

## EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

Flexible Permit Numbers 38754 and PSD-TX-324-M12

### 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), Other	Final	1201	1218

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

Source Name	Year	lb/hr	TPY
Fired Units, Flares	Final	1155	2441.2

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

Source Name	Year	lb/hr	TPY
Fired Units, Flares, 168	Final	509	2023

#### CO EMISSION CAP

Source Name	Year	lb/hr	TPY
Fired Units, Flares	Final	1362	5623

#### PM EMISSION CAP

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

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

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

**BENZENE EMISSION CAP**

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

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

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
121	Final	49.0	214.6

AIR CONTAMINANTS DATA

<u>Emission</u>	<u>Source</u>	<u>Air Contaminant</u>	<u>Emission Rates</u>
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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES				
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
31F	HF Alkylation Unit Fugitives Initial (4)(5)	HF	0.07	0.29
31F	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. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.  
 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.

Dated February 2, 2009

## ATTACHMENT 1

Flexible Permit Numbers 38754 and PSD-TX-324M12

### 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
	16-P-07	Diesel Pump
	83-P-904	Diesel Pump
	83-P-905	Diesel Pump

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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
	72	Tank No. 18
	88	Tank No. 57
	89	Tank No. 58
	90	Tank No. 59
	91	Tank No. 60
	92	Tank No. 61

Category: Tanks (cont'd.)	<u>EPN</u>	<u>Description</u>
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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
21/22F	HOC Unit
30B02F	30-B-02
30B03F	30-B-03
31F	HF Alkylation Unit
36F	Butamer Unit
37F	MTBE
38F	Oleflex

Category: Fugitive (cont'd.)

<u>EPN</u>	<u>Description</u>
41/46/24F	SULF/SEU/SRU
47F	HCU

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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

<u>EPN</u>	<u>Description</u>
VRU	Marine loading VRU
31	Barge Loading (Heavy Oil)
SHIP FUG	Ship Dock Fugitives
TRUCKFUG	Truck Loading
Loading-East	Loading East

Category: Other

<u>EPN</u>	<u>Description</u>
1CT	CU/VRU Cooling Tower
122	HOC Cooling Tower
123	ALKY Cooling Tower
167-CT	BUP Cooling Tower

Category: Other (cont'd.)

<u>EPN</u>	<u>Description</u>
AE-49601A/B	Analyzer Vent AE-49601A/B
AE-49900A/B	Analyzer Vent AE-49900A/B
AE-49901A/B	Analyzer Vent AE-49901A/B

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Dated February 2, 2009