

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 21995

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)	Emission Rates *	
			lb/hr	TPY **
VSP-1	F-1421 Flash Dryer (5) Bag Filter (Integrated mode)	PM ₁₀	1.53	6.07
		NO _x	1.68	6.94
		CO	2.09	8.62
		VOC	0.14	0.56
		SO ₂	0.02	0.06
		NH ₃	0.03	0.11
	F-1421 Flash Dryer (6) Bag Filter (Independent mode)	PM ₁₀	1.53	6.07
		NO _x	1.06	4.36
		CO	1.31	5.41
		VOC	0.09	0.35
		SO ₂	0.01	0.04
		NH ₃	0.03	0.11
VSP-2	F-1521 Flash Dryer (5) Bag Filter (Integrated Mode)	PM ₁₀	1.53	6.07
		NO _x	1.68	6.94
		CO	2.09	8.62
		VOC	0.14	0.56
		SO ₂	0.02	0.06
		NH ₃	0.03	0.11
	F-1521 Flash Dryer (6) Bag Filter (Independent mode)	PM ₁₀	1.53	6.07
		NO _x	1.06	4.36
		CO	1.31	5.41
		VOC	0.09	0.35
		SO ₂	0.01	0.04
		NH ₃	0.03	0.11
VSP-3	Vacuum Vent	NH ₃	0.50	2.05
VSP-4	C-1822 Ammonia Stripper	NH ₃	0.02	0.07

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Emission Source		Air Contaminant		
Emission Rates *				
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY **
VSP-7	Vent Scrubber HCl Tank Scrubber (4)	HCl	0.05	0.03
VSP-8	NH3 Tank Vent Scrubber (4)	NH ₃	0.01	0.01
VSP-9	Steam Boiler (4)	PM ₁₀	0.94	2.67
		NO _x	7.57	21.64
		CO	10.34	29.56
		VOC	0.68	1.94
		SO ₂	0.07	0.21
VSP-10	Tank T-1423	NH ₃	0.01	0.01
VSP-11	Tank T-1523	NH ₃	0.01	0.01
VSP-12	F-1422 Calciner (5)(6) (Independent mode)	PM ₁₀	0.10	0.41
		NO _x	0.89	3.68
		CO	1.11	4.56
		VOC	0.07	0.30
		SO ₂	0.01	0.03
VSP-13	F-1522 Calciner (5)(6) (Independent mode)	PM ₁₀	0.10	0.41
		NO _x	0.89	3.68
		CO	1.11	4.56
		VOC	0.07	0.30
		SO ₂	0.01	0.03
VSP-14	H ₂ SO ₄ Tank T-1151 (4)	H ₂ SO ₄	0.01	0.01
		SO ₃	0.01	
VSP-15	Tank 1965 Bag Filter	PM ₁₀	0.01	0.01
VSP-FUG	Fugitives (7)	NH ₃	0.26	1.16

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- (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_{10} - 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.
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x - total oxides of nitrogen
 - SO_2 - sulfur dioxide
 - CO - carbon monoxide
 - NH_3 - ammonia
 - HCl - hydrochloric acid
 - SO_3 - sulfur trioxide
 - H_2SO_4 - sulfuric acid
- (4) Emission rates for the HCl Tank Scrubber (EPN VSP-7), NH_3 Tank Vent Scrubber (VSP-8), Steam Boiler (VSP-9), and H_2SO_4 Tank T-1151 (VSP-14) are based on and the facilities are limited by a maximum operating schedule of 8,760 hrs/year.
- (5) During integrated operating mode, emissions from the calciners are routed to the flash dryers and flow through EPNs VSP-1 and VSP-2. There are no emissions from EPNs VSP-12 and VSP-13 during integrated mode.
- (6) Annual NO_x limitations from Special Condition No. 3 are based on VSP-1, VSP-2, VSP-12, and VSP-13 operating in independent mode.
- (7) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* 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 8,250

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

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Dated December 19, 2003

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