

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 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)	lb/hr	TPY **
HTBLR010	CO Boiler	CO	141.60	197.33
		NO _x	201.86	639.49
		SO ₂	290.45	1272.18
		PM ₁₀ (Total) (7)	34.80	152.43
		VOC	10.11	44.30
HTFCC002	FCC Charge Heater	CO	4.94	21.64
		NO _x	5.88	25.76
		PM ₁₀	0.45	1.96
		SO ₂	1.92	8.41
		VOC	0.32	1.42
TKTKF826	Tank 826	VOC	2.89	3.95
TKTKF204	Tank 204	VOC	0.07	0.02
TKTKF001	Tank 1	VOC	9.10	
TKTKF101	Tank 101	VOC	9.10	
TKTKF102	Tank 102	VOC	9.10	
TKTKF103	Tank 103	VOC	9.10	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
TKTKF111	Tank 111	VOC	9.10	
TKTKF112	Tank 112	VOC	9.10	
TKTKF113	Tank 113	VOC	9.10	
TKTKF203	Tank 203	VOC	9.09	
TKTKF206	Tank 206	VOC	9.10	
	Tanks 1, 101, 102, 103, 111, 112, 113, 203, and 206	VOC		6.30
TKTKF808	Tank 808	VOC	6.62	
TKTKF810	Tank 810	VOC	6.39	
TKTKF811	Tank 811	VOC	5.91	
TKTKF812	Tank 812	VOC	6.45	
TKTKF818	Tank 818	VOC	6.03	
	Tanks 808, 810, 811, 812, and 818	VOC		24.31
TKTKF307	Tank 307	VOC	12.10	
TKTKF308	Tank 308	VOC	12.10	
TKTKF330	Tank 330	VOC	12.13	
TKTKF820	Tank 820	VOC	3.07	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
	Tanks 330, 307, 308, and 820	VOC		7.27
VTFCC001	Fresh Catalyst Cyclone	PM ₁₀	46.0	2.20
VTFCC002	Spent Catalyst Cyclone	PM ₁₀	50.0	0.92
VTFCC003	Seal Pot - Cold Start-Up Only (38 hours per year)	PM ₁₀	214.00	2.57
FUFCC001	Process Fugitives (4)	VOC (5)	11.77	51.56
		VOC (6)	7.31	32.00
FUFCC002	Process Fugitives (4)	PM ₁₀	1.60	0.04

- (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 - carbon monoxide
 NO_x - nitrogen oxides
 SO₂ - sulfur dioxide
 PM₁₀ - particulate matter equal to or less than 10 microns
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable rate.
- (5) Pre emission control value for no annual instrument connector monitoring.
- (6) Post emission control value for annual instrument connector monitoring.
- (7) PM₁₀ (Total) includes both filterable and condensable particulates. The condensable portion of the particulate emissions is estimated to be 17.40 pounds per hour (lb/hr), 76.00 tons per year (tpy) of H₂SO₄; and 9.40 lb/hr, 41.04 tpy of (NH₄)₂ SO₄.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

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Hrs/day 24 Days/week 7 Weeks/year 52

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated: November 9, 2010