

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5414

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 **
FE-1	Fire Pump Engine No. 1 (7) 334-Horsepower	NO <sub>x</sub>	10.35	0.45
		CO	2.23	0.10
		VOC	0.82	0.04
		SO <sub>2</sub>	0.68	0.03
		PM <sub>10</sub>	0.73	0.03
FE-2	Fire Pump Engine No. 2 (7) 334-Horsepower	NO <sub>x</sub>	10.35	0.45
		CO	2.23	0.10
		VOC	0.82	0.04
		SO <sub>2</sub>	0.68	0.03
		PM <sub>10</sub>	0.73	0.03
FE-3	Fire Pump Engine No. 3 (7) 334-Horsepower	NO <sub>x</sub>	10.35	0.45
		CO	2.23	0.10
		VOC	0.82	0.04
		SO <sub>2</sub>	0.68	0.03
		PM <sub>10</sub>	0.73	0.03
FE-4	Fire Pump Engine No. 4 (6) 468-Horsepower	NO <sub>x</sub>	14.51	0.63
		CO	3.13	0.14
		VOC	1.16	0.05
		SO <sub>2</sub>	0.96	0.04
		PM <sub>10</sub>	1.03	0.05
FL-1	Flare Stack (Normal operation and pilot fuel)	CO	0.0	0.0
		NO <sub>x</sub>	0.0	0.0
		SO <sub>2</sub>	0.01	
		VOC (7)	33.01	144.60
		BD	1.92	8.39
		C <sub>2</sub> H <sub>4</sub>	1.44	6.32
		C <sub>3</sub> H <sub>6</sub>	1.99	8.71

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
H-02	Smalling Heater Stack	CO	3.28	14.35
		NO <sub>x</sub>	3.90	17.08
		PM <sub>10</sub>	0.30	1.30
		SO <sub>2</sub>	0.02	0.01
		VOC	0.21	0.94
H-07	Propane Regen Heater Stack	CO	0.42	1.84
		NO <sub>x</sub>	0.50	2.19
		PM <sub>10</sub>	0.01	0.01
		SO <sub>2</sub>	0.04	0.17
		VOC	0.03	0.12
H-08	Boiler Stack	CO	1.23	5.41
		NO <sub>x</sub>	1.47	6.44
		PM <sub>10</sub>	0.01	0.04
		SO <sub>2</sub>	0.11	0.49
		VOC	0.08	0.35
H-09	Butane Regen Heater Stack	CO	0.29	1.29
		NO <sub>x</sub>	0.35	1.53
		PM <sub>10</sub>	0.01	0.01
		SO <sub>2</sub>	0.03	0.12
		VOC	0.02	0.08
LR-1MP	Barge Slip Tubes	BD	0.0	0.0
		C <sub>2</sub> H <sub>4</sub>	0.0	
		C <sub>3</sub> H <sub>6</sub>	0.0	
		VOC (7)	0.0	0.0
LR-1T	Truck Loading and Unloading Connections	BD	0.0	0.0
		C <sub>2</sub> H <sub>4</sub>	0.0	0.0
		C <sub>3</sub> H <sub>6</sub>	0.0	
		VOC (7)	0.0	0.0
LR-2T	Truck Slip Tubes	BD	0.0	0.0
		C <sub>2</sub> H <sub>4</sub>	0.0	
		C <sub>3</sub> H <sub>6</sub>	0.0	
		VOC (7)	0.0	0.0

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY

FUG-1	Pmtd. Comp. Process Fug (4)	VOC	0.0	0.0
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----- These emission rates apply as long as H-03 and H-04 do not each exceed 4,730 hr/yr operation -----

H-03	A Glycol Heater Stack	CO	2.28	5.38
		NO <sub>x</sub>	6.19	14.64
		PM <sub>10</sub>	0.89	2.11
		SO <sub>2</sub>	0.04	0.09
		VOC	0.18	0.41

H-04	B Glycol Heater Stack	CO	2.28	5.38
		NO <sub>x</sub>	6.19	14.64
		PM <sub>10</sub>	0.89	2.11
		SO <sub>2</sub>	0.04	0.09
		VOC	0.18	0.41

----- These emission rates apply once H-03 and/or H-04 exceed 4,730 hr/yr operation -----

H-03	A Glycol Heater Stack (5)	CO	5.46	16.73
		NO <sub>x</sub>	1.63	4.98
		PM <sub>10</sub>	0.49	1.51
		SO <sub>2</sub>	0.04	0.12
		VOC	0.36	1.10

H-04	B Glycol Heater Stack (5)	CO	5.46	16.73
		NO <sub>x</sub>	1.63	4.98
		PM <sub>10</sub>	0.49	1.51
		SO <sub>2</sub>	0.04	0.12
		VOC	0.36	1.10

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- (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) BD - butadiene  
CO - carbon monoxide  
C<sub>2</sub>H<sub>4</sub> - ethylene  
C<sub>3</sub>H<sub>6</sub> - propylene  
NO<sub>x</sub> - total oxides of nitrogen  
PM<sub>10</sub> - particulate matter less than 10 microns in diameter  
SO<sub>2</sub> - sulfur dioxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
  - (5) Emission rates for H-03 and H-04 are based on and the facilities are limited by the following maximum operating schedule: 6,130 Hrs/year
  - (6) 87 hours per year of operation
  - (7) 1-3, butadiene, ethylene and propylene are not included in the VOC emission rates.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:  
  
Hrs/day 24 Days/week 7 Weeks/year 52
- \*\* Compliance with annual emission limits is based on a rolling 12-month period.