

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2537

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		Air Contaminant		<u>Emission Rates *</u>	
	Name (2)	Name (3)	lb/hr	TPY		
BH-4	Baghouse No. 4**			ZnO	0.344	0.716
				Zn	0.277	0.576
				PbO	0.040	0.083
				Pb	0.037	0.077
				CuO	0.008	0.016
				Cu	0.006	0.013
				CdO	<0.00048	<0.00152
				Cd	<0.00043	<0.00133
				CrO	<0.00488	<0.01521
				Cr	<0.00373	<0.01163
				BaO	<0.02437	<0.07605
				Ba	<0.02183	<0.06811
				AsO	<0.00048	<0.00152
				As	<0.00043	<0.00133
				AgO	<0.00048	<0.00152
				Ag	<0.00043	<0.00133
				HgO	<0.00244	<0.00760
				Hg	<0.00226	<0.00704
				SeO	<0.00975	<0.03042
				Se	<0.0811	<0.02529
				PM ₁₀	0.234	0.485
BH-5	Baghouse No. 5			ZnO	0.435	1.901
				Zn	0.345	1.527
				PbO	0.013	0.056
				Pb	0.012	0.052
				CdO	<0.00048	<0.00214
				Cd	<0.00043	<0.00187
				CrO	<0.00488	<0.02136
				Cr	<0.00373	<0.01633
				PM ₁₀	0.192	0.839

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
BH-6	Baghouse No. 6	ZnO	0.001	0.004
		Zn	0.001	0.003
		PbO	<0.001	<0.001
		Pb	<0.001	<0.001
		CdO	<0.00001	<0.00001
		Cd	<0.00001	<0.00001
		CrO	<0.00001	<0.00006
		Cr	<0.00001	<0.00005
		BaO	<0.00007	<0.00031
		Ba	<0.00006	<0.00028
		AsO	<0.00001	<0.00001
		As	<0.00001	<0.00001
		AgO	<0.00001	<0.00001
		Ag	<0.00001	<0.00001
		PM ₁₀	<0.001	<0.001
BH-8	Baghouse No. 8	ZnO	0.002	0.008
		Zn	0.0014	0.006
		PbO	<0.001	<0.001
		Pb	<0.001	<0.001
		CdO	<0.00001	<0.00001
		Cd	<0.00001	<0.00001
		CrO	<0.00002	<0.00012
		Cr	<0.00002	<0.00009
		BaO	<0.00014	<0.00062
		Ba	<0.00013	<0.00055
		AsO	<0.00001	<0.00001
		As	<0.00001	<0.00001
		AgO	<0.00001	<0.00001
		Ag	<0.00001	<0.00001
		PM ₁₀	<0.001	0.004

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
BH-15	Baghouse No. 15	ZnO	0.327	1.426
		Zn	0.262	1.145
		PbO	0.0096	0.041
		Pb	0.0090	0.031
		CdO	<0.00272	<0.01188
		Cd	<0.00238	<0.01040
		CrO	<0.02721	<0.11885
		Cr	<0.02081	<0.09088
		PM ₁₀	0.144	0.625
	Raw Material Handling (4)	TSP	0.020	0.060
		PM ₁₀	0.010	0.030
	Retort Furnaces (4)(5)	CO	0.600	2.600
		NO _x	2.380	10.410
		SO ₂	0.010	0.450
		VOC	0.010	0.430
		PM ₁₀	0.110	0.460
	Finished Product Handling Building (4) (6)	ZnO	0.163	0.384
		Zn	0.130	0.310
		PbO	<0.001	<0.001
		Pb	<0.001	<0.001
		CuO	<0.00002	<0.00002
		Cu	<0.00001	<0.00001
		Fe	<0.42371	<0.00001
		Al	<0.42371	<0.00001
		CdO	<0.00084	<0.00370
		Cd	<0.00074	<0.00324
		CrO	<0.00847	<0.03702
		Cr	<0.00648	<0.02831
		BaO	<0.04237	<0.18508
		Ba	<0.03795	<0.16575
		AsO	<0.00084	<0.00370
		As	<0.00077	<0.00305

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SeO	<0.01695	<0.07403
Se	<0.01409	<0.06156
PM ₁₀	0.110	0.0242

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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) PM₁₀ - particulate matter less than 10 microns in diameter but not

including the following elements and/or compounds:

ZnO	- zinc oxide, including zinc
Zn	- zinc
CuO	- copper oxide, including copper
Cu	- copper
PbO	- lead oxide, including lead
Pb	- lead
Fe	- iron
Al	- aluminum
CdO	- cadmium oxide, including cadmium
Cd	- cadmium
CrO	- chromium oxide, including chromium
Cr	- chromium
BaO	- barium oxide, including barium
Ba	- barium
AsO	- arsenic oxide, including arsenic
As	- arsenic
AgO	- silver oxide, including silver
Ag	- silver
HgO	- mercury oxide, including mercury
Hg	- mercury
SeO	- selenium oxide, including selenium
Se	- selenium
VOC	- volatile organic compounds as defined in General Rule 101.1
NO _x	- total oxides of nitrogen

SO₂ - sulfur dioxide
CO - carbon monoxide
TSP - total suspended particulate

- (4) 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 hourly throughputs and operating schedule:

Rotary Kiln	2.50 tons per hour
Melting Pots (each)	1.25 tons per hour
Retort Furnaces (each)	0.18 tons per hour
Dust Milling No. 1	4.25 tons per hour
Dust Milling No. 2	6.00 tons per hour

Annual emission rates are based on operating 8,760 hours per year.

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

Hrs/day 16 Days/week 5 Weeks/year 52

- (5) VOCs, NO_x, SO₂, and CO are products from the combustion of natural gas.
- (6) Building fugitives include zinc pan dumping and emissions from Baghouses Nos. 20 and 21.

Dated_____

