

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 18277 and PSD-TX-802

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 **
27STK_001	Pretreater Heater H-3401 (92 MMBtu/hr heat input)	CO	3.06	13.42
		NO <sub>x</sub>	11.04	48.36
		PM <sub>10</sub>	1.78	7.80
		SO <sub>2</sub> (5) 2.30	10.07	
		VOC 0.25	1.09	
27STK_002	Stripper Reboiler H-3402 (76 MMBtu/hr heat input)	CO	2.97	13.01
		NO <sub>x</sub>	8.36	36.62
		PM <sub>10</sub> (11)	1.31	5.74
		SO <sub>2</sub> (5) 2.15	9.42	
		VOC 0.24	1.05	
27STK_003	Reformer Heaters H-3403 through H-3406 (438 MMBtu/hr heat input) (9) (600 MMBtu/hr heat input) (10)	CO	44.40	105.90
		NO <sub>x</sub>	77.40	211.03
		PM <sub>10</sub> (11)	1.98	6.27
		SO <sub>2</sub> (8)	17.52	28.01
		VOC 1.20	3.84	
27STK_004	Debutanizer Reboiler H-3408 (80 MMBtu/hr heat input) (9) (90 MMBtu/hr heat input) (10)	CO	6.66	12.30
		NO <sub>x</sub>	5.40	21.02
		PM <sub>10</sub>	0.83	3.22
		SO <sub>2</sub> (5) 2.63	10.23	
		VOC 0.25	0.98	
27VNT_001	Regenerator Vent	CO	1.48	4.80
		HCl (6) 0.56	3.05	
			3.29 (7)	
		NO <sub>x</sub> 0.98	4.30	
		PM <sub>10</sub> 0.06	0.25	
		SO <sub>2</sub> (5)	0.68	3.00

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
27FUG_001	Fugitives (4)	Cl <sub>2</sub>	0.10	0.44
		VOC 13.69	59.97	

- (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 area name or fugitive source name.
- (3) CO - carbon monoxide  
 NO<sub>x</sub> - total oxides of nitrogen  
 PM<sub>10</sub> - particulate matter (PM) 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.  
 SO<sub>2</sub> - sulfur dioxide  
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 ( Cl<sub>2</sub> - chlorine  
 HCl - hydrogen chloride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Based on maximum fuel hydrogen sulfide (H<sub>2</sub>S) content of 150 parts per million.
- (6) 22.9 percent of hydrogen chloride emissions are in the form of CL<sub>2</sub>.
- (7) This rate allowed only under the conditions of Special Condition No. 6.
- (8) Annual limits based on maximum fuel H<sub>2</sub>S content of 75 parts per million; hourly limits based on maximum fuel H<sub>2</sub>S content of 150 ppm.
- (9) Annual emission limit is based on an annual average heat input.
- (10) Hourly emission limit is based on the maximum hourly heat input.
- (11) PSD-TX-802 pollutant

\* 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

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