

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, sources, and related activities. 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)	Emission Rates	
			lbs/hour	TPY (4)
HF-01	HF Scrubber Process Vent (6)	SO ₂	6.84	29.90
		HF	0.17	0.75
		PM	1.07	4.69
		PM ₁₀	0.08	0.35
		PM _{2.5}	0.08	0.35
HF-04F	HF Process Fugitives (5)	HF	0.08	0.35
		HFC	2.3	10.1
		HCFC	2.9	12.7
HF-05	Reactor Heater Vent	NO _x	0.58	2.54
		CO	0.45	1.98
		VOC	0.04	0.18
		PM	0.05	0.21
		PM ₁₀	0.05	0.21
		PM _{2.5}	0.05	0.21
		SO ₂	0.01	0.02
HF-07F	Spar Handling Fugitives	PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
HF-08	North Silo Vent	PM	0.48	2.11
		PM ₁₀	0.13	0.55
		PM _{2.5}	0.02	0.11

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HF-09	South Silo Vent	PM	0.48	2.11
		PM ₁₀	0.13	0.55
		PM _{2.5}	0.02	0.11
HF-10	Feed Bin Vent	PM	0.15	0.66
		PM ₁₀	0.04	0.17
		PM _{2.5}	<0.01	0.03
HF-12	Spar Dryer Vent	NO _x	5.40	23.65
		CO	0.15	0.65
		VOC	0.17	0.72
		PM	2.09	9.16
		PM ₁₀	0.55	2.40
		PM _{2.5}	0.11	0.46
		SO ₂	0.02	0.08
HF-14	Emergency Generator	NO _x	1.59	0.04
		CO	2.46	0.06
		VOC	0.02	0.01
		PM	0.01	<0.01
		PM ₁₀	0.01	<0.01
		PM _{2.5}	0.01	<0.01
		SO ₂	0.01	0.01
HFMSS	Equipment opening for Maintenance	HF	2.78	0.13
		H ₂ SO ₄	0.01	0.01
HFRXMSS	HF Reactor Opening for Maintenance	HF	0.02	0.01
HFSPHMSS	HF Sphere Opening for Maintenance	HF	0.23	0.01

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HF-25	Lime Tank	HF	<0.01	<0.01
		SO ₂	<0.01	<0.01
HF-30	Weigh Bin Dust Collector	PM	0.01	0.02
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - H₂SO₄ - sulfuric acid
 - HF - hydrogen fluoride
 - HFC - hydrofluorocarbons
 - HCFC - hydrochlorofluorocarbons
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) 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.

Date: April 16, 2018