

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 46776 and PSD-TX-1004

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**
H-64	No. 4 Hydrotreater Charge Heater (30.1 MMBtu/hr) (5)	VOC	0.19	0.79
		NO _x	1.16	5.07
		SO ₂	1.14	1.54
		CO	2.35	10.26
		PM ₁₀	0.25	1.09
H-65	No. 4 Hydrotreater Stripper Reboiler Heater (37 MMBtu/hr) (5)	VOC	0.22	0.97
		NO _x	1.43	6.23
		SO ₂	1.40	1.89
		CO	2.88	12.61
		PM ₁₀	0.31	1.33
H-66	Splitter Reboiler Heater (38.5 MM Btu/hr) (5)	VOC	0.23	1.00
		NO _x	1.48	6.48
		SO ₂	1.46	1.96
		CO	3.00	13.12
		PM ₁₀	0.32	1.39
H-67	No. 3 Reformer Charge Heaters H-67A, H-67B, H-67C (Common Stack) (160.4 MMBtu/hr) (5)	VOC	0.97	4.20
		NO _x	6.18	26.99
		SO ₂	6.07	8.18
		CO	12.49	54.67
		PM ₁₀	1.35	6.78
H-68	No. 3 Reformer Stabilizer Reboiler Heater (13.5 MMBtu/hr) (5)	VOC	0.09	0.35
		NO _x	0.52	2.28
		SO ₂	0.51	0.69
		CO	1.06	4.61
		PM ₁₀	0.12	0.50

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
H-69	No. 3 SRU Heat Transfer Heater (10.8 MMBtu/hr) (5)	VOC	0.07	0.29
		NO _x	0.42	1.82
		SO ₂	0.41	0.55
		CO	0.85	3.69
		PM ₁₀	0.10	0.40
F-88	Fugitives - No. 4 Hydrotreater (4)	VOC	1.2	5.24
		H ₂ S	0.04	0.19
F-89	Fugitives - Splitter (4)	VOC	0.23	1.03
F-90	Fugitives - No. 3 SRU (4)	VOC	0.21	0.90
		H ₂ S	0.78	3.42
F-91	Fugitives - Isomerization (4)	VOC	1.46	6.40
F-92	Fugitives - No. 3 Reformer (4)	VOC	1.04	4.57
S-202	Sour LSR Storage Tank No. 202	VOC	1.54	3.27
V-27	No. 3 SRU Tail Gas Incinerator	VOC	0.04	0.19
		NO _x	0.72	3.13
		SO ₂	22.27	95.66
		CO	0.56	2.44
		PM ₁₀	0.07	0.26
		H ₂ S	<0.01	<0.01

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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 30 Texas Administrative Code Section 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 particulate matter greater than 10 microns is emitted.
H₂S - hydrogen sulfide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Maximum heater firing rates are on the basis of lower heating value.
* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

8,760 Hrs/year

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

Dated _____