

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 22038 and PSD-TX-815

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	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (FIN) (2)	Name (3)	lb/hr	TPY
(4)				
CASE I: TURBINE WITH DUCT BURNER FIRED				
CG1	GE Frame 7	NO _x	89.8	367.0
	Turbine (75 MW)	CO	85.5	343.8
	265-MMBTU/HR	SO ₂	7.9	19.5
	Ductburner	PM ₁₀	12.3	53.9
		VOC	5.2	21.8
		SO ₃	.3	.73
CG2	GE Frame 7	NO _x	89.8	367.0
	Turbine (75 MW)	CO	85.5	343.8
	265-MMBTU/HR	SO ₂	7.9	19.5
	Ductburner	PM ₁₀	12.3	53.9
		VOC	5.2	21.8
		SO ₃	.3	.73
FECG	Fugitives (4)	VOC	.33	1.45
CASE II: TURBINE ONLY - DUCT BURNER UNFIRED				
CG1	GE Frame 7	NO _x	58.0	227.8
	TURBINE (75 MW)	CO	59.0	227.8
	265-MMBTU/HR	SO ₂	.7	2.8
	Ductburner	PM ₁₀	7.0	30.7
		VOC	2.0	7.9
		SO ₃	.03	.10
CG2	GE FRAME 7	NO _x	58.0	227.8
	Turbine (75 MW)	CO	59.0	227.8
	265 MMBTU/HR	SO ₂	.7	2.8
	Ductburner	PM ₁₀	7.0	30.7

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VOC	2.0	7.9
SO ₃	.03	.10

- (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) PM₁₀ - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1.
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
CO - carbon monoxide
SO₃ - sulfur trioxide
 - (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
 - (5) Maximum hourly emission based on 20°F ambient temperature.
 - (6) Annual emissions based on 70°F ambient temperature with duct burners in operation.
- * The SO₂ lb/hr emission rates (ERs) are based on 100 percent conversion of .25 grain of hydrogen sulfide (H₂S) per 100 dscf in the refinery fuel gas to SO₂. The SO₂ tpy ERs are based on 100 percent conversion of 10 grains of H₂S per 100 dscf in the refinery fuel gas to SO₂.

** 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 or Hrs/year 8,760

Dated October 5, 2004