

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 8356 and PSD-TX-331M1

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)	Emission Rates *	
			lb/hr	TPY**
B-004	Steam Boilers (5)	VOC	0.63	2.76
		NO _x	20.11	88.09
		SO ₂	6.69	8.79
		PM	1.85	8.08
		CO	5.03	22.03
B-005	Boiler SP-5	VOC	0.21	0.90
		NO _x	2.82	12.40
		SO ₂	1.31	2.47
		PM	0.35	1.50
		CO	2.45	10.70
B-006	Steam Boiler	VOC	0.44	1.90
		NO _x	5.94	26.00
		SO ₂	3.94	5.20
		PM	0.73	3.20
		CO	8.83	38.60
F-0681	Oil/Water Separator	VOC	1.62	7.10
F-2200	Alky Splitter Fugitive (4)	VOC	0.89	3.90
F-2310	Amine Unit Fugitive (4)	VOC	1.05	4.60
F-2320	No. 1 SWRU Fugitive (4)	VOC	0.18	0.80
F-2330	ATS Unit Fugitive (4)	SO ₂	<0.01	<0.01
		H ₂ S	0.02	0.09
		NH ₃	0.09	0.41

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			lb/hr	TPY**
F-2410	FCC Fugitive (4)	VOC	5.34	23.40
F-2420	LPG Merox Fugitive (4)	VOC	1.26	5.50
F-2430	Cat Merox Fugitive (4)	VOC	1.07	4.70
F-2500	Alky Fugitive (4)	VOC	2.31	10.10
F-2800	East Plant Boiler Fugitive (4)	VOC	0.37	1.6
F-2810	East Plant Cooling Tower	VOC	1.47	6.44
F-3500	No. 1 Sulfur Plant Fugitives (4)	VOC	0.01	0.03
		SO ₂	<0.01	<0.01
		H ₂ S	0.02	0.09
		NH ₃	<0.01	<0.01
		Sulfur	<0.01	<0.01
FL-003 only	Emergency Flare	VOC	Emergency	use
		NO _x		
		SO ₂		
		PM		
		CO		
H-020	Isostripper Reboiler Heater	VOC	0.19	0.81
		NO _x	5.86	25.65
		SO ₂	1.64	2.16
		PM	0.54	2.37
		CO	1.47	6.42
H-039	No. 1 SRU Hot Oil Heater	VOC	0.04	0.09
		NO _x	0.21	0.91
		SO ₂	0.17	0.23
		PM	0.06	0.26
		CO	0.21	0.92

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			lb/hr	TPY**
V-003	ATS Secondary Absorber	SO ₂	2.00	3.01
		H ₂ S	0.10	0.44
V-008	No. 1 Sulfur Plant Vent	VOC	0.06	0.17
		NO _x	1.26	3.68
		SO ₂	15.55	68.09
		PM	0.08	0.23
		CO	0.42	1.23

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (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_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 H₂S - hydrogen sulfide
 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 particulate matter greater than 10 microns is emitted.
 CO - carbon monoxide
 NH₃ - ammonia
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Two boilers venting through a common stack. Each boiler when operating alone is limited to emit one-half of the values shown.

* 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 May 20, 2004