

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

Flexible Permit Numbers 6308 and PSDTX137M2

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 1 for list of Emission Point Numbers and Source Descriptions for emission points included in each Source Category.

NO_x EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Fired Units	2009	419.50	881.02

CO EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Fired Units	2009	286.83	476.03

SO₂ EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Fired Units	2009	255.18	156.07

PM EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Fired Units, Cooling Towers (5)	2009	48.55	183.11

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VOC EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Fired Units, Cooling Towers, Tanks, Fugitives, Wastewater, Miscellaneous (4)	2009	370.92	469.32

Cl₂ EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Cooling Towers (5)	2009	0.01	0.01

SPECIATED VOC EMISSION CAPS

Toluene EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Tanks E11TKS21, E11TKS23, E11TKR17, and E11TKR18	2009	1.34	3.01

Xylene EMISSION CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Tanks E11TKS21, E11TKS32, and E11TKR9	2009	6.55	7.48

Benzene CAP

<u>Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY **</u>
Tanks E11TKR5, E11TKR7, and E11TKR145	2009	1.18	1.99

INDIVIDUAL EMISSIONS LIMITATIONS

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EPN	Source Name	Air Contaminant (3)	lb/hr	TPY **
FL-97/FL-28/ FL-27	Main Flare, West Flare and East Flare	VOC	38.19	99.19
		NO _x	4.06	11.50
		CO	20.92	59.22
		SO ₂	7.30	31.27
		H ₂ S	0.08	0.33
C-108	BTX Cooling Tower	PM	0.17	0.74
		Cl ₂	0.01	0.01
C-109	Crudell Cooling Tower	PM	0.24	1.05
		Cl ₂	0.01	0.01
C-110	Hydrobon Cooling Tower	PM	0.29	1.26
		Cl ₂	0.01	0.01

SULFUR RECOVERY UNIT NO. 1

E29H417	SRU No. 1 Heater	VOC	0.02	0.09
		NO _x	0.58	2.53
		CO	0.31	1.38
		PM	0.03	0.12
		SO ₂	0.12	0.32
F-SRU1	SRU No. 1 Fugitives (4)	VOC	0.11	0.47
		CO	0.03	0.15
		H ₂ S	0.07	0.31
FL-87	SRU No. 1 Flare	VOC	0.02	0.04
		NO _x	0.09	0.20
		CO	0.77	1.69
		SO ₂	0.02	0.03

EPN	Source Name	Air Contaminant (3)	lb/hr	TPY **
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S-84, S-85	SRU No. 1 and No. 2 Tail Gas Incinerator Stacks (TGI)	VOC	0.13	0.56
		NO _x	2.34	10.30
		CO	14.40	62.90
		PM	0.18	0.78
		SO ₂	39.04	171.01
		H ₂ S	0.42	1.82

SULFUR RECOVERY UNIT NO. 2

F-SRU2	SRU No. 2 Fugitives (4)	VOC	0.11	0.47
		CO	0.03	0.15
		H ₂ S	0.07	0.29
FL-88	SRU No. 2 Acid Gas Flare	VOC	0.02	0.04
		NO _x	0.09	0.20
		CO	0.77	1.69
		SO ₂	0.02	0.03
PROPFRZTST	Propane Freeze Test	VOC	5.10	3.72
E13P45	Firewater Diesel Engine E13P45	VOC	0.12	0.05
		NO _x	6.22	2.73
		CO	1.08	0.47
		PM ₁₀	0.44	0.19
		SO ₂	0.96	0.42
E13P46	Firewater Diesel Engine E13P46	VOC	0.12	0.05
		NO _x	6.22	2.73
		CO	1.08	0.47
		PM ₁₀	0.44	0.19
		SO ₂	0.96	0.42
E13P47	Firewater Diesel Engine E13P47	VOC	0.12	0.05
		NO _x	6.22	2.73
		CO	1.08	0.47
		PM ₁₀	0.44	0.19
		SO ₂	0.96	0.42

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EPN	Source Name	Air Contaminant (3)	lb/hr	TPY **
E13TK39	Diesel Tank for E13P45	VOC	0.01	0.03
E13TK40	Diesel Tank for E13P46	VOC	0.01	0.03
E13TK41	Diesel Tank for E13P47	VOC	0.01	0.03

PLANNED MAINTENANCE, START-UP, AND SHUTDOWN EMISSIONS

FL-97/FL-28/ FL-27	Main Flare, West Flare (6) and East Flare	VOC	561.58	1.24
		NO _x	46.03	0.23
		CO	236.94	1.18
		SO ₂	589.76	4.75
		H ₂ S	3.43	0.09
BTX REGEN	BTX Regenerator Vent (6)	NO _x	45.50	2.73
		CO	13.65	0.82
		SO ₂	0.61	0.06
		HCl	0.58	0.03
BTXRGENFUG	BTX Regenerator Fugitives (6) (4)	VOC	0.01	0.03

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan per Attachment 1.
- (2) Specific point source names. 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_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 in emitted.
- H₂S - hydrogen sulfide
- Cl₂ - chlorine
- HCl - Hydrogen chloride
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) Only the FCCU and sulfolane cooling towers are included in the PM and Cl₂ emission caps.
- (6) Planned MSS activities and emissions emit from this EPN.

EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSIONS LIMITATIONS

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

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

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

Dated June 15, 2009