

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 48455

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**
5F	Bauxite Unloading (Marine Terminal) (4)	PM/PM ₁₀	--	157.91
12	Kiln 8 Stack - ESP	PM/PM ₁₀	9.76	38.53
		PM/PM ₁₀ (7)	15.00	
		NO _x	9.64	38.06
		NO _x (7)	25.08	
		CO	22.00	86.86
		SO ₂	0.23	0.89
		VOC	5.00	19.74
		Hg	0.0025	0.01
		HF (7) 0.10		
13	Facility 51 - Alumina Conveyor Baghouse	PM ₁₀	1.63	7.14
14	Facility 51 - Alumina Conveyor Baghouse	PM ₁₀	1.63	7.14
14F	Dock Conveyor (4)	PM/PM ₁₀	--	0.11
15F	Bauxite Stockpile/Reclaim (4)	PM/PM ₁₀	--	3.19
26	No. 10 Boiler	PM/PM ₁₀	2.63	1.90
		NO _x	48.44	34.88
		CO	29.07	20.93
		SO ₂	0.07	0.05
		VOC	1.91	1.38

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			<u>lb/hr</u>	<u>TPY**</u>

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			lb/hr	TPY**
28	No. 11 Boiler	PM/PM ₁₀	3.88	15.32
		NO _x	71.40	281.89
		CO	42.84	169.13
		SO ₂	0.11	0.44
		VOC	2.81	11.10
29	Kiln 9 Stack - ESP	PM/PM ₁₀	9.76	7.03
		NO _x	9.64	6.95
		CO	22.00	15.84
		SO ₂	0.23	0.17
		VOC	5.00	3.60
		Hg	0.0025	0.002
30	South Railroad Track Baghouse	PM ₁₀	1.63	7.14
31	Alumina Ship Loader Conveyor Elevator Baghouse	PM ₁₀	1.29	5.64
32	Kiln 1- Hydrate Dryer - ESP	PM/PM ₁₀	5.00	21.90
		NO _x	1.00	4.38
		CO	0.50	2.19
		SO ₂	0.04	0.14
		VOC	2.20	4.69
		Hg	0.0008	0.003
34	Alumina Ship Loader Conveyor - Tunnel Baghouse	PM ₁₀	1.29	5.64
35	Alumina Ship Loader Conveyor - Tower Baghouse	PM ₁₀	1.20	5.26
53	Hydrate Loading Baghouse	PM ₁₀	0.39	1.67
90F	90 Silo Fugitives (4)	PM/PM ₁₀	0.73	3.17
91F	Alumina Loading (4)	PM/PM ₁₀	--	38.38

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	(Marine Terminal)			
92	90 1-1 Silo Dust Collector	PM ₁₀	0.43	1.88
93	90 2-1 Silo Dust Collector	PM ₁₀	0.43	1.88
94	90 2-2 Silo Dust Collector	PM ₁₀	0.43	1.88
95	90 3-1 Silo Dust Collector	PM ₁₀	0.43	1.88
96	90 3-2 Silo Dust Collector	PM ₁₀	0.43	1.88
97	90 3-3 Silo Dust Collector	PM ₁₀	0.43	1.88
98	90 3-4 Silo Dust Collector	PM ₁₀	0.43	1.88
100A	Lime Silo 1 Vent Baghouse	PM ₁₀	0.13	0.56
100B	Lime Silo 2 Vent Baghouse	PM ₁₀	0.13	0.56
101	No. 1 Lime Slaker Baghouse	PM ₁₀	0.13	0.56
102	No. 2 Lime Slaker Baghouse	PM ₁₀	0.13	0.56
109	Belt Feeding Calciner No. 1 (4)(5)	PM/PM ₁₀	--	--
110	Belt Feeding Calciner No. 2 (4)(5)	PM/PM ₁₀	--	--
111	Scale Conveyor (4)(6)	PM/PM ₁₀	--	--
112	Conveyor Feeding Kiln No. 8 (4)(5)	PM/PM ₁₀	--	--
113	Conveyor Feeding	PM/PM ₁₀	--	--

Kiln No. 9 (4)(5)

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- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
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.
CO - carbon monoxide
Hg - mercury
HF - hydrogen fluoride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) No emissions due to 8 to 10 percent moisture in the material during normal operations.
- (6) No emissions because the material contains 10 to 15 percent free liquids entrained in the matrix.
- (7) These emission limits are for the periods when testing conditions to produce different alumina products. Testing will not extend past September 30, 2003 without re-authorization.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

8,760 Hrs/year

Bauxite unloading limited to 3,828,000 tons per 12-month rolling total.

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

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Dated January 14, 2003