

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

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, Flares, Tanks, Loading, Fugitives (4), Other	Final	1,015	1,179

NO_x EMISSION CAP

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, Flares 2441.2	Final	1,155	

SO₂ EMISSION CAP

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

CO EMISSION CAP

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

PM EMISSION CAP

<u>Source Name</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
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Fired Units	Final	272	826
H₂S 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), WWTP, Other	Final	17.8	14.7

H₂SO₄ EMISSION CAP

Source Name	Year	lb/hr	TPY
121	Final	49.0	214.6

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

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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	AIR CONTAMINANTS DATA	
			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 ₂	0.01	0.04
		H ₂ SO ₄	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

Exempt Solvents - carbon compounds that have been excluded from the definition of volatile organic compound.

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO - carbon monoxide

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 PM greater than 10 microns is emitted.

HF - hydrogen fluoride

H₂S - hydrogen sulfide

H₂SO₄ - sulfuric acid

HCl - hydrochloric acid

Cl₂ - chlorine

NH₃ - ammonia

(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.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (7) The annual limits tons 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: June 1, 2010

ATTACHMENT 1

Flexible Permit Numbers 38754 and PSDTX324M13

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 (Pilots Only)
	135	Acid Gas Flare (Pilots 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

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Category: Tanks (cont'd.)	<u>EPN</u>	<u>Description</u>
	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

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Category: Fugitive (cont'd.)	<u>EPN</u>	<u>Description</u>
	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
	201	Railcar Unloading
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

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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
	V-201	Unloading Vent (MSS only)

Dated: June 1, 2010