

# Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 46426, PSDTX999M1, and N290

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)
EP-H9	Boiler 9 (6)(7)	VOC	2.43	10.63
		NO <sub>x</sub>	247.06	658.08
		SO <sub>2</sub>	1.42	1.79
		PM	6.71	29.37
		PM <sub>10</sub>	6.71	29.37
		PM <sub>2.5</sub>	6.71	29.37
		CO	74.12	95.72
Boiler 10	Boiler 10	NO <sub>x</sub>	13.30	55.50
		NO <sub>x</sub> MSS (5)	17.24	
		SO <sub>2</sub>	12.27	5.02
		PM	4.95	20.70
		PM <sub>10</sub>	4.95	20.70
		PM <sub>2.5</sub>	4.95	20.70
		CO	47.90	200.40
		CO MSS (5)	65.76	
Boiler 11	Boiler 11	NO <sub>x</sub>	13.30	55.50
		NO <sub>x</sub> MSS (5)	17.24	
		SO <sub>2</sub>	12.27	5.02
		PM	4.95	20.70
		PM <sub>10</sub>	4.95	20.70
		PM <sub>2.5</sub>	4.95	20.70
		CO	47.90	200.40
		CO MSS (5)	65.76	

Emission Sources - Maximum Allowable Emission Rates

Boilers 10 and 11	VOC Emission CAP for Boilers 10 and 11	VOC	14.86	39.90
Boiler 12	Boiler 12	VOC	1.41	8.96
		NO <sub>x</sub>	6.64	29.08
		NO <sub>x</sub> MSS	72.54	7.25
		SO <sub>2</sub>	8.86	3.26
		PM	4.95	21.67
		PM <sub>10</sub>	4.95	21.67
		PM <sub>2.5</sub>	4.95	21.67
		CO	4.91	21.49
		CO MSS	294.36	29.44
		NH <sub>3</sub>	2.98	13.07

- (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  
NH<sub>3</sub> - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission limits apply during startup and shutdown as defined in the special conditions of this permit.
- (6) Planned MSS emissions are included within normal operation limits.
- (7) Boiler 9 is authorized to operate for 180 days after completion of the VAU Debottleneck project to perform shakedown and startup of Boiler 12. After 180 days Boiler 9 will be permanently shut down.

Date: TBD

## Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX203

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized 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 authorized by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates
			TPY (4)
Boiler 12	Boiler 12	CO <sub>2</sub> (5)	267509.15
		CH <sub>4</sub> (5)	5.20
		N <sub>2</sub> O (5)	0.32
		CO <sub>2</sub> e	267733.66

(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) CO<sub>2</sub> - carbon dioxide  
 N<sub>2</sub>O - nitrous oxide  
 CH<sub>4</sub> - methane  
 HFCs - hydrofluorocarbons  
 PFCs - perfluorocarbons  
 SF<sub>6</sub> - sulfur hexafluoride  
 CO<sub>2</sub>e - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015):  
 CO<sub>2</sub> (1), N<sub>2</sub>O (298), CH<sub>4</sub>(25), SF<sub>6</sub> (22,800), HFC (various), PFC (various)

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.

(5) Emission rate is given for informational purposes only and does not constitute enforceable limit.

Date: \_\_\_\_\_ TBD