Emission Sources - Maximum Allowable Emission Rates

Permit Number 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, 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)
HPC-2	HNO_3 Tank Scrubber	HNO_3	0.01	0.01
HPC-3	BOC Silo Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-12A	Spray Dryer (8)	NO_x	2.20	9.24
		PM	1.07	4.49
		PM_{10}	1.07	4.49
		$PM_{2.5}$	1.07	4.49
		CO	1.64	6.88
		VOC	0.11	0.45
		SO_2	0.01	0.05
HPC-12B	NO_x Scrubber (8)	NO_x	15.20	44.60
		PM	0.52	2.18
		PM_{10}	0.52	2.18
		$PM_{2.5}$	0.52	2.18
		VOC	0.82	1.72
		NH_3	0.74	3.13
HPC-16	Nickel Nitrate Tank	HNO_3	0.01	0.01
HPC-17	HEPA Filter for Molox Bin (7)	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01

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HPC-18	Dust Conveyor Bag Filter	PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
HPC-23	Belt Dryer Stack (6)	NO_x	2.24	8.16
		PM	0.02	0.07
		PM_{10}	0.02	0.07
		$PM_{2.5}$	0.02	0.07
		CO	2.37	7.04
		VOC	0.16	0.46
		SO_2	0.02	0.05
HPC-24	Calciner 1A Bypass Stack (6)	NO_x	0.97	4.08
		PM	0.08	0.32
		PM_{10}	0.08	0.32
		$PM_{2.5}$	0.08	0.32
		CO	0.84	3.52
		VOC	0.05	0.23
		SO_2	0.01	0.03
HPC-24A	Calciner 1B Bypass Stack (6)	NO_x	0.97	4.08
		PM	0.08	0.32
		PM_{10}	0.08	0.32
		$PM_{2.5}$	0.08	0.32
		CO	0.84	3.52
		VOC	0.05	0.23
		SO_2	0.01	0.03
HPC-24B	Calciner 2	NO_x	0.97	4.08
		PM	0.08	0.32
		PM_{10}	0.08	0.32

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		$PM_{2.5}$	0.08	0.32
		CO	0.84	3.52
		VOC	0.05	0.23
		SO_2	0.01	0.03
HPC-30	Mix Dose Tank 2	HNO_3	<0.01	<0.01
HPC-31	Base Storage Hopper Bagfilter	PM	0.07	0.27
		PM_{10}	0.07	0.27
		$PM_{2.5}$	0.07	0.27
HPC-32	Base Bin A Bagfilter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-33	Base Bin B Bagfilter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-34	Base Bin C Bagfilter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-35	Dust Bin A Bagfilter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-36	Dust Bin B Bagfilter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-44	Solution Reactor	NH_3	0.15	0.31
HPC-46	CO $(NO_3)_2$ Tank	HNO_3	0.01	0.01
HPC-48	Final Product Loadout Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-48A	Final Product Loadout	PM	0.01	0.01

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		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-52	Extruder Feed Hopper	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-53	Manual Feed Hopper	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-54	3rd Impreg. Dryer Bag Filter	NO_x	0.31	1.34
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
		CO	0.72	3.14
		VOC	0.05	0.21
		SO_2	0.01	0.02
HPC-55	3rd Impreg. Area Vent Bag Filter	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-56	Dilute Nitric Acid Tank	HNO_3	0.01	0.01
HPC-60	PE Receiver	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-FUG	Fugitives (5)	NH_3	0.01	0.03
		HNO_3	0.01	0.05
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-4135-155	Manual Feed Hopper Red	PM	0.01	0.01
		PM_{10}	0.01	0.01

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		$PM_{2.5}$	0.01	0.01
HPC-4135-303	Manual Feed Hopper Green	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
HPC-Orange	Manual Feed Hopper Orange	PM	0.01	0.01
		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) NO_x - total oxides of nitrogen
PM - particulate matter
PM_{10} - particulate matter less than 10 microns
$PM_{2.5}$ - particulate matter less than 2.5 microns
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
SO_2 - sulfur dioxide
H_3PO_4 - phosphoric acid
NH_3 - ammonia
HNO_3 - nitric acid
(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) Emissions from Calciners 1A and 1B are vented through one or more of the following emission points depending upon manufacturing process requirements: HPC-24, HPC-24A, HPC-26, and HPC-23. The total emissions from these sources will not exceed the quantities shown for HPC-23.
(7) The hourly and annual emission values for the molox bin assume to contain a maximum of 67 percent molybdenum.
(8) 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).

Date: December 8, 2020