

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

C-20246

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	<u>Emission Rates*</u>	
Point No. (1)	Name (2)	Name (3)	#/hr	TPY
B-10	CO Boiler	NOx	202.0	639.0
		SO ₂	290.0	1270.0
		CO	142.0	198.0
		VOC	10.1	44.2
		PM ₁₀	34.8	152.0
		(Catalyst)		
		H ₂ SO ₄	36.4	159.0
		(NH ₄) ₂ SO ₄	15.2	66.6
		PM ₁₀ (total)	86.4	378.0
FH-2	FCC Charge Heater	NOx	4.2	18.4
		SO ₂	1.8	7.9
		CO	3.6	15.8
		VOC	0.2	0.8
		PM ₁₀	0.3	1.5
Flare-W	West Flare (5)	NOx	3.5	15.3
		SO ₂	1.5	6.6
		CO	19.8	86.7
		H ₂ SO ₄	<0.1	0.3
		PM ₁₀ (total)	<0.1	0.3
		H ₂ S	<0.1	0.4
T1	Tank 1	VOC	2.5	4.1
T206	Tank 206	VOC	5.6	2.9
T204	Tank 204	VOC	9.4	1.5
T2	Tank 2	VOC	9.5	2.4

T101	Tank 101	VOC	9.4	0.9
T102	Tank 102	VOC	9.4	1.0
T103	Tank 103	VOC	9.4	1.1

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>#/hr</u>	<u>TPY</u>	
T111	Tank 111		VOC	9.4	1.1
T112	Tank 112		VOC	9.4	1.2
T113	Tank 113		VOC	9.4	1.0
T826	Tank 826		VOC	0.7	2.2
T207	Tank 207		VOC	11.6	2.6
T307	Tank 307		VOC	7.2	3.9
T308	Tank 308		VOC	14.2	3.1
T820	Tank 820		VOC	0.2	0.3
T202	Tank 202		VOC	0.1	0.1
T203	Tank 203		VOC	0.2	0.1
T808	Tank 808		VOC	3.6	1.2
T810	Tank 810		VOC	3.3	1.4
T811	Tank 811		VOC	3.2	1.5
T812	Tank 812		VOC	3.3	1.3
T818	Tank 818		VOC	2.9	1.9
F-PFCC	Fugitive (4)		VOC	13.6	59.7
F-POWS-1	Oil/Water Separator (5)		VOC	0.8	3.5
FCC-V1	Fresh Catalyst Cyclone		PM ₁₀	46.0	2.2
FCC-V2	Spent Catalyst Cyclone		PM ₁₀	50.0	0.9
F-PFCC	Fugitive (4)		PM ₁₀	1.6	0.1

- (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 General Rule 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
CO - carbon monoxide
PM₁₀ - particulate matter less than 10 microns
H₂SO₄ - sulfuric acid
H₂S - hydrogen sulfide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emission estimates represent FCC facilities' contributions only and do not represent total source emissions.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
- Hrs/day____Days/week____Weeks/year____or Hrs/year 8760