SO ₂	0.14
	VOC	0.79

ENGINES

FIRE-PUMP	Rack R-4 Fire Water Pump	CO	0.06
	Engine (5)	NO _x	0.30
		PM	0.02
		SO ₂	0.02
		VOC	0.02

EQUIPMENT LEAK FUGITIVE EMISSIONS

(FU)+(FU-M)	Piping Fugitive Emissions (4)	VOC	18.68+ 58.99 =
		77.67	
		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_x - total oxides of nitrogen
 PM - particulate matter, suspended in the atmosphere, including PM₁₀.
 PM₁₀ - 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.
 SO₂ - 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.

* 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:

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

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

Dated_____