

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 38754/PSD-TX-324M10

EMISSION CAP TABLE

This table lists the maximum allowable 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 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.

See Attachment I for Source Name and Emission Point Number Index. All caps for all compound categories must be met for all averaging periods.

VOC EMISSION CAPS

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, 121, 126e, Tanks, Loading, Fugitives (4)	1999	4013	1544
	2000 (5)	1573	1209
	2001	1569	1199
	2002	1554	1159
	2003 (Final)	1655	1142
126n, 158 39.6		2000 (Final)	226

NO_x EMISSION CAPS

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, 121	1999 (Final)	883.0	3717.0
Fired Units, 121, 126	1999 (Final)	897.0	3724.0
126, 158	1999 (Final)	75.8	18.8

SO₂ EMISSION CAPS

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, 121, 168	1999 (Final)	474	1925
Fired Units, 121, 126, 168	1999 (Final)	490	1933

126, 158	1999 (Final)	51.1	12.0
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CO EMISSION CAPS

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, 121	1999 (Final)	1190	5053.0
Fired Units, 121, 126	1999 (Final)	1211	5067.0
126, 158	1999 (Final)	472	90.5

PM EMISSION CAP

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, 121	1999 (Final)	223.3	966.6

H₂S EMISSION CAP

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
121, Fugitive (4), Tanks, 126, 158	1999 (Final)	3.1	13.6

BENZENE EMISSION CAP

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, 121, Tanks, 126, 158, Loading, Fugitives (4)	1999	26.0	11.2
	2000 (5)	13.3	7.6
	2001	13.3	7.6
	2002	13.2	7.4
	2003 (Final)	14.1	7.3

H₂SO₄ EMISSION CAP

Source Name	Year	lb/hr	<u>TPY</u>
121	1999 (Final)	9.4	40.9

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
168	Oleflex Scrubber	HCl	0.06	0.28
		Cl ₂	0.01	0.04
		H ₂ SO ₄	<0.01	0.01
155	CRU CCR	HCl	0.07	0.29
1CT	CU/VRU Cooling Tower	VOC	0.21	0.92
122	HOC Cooling Tower	VOC	6.09	26.67
123	ALKY Cooling Tower	VOC	1.26	5.52
167-CT	BUP Cooling Tower	VOC	1.68	7.36
AE-49601A/B	Analyzer Vent AE-49601A/B	VOC	<0.01	<0.01
AE-49900A/B	Analyzer Vent AE-49900A/B	VOC	<0.01	<0.01
AE-49901A/B	Analyzer Vent AE-49901A/B	VOC	<0.01	<0.01
135	Acid Gas Flare (6)	VOC	7.26	4.97
		NO _x	0.82	0.56
		SO ₂	36.38	24.89
		CO	7.06	4.83
		H ₂ S	0.36	0.25
128	Halo Flare	Emergency Use Only		

(1) Emission point identification - either specific equipment designation or emission point number from plot plan per Attachment 1.

(2) Specific point source name. For fugitive sources use area name or fugitive source name.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code Section 101.1
- NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - CO - carbon monoxide
 - PM - particulate matter, suspended in the atmosphere, including PM₁₀ and as identified on Confidential Table 1 (**dated 4/7/00**)
 - 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 greater than 10 microns is emitted.
- H₂S - hydrogen sulfide
 - H₂SO₄ - sulfuric acid
 - HCl - hydrochloric acid
 - Cl₂ - chlorine
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Year 2000 emissions are based upon the calendar year; subsequent years are a rolling average.
- (6) Emissions are only authorized from this point through December 31, 2002. After that date, this emission point is emergency use only.

Date _____

ATTACHMENT 1

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Permit Emission Points by Type

Category: Fired Units	<u>EPN</u>	<u>Description</u>
	1	Crude Heater
	74	Vacuum Unit Heater
	114	Desalter Heater
	115	HDS Charge Heaters
	116	HDS Heavy Oil Preheater
	117	Alky Fract Reboiler
	118	Hydrogen Reformer Heater
	119	Sulften Heater
	120	Butamer Heater
	131	Crude Preflash Heater
	132	Crude Stabilizer Heater
	150	HCU Heater
	151	NHT Heater
	152	CRU Heaters
	153	Boiler 30-B-02
	162	Oleflex Heaters
	172	RSU Heater
	49H90	C7 Splitter Reboiler
	49H02	49H02
	47H05	47H05
	49HDIC6	49HDIC6
	O2HO2	Vacuum PF Heater
	127	MTBE Flare
	124	API Separator Combustor
	TRUCKCOMB	Truck Loading Combustor

