

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 22038 and PSDTX815

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	
			lbs/hour	TPY (4)
Case I: Turbine with Duct Burner Fired				
CG1	GE Frame 7 Turbine (75 MW) 265- MMBtu/hr Duct Burner (5)	NO _x	89.8	54.2
		NO _x (MSS)	157.0	
		CO	85.5	343.8
		CO (MSS)	322.0	
		SO ₂	7.9	19.5
		PM ₁₀	12.3	53.9
		VOC	5.2	21.8
		SO ₃	0.3	0.73
CG2	GE Frame 7 Turbine (75 MW) 265- MMBtu/hr Duct Burner (5)	NO _x	89.8	367.0
		NO _x (MSS)	157.0	
		CO	85.5	343.8
		CO (MSS)	322.0	
		SO ₂	7.9	19.5
		PM ₁₀	12.3	53.9
		VOC	5.2	21.8
		SO ₃	0.3	0.73
FECG	Fugitives (6)	VOC	0.33	1.45
Case II: Turbine Only - Duct Burner Unfired				
CG1	GE Frame 7 Turbine (75 MW) 265 MMBtu/hr Duct Burner (5)	NO _x	58.0	54.2
		NO _x (MSS)	157.0	

Emission Sources - Maximum Allowable Emission Rates

		CO	59.0	227.8
		CO (MSS)	322.0	
		SO ₂	0.7	2.8
		PM ₁₀	7.0	30.7
		VOC	2.0	7.9
		SO ₃	0.03	0.1
CG2	GE Frame 7 Turbine (75 MW) 265 MMBtu/hr Duct Burner (5)	NO _x	58.0	227.8
		NO _x (MSS)	157.0	
		CO	59.0	227.8
		CO (MSS)	322.0	
		SO ₂	0.7	2.8
		PM ₁₀	7.0	30.7
		VOC	2.0	7.9
		SO ₃	0.03	0.1
Emissions Related to the CCU Boiler				
H600	CCU CO Boiler	NO _x	56.88	124.56
		CO	346.32	1381.92
		SO ₂	593.48	216.62
		PM	66.00	289.08
		VOC	3.20	14.02
		NH ₃	5.25	23.02
FUGCCU	CCU Fugitives (6)	VOC	5.35	23.37
		Benzene	0.02	0.06
		NH ₃	0.01	0.01
		H ₂ S	0.10	0.42
FUGCCUSCR	FCCU SCR Fugitives (6)	NH ₃	0.06	0.25
MSSCOGEN	MSS Cogen Emissions	VOC	1.27	0.02
		CO	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

		NO _x	<0.01	<0.01
		PM ₁₀	0.15	0.05
		PM _{2.5}	0.14	0.05
		NH ₃	17.76	0.02
Standard Permit (SP) sources incorporated by reference. Sources remain authorized by the SP(s) as listed below:				
Standard Permit Number 81971				
CG1	GE Frame 7 Turbine (75 MW) 265-MMBtu/hr Duct Burner (5)	NO _x	----	54.2
		NH ₃	20.66	90.50
COGENFUGITIVES	Fugitives	NH ₃	0.09	0.38
Standard Permit Number 77952				
CG2	GE Frame 7 Turbine (75 MW) 265-MMBtu/hr Duct Burner (5)	NH ₃	0.06	0.30

- (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
- NH₃
 - ammonia
- NO_x
 - total oxides of nitrogen
- SO₂
 - sulfur dioxide
- SO₃
 - sulfur trioxide
- PM
 - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
- PM₁₀
 - total particulate matter equal to or less than 10 microns in diameter
- PM_{2.5}
 - total particulate matter equal to or less than 2.5 microns in diameter
- CO
 - carbon monoxide
- H₂S
 - hydrogen sulfide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Planned maintenance, startup and shutdown (MSS) for all pollutants are authorized even if not specifically identified as MSS. During any clock hour that includes one or more minutes of planned MSS that pollutant's maximum hourly emission rate shall apply during that clock hour.
- (6) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

Date: January 16, 2020