

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 9804

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>				
DCS-SP-1 to DCS-SP-5	Stockpile (4)	PM	0.15	0.66
		PM ₁₀	0.15	0.66
		Cr ⁺³	0.05	0.20
		Cr _{tot}	0.05	0.20
DCS-CT-1 to DCS-CT-7	Cooling Tower	PM	<.01	<.01
		PM ₁₀	<.01	<.01
		Cr ⁺⁶	0.0003	0.001
		Cr _{tot}	0.0003	0.001
DCS-MH-1	Material Handling (4)	PM	0.022	0.0024
		PM ₁₀	<.01	<.01
		Cr ⁺³	0.0007	0.0007
		Cr _{tot}	0.0007	0.0007
14	Hearth Stack (5)	PM		
		PM ₁₀		
		VOC		
		NO _x		
		SO ₂		
		CO		
		Cr ⁺³		
		Cr ⁺⁶		
		Cr _{tot}		
15	Mixer Scrubber Stack	PM	4.53	19.83
		PM ₁₀	4.53	19.83
		Cr ⁺³	0.25	1.10

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission lb/hr	Rates
TPY				
		Cr ⁺⁶	0.015	0.07
		Cr _{tot}	0.27	1.16
16	Raw Materials Baghouse Stack	PM	0.85	3.72
		PM ₁₀	0.85	3.72
		VOC	0.06	0.28
		NO _x	0.79	3.43
		SO ₂	<0.01	0.03
		CO	0.16	0.70
		Cr ⁺³	0.22	0.98
		Cr ⁺⁶	0.005	0.022
		Cr _{tot}	0.23	1.0
17	Electrolytic Stack	PM	1.15	5.01
		PM ₁₀	1.15	5.01
		Cr ⁺³	0.004	0.016
		Cr ⁺⁶	0.015	0.066
		Cr _{tot}	0.019	0.082
		NaOH	0.50	2.20
34	Soda Ash Bin No. 1 Baghouse Stack	PM	0.13	0.57
		PM ₁₀	0.13	0.57
35	Soda Ash Bin No. 2 Baghouse Stack	PM	0.13	0.57
		PM ₁₀	0.13	0.57
36	Kiln Ash Feed Bin Baghouse Stack	PM	0.13	0.57
		PM ₁₀	0.13	0.57
38	Soda Ash Supply Bin Baghouse Stack	PM	0.08	0.35
		PM ₁₀	0.07	0.32
41	Kiln Stack	PM	0.88	3.83

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Emission *	Source	Air Contaminant	Emission Rates	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
<u>TPY</u>				
		PM ₁₀	0.88	3.83
		VOC	0.28	1.23
		NO _x	3.49	15.29
		SO ₂	0.02	0.09
		CO	0.70	3.07
		Cr ⁺³	0.07	0.307
		Cr ⁺⁶	0.03	0.132
		Cr _{tot}	0.10	0.439
42	Leach Scrubber Stack	PM	1.80	7.86
		PM ₁₀	1.80	7.86
		Cr ⁺³	0.61	2.67
		Cr ⁺⁶	0.15	0.66
		Cr _{tot}	0.76	3.33
18	Primary Kiln Stack	PM	5.07	22.19
		PM ₁₀	5.07	22.19
		VOC	0.86	3.77
		NO _x	10.71	46.91
		SO ₂	0.06	0.26
		CO	2.14	9.37
		Cr ⁺⁶	0.1	0.44
		Cr ⁺³	0.5	2.19
		Cr _{tot}	0.6	2.63
D1 to Dx	Storage Tanks (4)	Cr ⁺⁶	0.007	0.005
		Cr _{tot}	0.007	0.005

(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 - 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,

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Emission *	Source	Air Contaminant	Emission Rates
Point No. (1)	Name (2)	Name (3)	lb/hr
TPY			

it shall be assumed that no PM greater than 10 microns is emitted.

- VOC - volatile organic compound as defined in General Rule 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- CO - carbon monoxide
- Cr⁺³ - trivalent chromium
- Cr⁺⁶ - hexavalent chromium
- Cr_{tot} - total chromium (Cr⁺³ + Cr⁺⁶)
- NaOH - sodium hydroxide

(4) Fugitive emissions are an estimate only

(5) The combined emissions from the Hearth Stack, Emission Point No. (EPN) 14 and the Primary Kiln Stack,

EPN 18 shall not exceed the emission quantities authorized for EPN 18.

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* 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 _____
8,760

Emission limits are based on the total maximum raw material and product throughput represented on Table 2 of the confidential attachment of Section III dated January 20, 1998.

Dated _____