Category: Tanks	<u>EPN</u>	<u>Description</u>
	5	Tank No. 93
	6	Tank No. 94
	7	Tank No. 95
	8	Tank No. 96
	9	Tank No. 101
	10	Tank No. 102
	11	Tank No. 103
	12	Tank No. 104
	13	Tank No. 105
	14	Tank No. 106

Category: Tanks (cont'd)	<u>EPN</u>	<u>Description</u>
	15	Tank No. 108
	16	Tank No. 109
	17	Tank No. 110
	34	Tank No. 97
	35	Tank No. 98
	36	Tank No. 99
	37	Tank No. 100
	38	Tank No. 107
	46	Tank No. 137
	48	Tank No. 139
	TK-51	Tank No. 51
	52	Tank No. 5
	53	Tank No. 6
	54	Tank No. 7
	55	Tank No. 8
	56	Tank No. 10
	57	Tank No. 11
	58	Tank No. 12
	59	Tank No. 13
	60	Tank No. 14
	61	Tank No. 15
	63	Tank No. 149
	64	Tank No. 150
	65	Tank No. 1
	66	Tank No. 2
	67	Tank No. 3
	68	Tank No. 4
	69	Tank No. 9
	70	Tank No. 16
	71	Tank No. 17
	72	Tank No. 18
	81	Tank No. 152
	82	Tank No. 153
	83	Tank No. 154
	84	Tank No. 52
	85	Tank No. 53
	86	Tank No. 55
	87	Tank No. 56

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Category: Tanks (cont'd)	<u>EPN</u>	<u>Description</u>
	88	Tank No. 57
	89	Tank No. 58
	90	Tank No. 59
	91	Tank No. 60
	92	Tank No. 61
	93	Tank No. 19
	94	Tank No. 20
	95	Tank No. 77
	96	Tank No. 78
	TK-112	Tank No. 112
	TK-113	Tank No. 113
	TK-114	Tank No. 114
	129	Tank No. 156
	140	Tank No. 161
	141	Tank No. 54
	142	Tank No. 111
	143	Tank No. 151
	156	Tank No. 62
	157	Tank No. 63
	164	Tank No. 64
	165	Tank No. 65
	166	Tank No. 76
	169	Tank No. 75
	173	Tank No. 115
	174	Tank No. 116
	176	Tank No. 163
	177	Tank No. 164

Category: 121	<u>EPN</u>	<u>Description</u>
	121	FCC Scrubber/SRU Incinerator

Category: 126	<u>EPN</u>	<u>Description</u>
	126	Main Flare

Category: 126e	<u>EPN</u>	<u>Description</u>
	126	Facilities venting to the main flare not covered by category

126n

Category: 126n

EPN
126

Description

reformer pressure swing absorber, catalytic reformer unit fuel gas drum No. 1, catalytic reformer unit fuel gas drum No. 2, crude preflash OH accumulator, stabilizer OH accumulator, crude tower OH accumulator, and purge gas vented to the main flare

Category: 158

EPN
158

Description

Ground Flare

Category: Fugitive

EPN

Description

1F	Crude Unit
2F	Vacuum Unit
4F	LEU
11F	Desalter Unit
12F	HDS Unit
13F	SMR
18F	HRLEU Unit
20F	LRU
21/22F	HOC Unit
30B02F	30-B-02
30B03F	30-B-03
31F	HF Alkylation Unit
36F	Butamer Unit
37F	MTBE
38F	Oleflex
41/46/24F	SULF/SEU/SRU
47F	HCU
47PSAF	PSA
48F	NHT
49F	CRU
54F	MTBE/TAME Unit
133F	Powerhouse

175 FUG-DOCKS	49-RSU/XFU Docks
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Category: Fugitive

<u>EPN</u>	<u>Description</u>
FUELDRM	Fuel Gas Drum
GBF	Gas Blending
LPGSTGF	LPG Storage
MVRUF	MVRU
T1F	Terminal 1
T2/2AF	Terminal 2/2A
T3F	Terminal 3
TRKRACKFUG	Truck Rack
ATU3FUG	Amine
SRU3FUG	SRU
SCOTFUG	SCOT

Category: Loading

<u>EPN</u>	<u>Description</u>
VRU	Marine loading VRU
31	Barge Loading
SHIP2	Ship Dock No. 2
SHIP3	Ship Dock No. 3
TRUCKFUG	Truck Loading

Date _____