

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 8097/PSD-TX-138M5

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
01	Meltshop Overhead Canopy Hoods Baghouse "A" Stack (Positive Pressure Baghouse) (6)	PM ₁₀	13.0	51.8
		CO	72.5	289.9
		NO _x	4.3	17.1
		SO ₂	4.3	17.0
		VOC	27.1	108.3
		Pb	0.039	0.16
		Hg	0.0027	0.011
		Cr	0.00097	0.0039
		Cd	0.0015	0.0058
02	Bar Mill Reheat Furnace (7)	PM ₁₀	0.70	3.10
		NO _x	77.00	340.00
		CO	5.60	25.00
		SO ₂	0.08	0.37
		VOC	0.20	0.86
04A	Meltshop Roof Monitor Monovent "A"	PM ₁₀	3.1	12.5
		CO	2.0	8.0
		NO _x	0.12	0.47
		SO ₂	0.12	0.47
		VOC	0.75	3.01
		Pb	0.063	0.25
		Hg	0.000046	0.00018
		Cr	0.0026	0.010
		Cd	0.0020	0.008

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
04B	Meltshop Roof Monitor Monovent "B"	PM ₁₀	3.1	12.5
		CO	2.0	8.0
		NO _x	0.12	0.47
		SO ₂	0.12	0.47
		VOC	0.75	3.01
		Pb	0.063	0.25
		Hg	0.000046	0.00018
		Cr	0.0026	0.010
		Cd	0.0020	0.008
05	Medium Section Mill Reheat Furnace (8)	PM ₁₀	4.30	10.00
		NO _x	65.70	154.00
		CO	10.70	25.00
		SO ₂	15.40	36.00
		VOC	2.10	5.00
06	Meltshop Overhead Canopy Hoods Baghouse "B" Stack (6)	PM ₁₀	21.9	87.4
		CO	124.6	498.3
		NO _x	7.3	29.4
		SO ₂	7.3	29.3
		VOC	46.6	186.2
		Pb	0.067	0.27
		Hg	0.0046	0.018
		Cr	0.0017	0.0067
		Cd	0.0025	0.010
07	Furnaces "A" and "B" 4th Hole Evacuation System Baghouse "C" Stack	PM ₁₀	17.4	69.5
		CO	254.4	1017.4
		NO _x	59.8	239.2
		SO ₂	27.1	108.4
		VOC	21.4	85.5
		Pb	0.022	0.087
		Hg	0.10	0.42
		Cr	0.0021	0.0083

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			<u>lb/hr</u>	<u>TPY</u>
		Cd	0.0013	0.0050
08	Air Cascade Separator Auto Shredder Primary Collection System (9)	PM ₁₀	2.50	2.20
09	Large Section Mill Reheat Furnace (5)	PM ₁₀	0.60	2.60
		NO _x	26.40	115.60
		SO ₂	1.70	4.50
		CO	4.80	21.00
		VOC	0.20	0.70
10A	Meltshop Roof Monitor Monovent "A"	PM ₁₀	0.19	0.77
		CO	0.34	1.36
		NO _x	1.62	6.46
		SO ₂	0.23	0.04
		VOC	0.09	0.34
10B	Meltshop Roof Monitor Monovent "B"	PM ₁₀	0.19	0.77
		CO	0.34	1.36
		NO _x	1.62	6.46
		SO ₂	0.23	0.04
		VOC	0.09	0.34
10C	Meltshop Sidewall Vent	PM ₁₀	0.23	0.91
		CO	0.40	1.61
		NO _x	1.91	7.65
		SO ₂	0.27	0.05
		VOC	0.10	0.40
11A	Outdoor Alloy Handling (4) 0.0073	PM		0.0019
		PM ₁₀	0.00089	0.0035
11B	Indoor Alloy Handling Monovent "A"	PM	0.00019	0.00075
		PM ₁₀	0.000089	0.00035

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			<u>lb/hr</u>	<u>TPY</u>
12	Scrap Steel Handling (4)	PM	0.4	1.7
		PM ₁₀	0.2	0.8
13	Baghouse Dust Railcar Fugitives (4)	PM	0.00047	0.0019
		PM ₁₀	0.00022	0.00089
		Pb	0.000012	0.000049
		Hg	0.000000007	
	0.000000003	Cr	0.000000081	0.0000032
		Cd	0.000000035	0.0000014
14	Alloy Piles (4)	PM	0.079	0.054
		PM ₁₀	0.079	0.054
15A	Pelletizer Silo Baghouse Stack	PM ₁₀	0.0324	0.1296
		Pb	0.00085	0.0034
		Hg	0.0000005	0.000002
		Cr	0.000055	0.00022
		Cd	0.000024	0.000095
15B	Railcar Loading From Pelletizer Silo (4)	PM	0.00047	0.0019
		PM ₁₀	0.00022	0.00089
		Pb	0.000012	0.000049
		Hg	0.000000007	
	0.000000003	Cr	0.000000081	0.0000032
		Cd	0.000000035	0.0000014
16	Shredder Fugitives (4)(9) 0.014	PM		0.0056
		PM ₁₀	0.0024	0.006
17	Residue Transfer at Magnetic Separator (4)(9) 0.012	PM	0.010	0.026
		PM ₁₀		0.0049
18	Vibrating Screen (4)(9)	PM	0.34	0.84
		PM ₁₀	0.034	0.084

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			lb/hr	TPY
19	Residue Transfers at Metals Recovery (4)(9) 0.061	PM	0.052	0.130
		PM ₁₀		0.025
20A	Unprocessed Residue Storage Pile (4)(9)	PM ₁₀	0.084	0.058
20B	Processed Residue Storage Pile (4)(9)	PM ₁₀	0.084	0.058
21	In-Plant Vehicle Traffic (4)	PM	---	34.8
		PM ₁₀	---	12.5

(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, it shall be assumed that no particulate matter greater than 10 microns is emitted.

CO - carbon monoxide

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

VOC - volatile organic compounds as defined in General Rule 101.1

Pb - lead and lead compounds

Hg - mercury and mercury compounds

Cr - chromium and chromium compounds

Cd - cadmium and cadmium compounds

(4) Fugitive emissions are an estimate only.

(5) Emissions are based on a maximum design firing rate of 120 MMBtu/hr of natural gas fuel for a maximum of 8,760 hrs/yr.

(6) Emissions collected in the canopy hood are combined in a mixing

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

chamber before splitting to the two baghouses.

(7) For reference only - emissions authorized in Permit No. 1635.

(8) For reference only - emissions authorized in Permit No. 8099.

(9) For reference only - emissions authorized in Permit No. 3026.

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

24 Hrs/day 7 Days/week 52 Weeks/year or 8,000
Hrs/year