

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 49154

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.

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
06ESPPCV	FCCU ESP Stack	VOC	5.08	22.25
		NO <sub>x</sub>	105.98	464.21
		SO <sub>2</sub>	669.90	2430.37
		PM	35.55	155.73
		CO	161.32	706.59
06CHRGHTR	FCCU Charge Heater	VOC	0.33	1.29
		NO <sub>x</sub>	2.21	8.58
		SO <sub>2</sub>	1.84	2.02
		PM	0.47	1.83
		CO	2.19	8.52
06FCCUFUG	FCCU Fugitives	VOC	7.00	30.65
		Benzene	0.04	0.16
		H <sub>2</sub> S	0.03	0.14
08CLEFUG	Cat. Light Ends Unit Fugitives	VOC	4.19	18.33
		H <sub>2</sub> S	0.06	0.25
11ALKYFUG	Alkylation Unit Fugitives	VOC	2.11	9.23
		Hydrogen Fluoride	0.24	1.03
25CLAYHTR	Clay Tower Heater	VOC	0.09	0.39
		NO <sub>x</sub>	1.49	6.53
		SO <sub>2</sub>	0.43	0.47
		PM	0.12	0.53
		CO	1.05	4.60
25AROMXFUG	Aromex Unit Fugitives	VOC	0.95	4.16
		Benzene	0.42	1.85

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
37ARORKLDG	Aromex Loading Rack Fugitives	VOC	14.07	1.88
		Benzene	10.32	1.82
14NEASTFLR	Northeast Flare	VOC	14.90	1.99
		NO <sub>x</sub>	1.35	0.17
		CO	10.96	1.14
		Benzene	1.85	1.42
25ARMXSCB	Aromex Unit Solvent Absorber	VOC	0.68	3.00
		Benzene	0.45	1.97
37TANK0321	Storage Tank No. 321	VOC	0.99	1.28
37TK321FUG	Tank No. 321 Fugitives	VOC	0.03	0.11
37TANK0330	Storage Tank No. 330	VOC	0.19	0.32
		Benzene	0.19	0.32
37TK330FUG	Tank No. 330 Fugitives	VOC	0.03	0.11
		Benzene	0.03	0.11
06CTR16FUG	Cooling Tower No. 16	VOC	0.36	1.59
11ALKY2CTR	Cooling Tower No. 2	VOC	0.38	1.66
11CTR6FUG	Cooling Tower No. 6	VOC	0.34	1.47

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- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an 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  
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 particulate matter greater than 10 microns is emitted.  
CO - carbon monoxide  
H<sub>2</sub>S - hydrogen sulfide
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

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

\_\_\_Hrs/day \_\_\_Days/week \_\_\_Weeks/year or 8,760 Hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated March 7, 2011