

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2487

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>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
<u>TPY</u>				
HPC-2	HNO ₃ Tank	HNO ₃	0.87	0.04
HPC-12A	Spray Dryer (E)	NO _x	2.30	9.68
		PM ₁₀	3.09	13.00
		CO	0.82	3.44
		VOC	0.14	0.57
		SO ₂	0.01	0.06
HPC-12B	NO _x Scrubber (E)	NO _x	15.20	44.60
		PM ₁₀	0.52	2.18
		NH ₃	0.74	3.11
HPC-12C	SCR Stack (E)	NO _x	11.21	47.08
		PM ₁₀	0.58	2.43
		SO ₂	<0.01	0.01
		NH ₃	0.95	4.00
HCK-8	HCK-8 Stack	NO _x	0.35	1.42
		PM ₁₀	0.60	2.43
		CO	0.07	0.28
		VOC	0.02	0.07
		SO ₂	<0.01	<0.01
HPC-14	Solution Tank	NH ₃	0.02	<0.01
HPC-15	CO ₂ (NO ₃) Tank	HNO ₃	0.04	<0.01
HPC-16	NI (NO ₃) ₂ Tank	HNO ₃	0.04	<0.01
HPC-17	HEPA Filter for Molox	PM ₁₀	<0.01	<0.01

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Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
	Bin (C)			
HPC-18	Dust Conveyor Bag Filter	PM ₁₀	0.25	1.04
HPC-23	Belt Dryer Stack (A)	NO _x	1.96	8.16
		PM ₁₀	0.10	0.42
		CO	0.70	2.94
		VOC	0.12	0.50
		SO ₂	0.01	0.05
HPC-24	Calciner 1A Bypass Stack (B) 4.08	NO _x		0.97
		PM ₁₀	0.05	0.21
		CO	0.35	1.47
		VOC	0.06	0.25
		SO ₂	0.01	0.03
HPC-24A	Calciner 1B Bypass Stack (B) 4.08	NO _x		0.97
		PM ₁₀	0.05	0.21
		CO	0.35	1.47
		VOC	0.06	0.25
		SO ₂	0.01	0.03
HPC-24B	Calciner 2	NO _x	0.97	4.08
		PM ₁₀	0.05	0.21
		CO	0.35	1.47
		VOC	0.06	0.25
		SO ₂	<0.01	0.03
HPC-26	Dryer Bypass (A)	NO _x	0.83	3.45
		PM ₁₀	0.04	0.18
		CO	0.30	1.24
		VOC	0.05	0.21
		SO ₂	<0.01	0.02
HPC-29	Boiler	NO _x	2.20	9.64

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		PM ₁₀	0.10	0.43
		CO	0.68	2.99
		VOC	0.11	0.50
		SO ₂	0.01	0.05
HPC-30	Mix Dose Tank 2	HNO ₃	<0.01	<0.01
HPC-31	Base Storage Hopper Bagfilter	PM ₁₀	0.03	0.14
HPC-32	Base Bin A Bagfilter	PM ₁₀	<0.01	0.02
HPC-33	Base Bin B Bagfilter	PM ₁₀	<0.01	0.02
HPC-34	Base Bin C Bagfilter	PM ₁₀	<0.01	0.02
HPC-35	Dust Bin A Bagfilter	PM ₁₀	<0.01	0.02
HPC-36	Dust Bin B Bagfilter	PM ₁₀	<0.01	0.02
HPC-37	Scale Hopper Bagfilter	PM ₁₀	<0.01	0.02
HPC-38	Extruder I Bagfilter	PM ₁₀	<0.01	0.02
HPC-39	Extruder II Bagfilter	PM ₁₀	<0.01	0.02
HPC-40	Extruder III Bagfilter	PM ₁₀	<0.01	0.02
HPC-42	ADM Storage Tank	NH ₃	0.15	<0.01
HPC-43	Ribbon Mixer Bagfilter	PM ₁₀	<0.01	0.02
HPC-46	CO (NO ₃) ₂	HNO ₃	0.04	<0.01

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Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
HPC-47	HEPA Filter for Solution Reactor (D)	PM ₁₀	<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) PM₁₀ - particulate matter less than 10 microns
 VOC - volatile organic compounds as defined in General Rule 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 CO - carbon monoxide
 NH₃ - ammonia
 HNO₃ - nitric acid

* Emission rates are based on and the facilities are limited by the maximum operating schedules represented in the permit renewal application of December 1992.

(A) During normal operations, the emissions from Calciners 1A and 1B are vented through HPC-23 and/or HPC-26.

(B) During emergency, low-fired or unfired operations and/or repairs the emissions from Calciners 1A and 1B are vented through HPC-24 and HPC-24A.

(C) The hourly and annual emission values for the molox bin assume to contain a maximum of 67 percent molybdenum.

(D) The hourly and annual emission values for the solution reactor assume to contain a maximum of 67 percent molybdenum, 50 percent nickel, and 50 percent cobalt.

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- (E) Emissions of the main stack HPC 12 are a combination of emissions from the NO_x Scrubber (HPC-12B) and the Spray Dryer (HPC-12A). HPC-12B will not contribute to HPC-12 vent when the SCR Stack (HPC-12C) is in use.

Dated_____