

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 171146

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 (5)(6)	
			lbs/hour	TPY (4)
H4102	Amine Reboiler Stack No. 1 (54.60 MMBtu/hr) (Natural gas)	PM	0.17	--
		PM <sub>10</sub>	0.17	--
		PM <sub>2.5</sub>	0.17	--
		VOC	0.16	
		NO <sub>x</sub>	1.99	
		SO <sub>2</sub>	0.03	
		CO	2.02	
H4103	Amine Reboiler Stack No. 2 (54.60 MMBtu/hr) (Natural gas)	PM	0.17	
		PM <sub>10</sub>	0.17	
		PM <sub>2.5</sub>	0.17	
		VOC	0.16	
		NO <sub>x</sub>	1.99	
		SO <sub>2</sub>	0.03	
		CO	2.02	
H4104	Amine Reboiler Stack No. 3 (54.60 MMBtu/hr) (Natural gas)	PM	0.17	
		PM <sub>10</sub>	0.17	
		PM <sub>2.5</sub>	0.17	
		VOC	0.16	
		NO <sub>x</sub>	1.99	
		SO <sub>2</sub>	0.03	
		CO	2.02	
	Total Annual Reboiler Emissions from Natural Gas (Boiler Nos. H4102, H4103, H4104)	PM	--	1.49
		PM <sub>10</sub>	--	1.49
		PM <sub>2.5</sub>	--	1.49

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		VOC	--	1.43
		NO <sub>x</sub>	--	17.42
		SO <sub>2</sub>	--	0.28
		CO	--	17.67
TEG 1	TEG Reboiler Stack (0.231 MMBtu/hr) (Natural gas)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		NO <sub>x</sub>	0.03	0.13
		SO <sub>2</sub>	<0.01	<0.01
		CO	0.02	0.10
F1	Flare with Natural Gas Pilot	NO <sub>x</sub>	18.72	4.33
		CO	160.52	37.14
		SO <sub>2</sub>	24.94	5.90
		VOC	0.01	<0.01
		H <sub>2</sub> S	0.27	0.06
F2	Flare with Natural Gas Pilot	NO <sub>x</sub>	18.72	4.33
		CO	160.53	37.14
		SO <sub>2</sub>	24.94	5.90
		VOC	0.01	<0.01
		H <sub>2</sub> S	0.27	0.06
S1	Amine and Iron Chelate Unit Acid Tailgas Vent Stack	H <sub>2</sub> S	0.16	0.69
		VOC	<0.01	<0.01
S2	Spent Air Vent	VOC	<0.01	<0.01
TEG2	TEG Dehydrator Still Vent Stack	H <sub>2</sub> S	<0.01	<0.01
		VOC	0.11	0.48
FUGFL	Flare Piping Fugitives (5)	H <sub>2</sub> S	<0.01	<0.01
		VOC	<0.01	<0.01
FUGLAG	Lagoon Cover Piping Fugitives (5)	H <sub>2</sub> S	0.02	0.07

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FUGPLT	Amine Plant Fugitives (5)	H <sub>2</sub> S	0.05	0.23
		VOC	1.97	8.44
SLP1	Slop Tank 1 Vent	H <sub>2</sub> S	<0.01	<0.01
		VOC	<0.01	<0.10
SLP2	Slop Tank 2 Vent	H <sub>2</sub> S	<0.01	<0.01
		VOC	<0.01	<0.01
SLP3	Slop Tank 3 Vent	H <sub>2</sub> S	<0.01	<0.01
		VOC	<0.01	<0.01
V-4286	IC-110 Bulk Tank 1 Vent	VOC	0.13	0.02
V-4287	IC-110 Bulk Tank 2 Vent	VOC	0.13	0.02
V-4288	IC-110 Bulk Tank 3 Vent	VOC	0.13	0.02
V-4289	IC-210 Bulk Tank Vent	VOC	0.13	0.02
IC-110	IC-110 Tote	VOC	0.01	<0.01
IC-210	IC-210 Tote	VOC	0.01	<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) 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) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: \_\_\_\_\_ DRAFT