

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

Flexible Permit Numbers 38754 and PSDTX324M13

### 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 CAP

Source Name	Year	lb/hr	TPY
Fired Units, Flares, Tanks, Loading, Fugitives (4), and Other	Final	1,201	1,218

#### NO<sub>x</sub> EMISSION CAP

Source Name	Year	lb/hr	TPY
Fired Units and Flares	Final	1,155	2441.2

#### SO<sub>2</sub> EMISSION CAP

Source Name	Year	lb/hr	TPY
Fired Units, Flares and 168	Final	509	2,023

#### CO EMISSION CAP

Source Name	Year	lb/hr	TPY
Fired Units and Flares	Final	1,362	5,623

#### PM EMISSION CAP

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Source Name	Year	lb/hr	TPY
Fired Units	Final	272	826

**H<sub>2</sub>S EMISSION CAP**

Source Name	Year	lb/hr	TPY
121, Fugitive (4), Tanks, 126, 158, and 135	Final	3.19	14.0

**BENZENE EMISSION CAP**

Source Name	Year	lb/hr	TPY
Fired Units, Tanks, Flares, Loading, Fugitives (4), and WWTP	Final	14.6	11.1

**H<sub>2</sub>SO<sub>4</sub> EMISSION CAP**

Source Name	Year	lb/hr	TPY
121	Final	49.0	214.6

**MAINTENANCE, STARTUP, AND SHUTDOWN (MSS) FINAL EMISSION CAPS (7)**

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Source Name	Air Contaminant Name (3)	lb/hr	TPY
MSS-TA CONTROLLED,	VOC	1,838	59.96
MSS-TA UNCONTROLLED,	NO <sub>x</sub>	560.3	11.24
MSS-MA CONTROLLED, and	CO	3,005	54.35
MSS-MA UNCONTROLLED as identified	SO <sub>2</sub>	1,019	37.24
In Attachment 4	PM	80.53	1.28
	H <sub>2</sub> S	6.59	0.22
	NH <sub>3</sub>	4.41	0.17
	Exempt solvent	1.76	0.60

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
31F	HF Alkylation Unit Fugitives Initial (4)(5)	HF	0.07	0.29
	HF Alkylation Unit Fugitives Final (4)(6)	HF	0.13	0.55
168	Oleflex Scrubber	HCl	0.06	0.28
		Cl <sub>2</sub>	0.01	0.04
		H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
155	CRU CCR	HCl	0.1	0.29

- (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.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- CO - carbon monoxide
- 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.
- HF - hydrogen flouride
- H<sub>2</sub>S - hydrogen sulfide
- H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- HCl - hydrochloric acid
- Cl<sub>2</sub> - chlorine
- (4) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (5) These emission rates are effective until the shutdown of the East HF Alkylation Unit authorized under Flexible Permit Number 2937.
- (6) These emission rates become effective when the emissions under footnote (5) cease to be in effect.
- (7) The annual limits (ton per year) apply to calendar year 2010 and for each rolling 12-month period starting January 2011. The MSS emission caps are independent of the routine operating emission caps. Authorized emissions of a pollutant from facilities in this permit is the sum of the emission cap and the MSS emission cap.

Dated March 29, 2010

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## 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
121	HOC (incinerator and scrubber stack)
124	API Separator Combustor
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
TRUCKCOMB	Truck Loading Combustor
195	GD Charge Heater
73-P-3	Diesel Pump
73-P-4	Diesel Pump
73-P-5	Diesel Pump
72-P-6	Diesel Pump
72-P-7	Diesel Pump
72-P-8	Diesel Pump
72-P-9	Diesel Pump
72-P-10	Diesel Pump
72-P-11	Diesel Pump
72-P-14A	Diesel Pump
72-P-14B	Diesel Pump
50-P-16	Diesel Pump
50-P-20	Diesel Pump
16-P-04	Diesel Pump

Category: Fired Units (cont'd.) EPN

Description

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	16-P-07	Diesel Pump
	83-P-904	Diesel Pump
	83-P-905	Diesel Pump
Category: Flares	<u>EPN</u>	<u>Description</u>
	126	Main Flare
	127	MTBE Flare
	128	Halo Flare (Emergency Use Only)
	135	Acid Gas Flare (Emergency Use
	Only)	
	158	Ground Flare
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
	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
	46	Tank No. 137
	48	Tank No. 139
	TK-51	Tank No. 51
	60	Tank No. 14
	61	Tank No. 15
	63	Tank No. 149
	64	Tank No. 150
	69	Tank No. 9
	70	Tank No. 16
	71	Tank No. 17
Category: Tanks (cont'd.)	<u>EPN</u>	<u>Description</u>

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72	Tank No. 18
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-114	Tank No. 114
129	Tank No. 156
140	Tank No. 161
142	Tank No. 111
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
196	Tank No. 70-TK-66
197	Tank No. 70-TK-67
198	Tank No. 70-TK-68

Category: Fugitive

<u>EPN</u>	<u>Description</u>
1F	Crude Unit
2F	Vacuum Unit
4F	LEU
11F	Desalter Unit
12F	HDS Unit
13F	SMR
18F	HRLEU Unit
20F	LRU

Category: Fugitive (cont'd.)

<u>EPN</u>	<u>Description</u>
21/22F	HOC Unit
30B02F	30-B-02
30B03F	30-B-03



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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	49-RSU/XFU
FUG-DOCKS	Docks
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
GD-FUG	Gasoline Desulfurization
LPGSTGF	Propane Pump Fugitives

Category: Loading

EPN                      Description

VRU	Marine loading VRU
31	Barge Loading (Heavy Oil)
SHIP FUG	Ship Dock Fugitives
TRUCKFUG	Truck Loading
Loading-East	Loading East

Category: Other

EPN                      Description

1CT	CU/VRU Cooling Tower
122	HOC Cooling Tower
123	ALKY Cooling Tower
167-CT	BUP Cooling Tower
AE-49601A/B	Analyzer Vent AE-49601A/B
AE-49900A/B	Analyzer Vent AE-49900A/B

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AE-49901A/B      Analyzer Vent AE-49901A/B

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