

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 16842

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, sources, and related activities. 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	
			lbs/hour	TPY (4)
ANLYZR	Portable Analyzer	VOC	0.09	0.38
		H <sub>2</sub> S	<0.01	0.01
FLTEMP	Pilot/Sweep Gas Temporary Flare	VOC (7)	**	**
		NO <sub>x</sub> (7)	**	**
		CO (7)	**	**
		SO <sub>2</sub> (7)	**	**
FE1	Pilot/Sweep Gas Flare	VOC (7)	0.04	0.19
		NO <sub>x</sub> (7)	0.96	4.19
		CO (7)	8.21	35.96
		SO <sub>2</sub> (7)	0.04	0.16
	M1 MSS	VOC	50.04	--
		NO <sub>x</sub>	30.00	--
		CO	159.60	--
		SO <sub>2</sub>	400.00	--
		H <sub>2</sub> S	3.96	--
FE2	Pilot/Sweep Gas Flare	VOC	0.01	0.04
		NO <sub>x</sub>	0.02	0.10
		CO	0.19	0.83
		SO <sub>2</sub>	0.04	0.18
	M2 MSS	VOC	18.72	--

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		NO <sub>x</sub>	12.00	--
		CO	49.34	--
		SO <sub>2</sub>	250.00	--
		H <sub>2</sub> S	2.48	--
FE3	Pilot/Sweep Gas Flare	VOC	0.70	3.06
		NO <sub>x</sub>	0.47	2.08
		CO	4.07	17.84
		SO <sub>2</sub>	0.02	0.08
	M3 MSS	VOC	76.27	--
		NO <sub>x</sub>	30.00	--
		CO	235.24	--
		SO <sub>2</sub>	400.00	--
		H <sub>2</sub> S	3.97	--
FE1, FE2, FE3	M1, M2, M3 MSS (6)	VOC	--	67.65
		NO <sub>x</sub>	--	51.44
		CO	--	206.97
		SO <sub>2</sub>	--	489.59
		H <sub>2</sub> S	--	4.84
FUGP	Process Fugitives (5)	VOC	5.92	25.95
		H <sub>2</sub> S	0.16	0.29
FUG3	Process Fugitives (5)	VOC	1.65	7.25
		H <sub>2</sub> S	0.03	0.15
FUG4	Compressor Fugitives (5)	VOC	0.12	0.54
		H <sub>2</sub> S	<0.01	<0.01
HE1	48 MMBtu/hr Heater	VOC	0.28	1.25
		NO <sub>x</sub>	5.76	25.23
		CO	4.35	19.05
		SO <sub>2</sub>	0.03	0.14

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		PM	0.39	1.72
		PM <sub>10</sub>	0.39	1.72
HE2	48 MMBtu/hr Heater	VOC	0.28	1.25
		NO <sub>x</sub>	5.76	25.23
		CO	4.35	19.05
		SO <sub>2</sub>	0.03	0.14
		PM	0.39	1.72
		PM <sub>10</sub>	0.39	1.72
HE3	53 MMBtu/hr Heater M3	VOC	0.29	1.25
		NO <sub>x</sub>	1.33	5.80
		CO	1.86	8.12
		SO <sub>2</sub>	0.04	0.17
		PM	0.40	1.73
		PM <sub>10</sub>	0.40	1.73
AHE4	3.93 MMBtu/hr Fired Heater	VOC	0.02	0.10
		NO <sub>x</sub>	0.42	1.86
		CO	0.36	1.56
		SO <sub>2</sub>	0.01	0.01
		PM	0.03	0.14
		PM <sub>10</sub>	0.03	0.14
MSD	Mole Sieve Vent	VOC	0.04	<0.01
		H <sub>2</sub> S	<0.01	<0.01
TEGREB1	0.68 MMBtu/hr TEG Regenerator	VOC	0.01	0.02
		NO <sub>x</sub>	0.07	0.32
		CO	0.06	0.27
		SO <sub>2</sub>	0.01	0.01
		PM	0.01	0.02
		PM <sub>10</sub>	0.01	0.02

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TEGREB2	1.5 MMBtu/hr TEG Regenerator	VOC	0.01	0.04
		NO <sub>x</sub>	0.16	0.71
		CO	0.14	0.60
		SO <sub>2</sub>	0.01	0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
TEGREB3	3.0 MMBtu/hr Regen Heater M3	VOC	0.02	0.10
		NO <sub>x</sub>	0.42	1.30
		CO	0.35	1.53
		SO <sub>2</sub>	0.01	0.01
		PM	0.03	0.14
		PM <sub>10</sub>	0.03	0.14
V-1	Blowdowns	VOC	26.62	1.06
		H <sub>2</sub> S	0.83	0.03

- (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<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
CO - carbon monoxide  
H<sub>2</sub>S - hydrogen sulfide  
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.  
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.  
(6) This cap authorizes emissions from the flares during MSS only, as described in Special Conditions.  
(7) The Temporary Flare (EPN FLTEMP) shall be utilized to control emissions and will emit no more than what is authorized under FE1 Pilot/Sweep Gas.

Date: May 31, 2017