EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 20800

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 F	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
HF-01	HF Process Vent (5)	SO ₂ HF PM ₁₀	6.84 0.17 0.01	29.9 0.75 0.02	
HF-04F	HF Process Fugitives (4)	HF HFC HCFC	0.08 2.3 2.9	0.35 10.1 12.7	
HF-05	Reactor Heater Vent	NO_x CO VOC PM_{10} SO_2	0.58 0.45 0.04 0.05 0.01	2.54 1.98 0.18 0.21 0.02	
HF-07F	Spar Handling Fugitives	PM PM ₁₀	0.01 0.01	0.01 0.01	
HF-08	North Silo Vent	PM PM ₁₀	0.60 0.16	2.60 0.70	
HF-09	South Silo Vent	PM PM ₁₀	0.60 0.16	2.60 0.70	
HF-10	Feed Bin Vent	PM PM ₁₀	0.15 0.04	0.66 0.18	
HF-12	Spar Dryer Vent	NO_x CO VOC PM_{10} SO_2	5.40 2.10 0.17 2.09 0.02	23.65 9.20 0.72 9.16 0.08	

AIR CONTAMINANTS DATA

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Emission	Source	Air Contaminant	Emission	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
HF-14	Emergency Generator	NO_x CO VOC PM_{10} SO_2	1.59 2.46 0.02 0.01 <0.01	0.04 0.06 <0.01 0.07 <0.01	
HFMSS	Equipment opening for Maintenance	HF H₂SO₄	2.78 <0.01	0.13 <0.01	
HFRXMSS	HF Reactor Opening for Maintenance	HF	0.02	<0.01	
HFSPHMSS	HF Sphere Opening for Maintenance	HF	0.23	<0.01	

- (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) PM particulate matter, suspended in the atmosphere, including PM₁₀
 - PM₁₀ particulate matter 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.
 - NO_x total oxides of nitrogen
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code Chapter 101.
 - SO_2 sulfur dioxide HF - hydrogen fluoride
 - HFC hydrofluorocarbons
 - HCFC hydrochlorofluorocarbons
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Planned startup, shutdown and maintenance clearing of the vessels listed in attachment A and their ancillary piping and equipment are part of the emission limit for this source.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

	Hrs/day	Days/week	_ Weeks/year	or Hrs/year _	8,760		
**	** Compliance with annual emission limits is based on a rolling 12-month period.						
					Dated	July 28, 201	1