

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 20459/PSD-TX-789M1

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)	<u>Emission Rates *</u>	
			lb/hr	

TPY

Case I: Turbine Only Firing With Unfired Heat Recovery Unit

20 (CHRU-T1)	Solar T-4500 Gas Turbine	CO	19.7	31
		NO _x	12.0	32
		SO ₂	0.08	0.33
		PM ₁₀	0.25	1.1
		VOC	0.10	0.44
21 (CHRU-T2)	Solar T-4500 Gas Turbine	CO	19.7	31
		NO _x	12.0	32
		SO ₂	0.08	0.33
		PM ₁₀	0.25	1.1
		VOC	0.10	0.44
22 (CHRU-T3)	Solar T-4500 Gas Turbine	CO	19.7	31
		NO _x	12.0	32
		SO ₂	0.08	0.33
		PM ₁₀	0.25	1.1
		VOC	0.10	0.44
20, 21, 22	Combined Gas Turbine Emissions	CO		93.0
		NO _x		96.0
		SO ₂		1.0
		PM ₁₀		3.3
		VOC		1.32

Case II: Turbine and Duct Burner Firing With Unfired Heat Recovery Unit

20 (CHRU-T1)	Solar T-4500 Gas Turbine	CO	20.07	32.62
		NO _x	12.66	34.88
		SO ₂	0.09	0.40
		PM ₁₀	.40	1.76

		VOC	.16	.70
21 (CHRU-T1)	Solar T-4500 Gas Turbine	CO	20.07	32.62
		NO _x	12.66	34.88
		SO ₂	0.09	0.40
		PM ₁₀	.40	1.76
		VOC	.16	.70

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
TPY			lb/hr	
22 (CHRU-T1)	Solar T-4500 Gas Turbine	CO	20.07	32.62
		NO _x	12.66	34.88
		SO ₂	0.09	0.40
		PM ₁₀	.40	1.76
		VOC	.16	.70
20, 21, 22	Combined Gas Turbine and Duct Burner Emissions	CO		97.9
		NO _x		104.6
		SO ₂		1.20
		PM ₁₀		5.28
		VOC		2.10
F18 (F-COGEN)	Fugitive (4)	VOC	0.04	0.17

(1) Emission point identification - 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 General Rule 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM₁₀ - particulate matter less than 10 microns in aerodynamic diameter

CO - carbon monoxide

(4) Turbine hourly emissions based on minimum ambient temperature.

(5) Turbine annual emissions based on full load at 60°F (approximate average annual ambient temperature).

* 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