

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 9649 and PSD-TX-683

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	Emission Rates*	
			Name (3)	lb/hr
TPY**				
W-01	CO ₂ Heater	NO _x	0.25	1.07
		CO	0.21	0.90
		SO ₂	<0.01	0.01
		PM ₁₀	0.02	0.08
		VOC	0.01	0.06
W-02	Glycol Reboiler	NO _x	0.20	0.86
		CO	0.17	0.72
		SO ₂	<0.01	0.01
		PM ₁₀	0.02	0.07
		VOC	0.01	0.05
W-03	Boiler 1	NO _x	5.4	23.5
		CO	4.5	19.8
		SO ₂	0.03	0.14
		PM ₁₀	0.4	1.8
		VOC	0.3	1.3
W-04	Boiler 2	NO _x	5.4	23.5
		CO	4.5	19.8
		SO ₂	0.03	0.14
		PM ₁₀	0.4	1.8
		VOC	0.3	1.3
W-05	SRU Heater	NO _x	0.11	0.47
		CO	0.09	0.40
		SO ₂	<0.01	<0.01
		PM ₁₀	0.01	0.04

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<u>Emission Rates*</u>	<u>Source</u>	<u>Air Contaminant</u>	<u>Emission</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
	TPY**			
W-06	SRU Incinerator	VOC	0.01	0.03
		NO _x	0.4	1.0
		CO	1.7	4.8
		SO ₂	110.8	308.0
		PM ₁₀	0.04	0.12
		VOC	0.02	0.05
		TRS	1.2	3.3
W-07	Flare	NO _x	0.05	0.2
		CO	0.2	0.9
		SO ₂	3.0	12.8
		VOC	0.9	3.5
		H ₂ S	0.03	0.14
W-08 (5/98)	Flare (7)	Emergency and maintenance use only		
FU-CO2	Plant Fugitives (4)	VOC	46.2	202.3
		H ₂ S	0.2	0.8
E-EMGEN	Emergency Generator (6)	NO _x	21.9	0.07
		CO	1.5	0.01
		SO ₂	1.5	0.01
		PM ₁₀	0.4	0.01
		VOC	0.6	0.01
E-EMWATER	Fire Water Pump (6)	NO _x	5.0	0.06
		CO	1.1	0.01
		SO ₂	0.3	0.01
		PM ₁₀	0.33	0.01
		VOC	0.4	0.01
E-METHANOL	Methanol Storage Tank	VOC	2.0	0.05

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
	<u>TPY**</u>			
E-NAPTHA	Naptha Storage Tank	VOC	3.8	0.05

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
	<u>TPY**</u>			
E-892	Diesel Storage Tank	VOC	0.4	0.01
E-201	T-201 Glycol Storage Tank	VOC	0.02	0.01
E-202	T-202 Sour Glycol Tank	VOC H ₂ S	0.2 0.01	0.2 0.01
E-401	T-401 Amine Storage Tank	VOC	0.4	0.01
E-C1	Chemical Storage Tank (5)	VOC	3.3	0.03
E-C2	Chemical Storage Tank (5)	VOC	2.1	0.02
E-C3	Chemical Storage Tank (5)	VOC	2.1	0.02
E-C5	Chemical Storage Tank (5)	VOC	1.1	0.01
E-C6	Chemical Storage Tank (5)	VOC	0.6	0.01

(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) NO_x - total oxides of nitrogen

CO - carbon monoxide

SO₂ - sulfur dioxide

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 is emitted.

VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1

TRS - total reduced sulfur

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>
	<u>TPY**</u>		
	H ₂ S - hydrogen sulfide		

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- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) These represent total vapor emission from the tank. The chemical stored may be in aqueous solution so that the total stated emissions would not be limited to VOC.
- (6) The emissions represented are due to operation of the equipment for required preventive maintenance.
- (7) Emission point is to be used for emergency and planned maintenance conditions only. Gas flared not to exceed 85 MMSCFD (inlet and assist gas). **(5/98)**

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

Hrs/day____ Days/week____Weeks/year____ or Hrs/year 8,760

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

Dated March 28, 2001