

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	13.4	53.8
		CO	83.4	333.5
		NO _x	4.5	18.0
		SO ₂	4.5	18.0
		VOC	31.2	124.6
		Pb	0.041	0.16
		Hg	0.0028	0.011
		Cr	0.001	0.041
		Cd	0.0015	0.0061
02	Bar Mill Reheat Furnace (7)	PM ₁₀	1.19	5.20
		NO _x	24.95	109.27
		CO	2.20	9.63
		SO ₂	0.07	0.31
		VOC	0.53	2.34
04A	Meltshop Roof Monitor Monovent "A"	PM ₁₀	9.0	35.8
		CO	6.0	23.9
		NO _x	0.32	1.29
		SO ₂	0.32	0.47
		VOC	2.23	8.92
		Pb	0.182	0.73
		Hg	0.00013	0.00053
		Cr	0.0074	0.030
		Cd	0.0058	0.023

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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	9.0	35.8
		CO	6.0	23.9
		NO _x	0.32	1.29
		SO ₂	0.32	1.29
		VOC	2.23	8.92
		Pb	0.182	0.73
		Hg	0.00013	0.00053
		Cr	0.0074	0.030
		Cd	0.0058	0.023
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	22.7	90.7
		CO	143.3	573.4
		NO _x	7.7	31.0
		SO ₂	7.7	30.9
		VOC	53.6	214.3
		Pb	0.070	0.28
		Hg	0.0048	0.019
		Cr	0.0018	0.007
		Cd	0.0026	0.011
07	Furnaces "A" and "B" 4th Hole Evacuation System Baghouse "C" Stack	PM ₁₀	15.7	62.6
		CO	292.7	1170.6
		NO _x	63.1	252.3
		SO ₂	28.6	114.3
		VOC	24.6	98.3
		Pb	0.023	0.091
		Hg	0.11	0.44
		Cr	0.0022	0.0088

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
		Cd	0.0013	0.0053
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	1.70	7.60
		NO _x	72.90	319.20
		SO ₂	5.0	0.90
		CO	13.9	60.80
		VOC	0.50	2.10
10A	Meltshop Roof Monitor Monovent "A" (Natural Gas Combustion) 1.23	PM ₁₀ Front-Half	0.07	0.26
		PM ₁₀ Back-Half	0.11	0.44
		CO		0.31
		NO _x	1.47	5.88
		SO ₂	0.21	0.04
		VOC	0.08	0.31
10B	Meltshop Roof Monitor Monovent "B" (Natural Gas Combustion) 1.23	PM ₁₀ Front-Half	0.07	0.26
		PM ₁₀ Back-Half	0.11	0.44
		CO		0.31
		NO _x	1.47	5.88
		SO ₂	0.231	0.04
		VOC	0.08	0.31
10C	"B" Side Ladle Heaters Meltshop Sidewall Vent	PM ₁₀ Front-Half	0.09	0.34
		PM ₁₀ Back-Half	0.14	0.57
		CO	0.40	1.61
		NO _x	1.91	7.65
		SO ₂	0.27	0.05
		VOC	0.10	0.40
10D	"A" Side Ladle Heaters Meltshop Sidewall Vent	PM ₁₀ Front-Half	0.03	0.11
		PM ₁₀ Back-Half	0.04	0.18
		CO	0.12	0.49

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
11A	Outdoor Alloy Handling (4) 0.0089	NO _x	0.59	2.34
		SO ₂	0.08	0.014
		VOC	0.03	0.12
		PM		0.0023
		PM ₁₀	0.0011	0.0042
11B	Indoor Alloy Handling Monovent "A"	PM	0.00023	0.00089
		PM ₁₀	0.00011	0.00042
12	Scrap Steel Handling (4)	PM	0.48	1.93
		PM ₁₀	0.23	0.91
13	Baghouse Dust Railcar Fugitives (4)	PM	0.00057	0.0023
		PM ₁₀	0.00027	0.0011
		Pb	0.000015	0.000059
		Hg	0.000000009	0.00000004
		Cr	0.00000097	0.0000039
		Cd	0.00000042	0.0000017
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	0.00057	0.0023
		PM ₁₀	0.00027	0.0011
		Pb	0.000015	0.000059
		Hg	0.000000009	0.00000004
		Cr	0.00000097	0.0000039
		Cd	0.00000042	0.0000017
16	Shredder Fugitives (4)(9)	PM	0.0056	0.014
		PM ₁₀	0.0024	0.006

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
17	Residue Transfer at Magnetic Separator (4)(9)	PM PM ₁₀	0.010 0.012	0.026 0.0049
19	Residue Transfers at Metals Recovery (4)(9)	PM PM ₁₀	0.052 0.025	0.130 0.061
20A	Unprocessed Residue Storage Pile (4)(9)	PM ₁₀		0.14
21	Processed Residue Storage Pile (4)(9)	PM ₁₀		0.14
22	Vibrating Screen (4)(9)	PM PM ₁₀	0.15 0.015	0.65 0.065
23	Material Handling (4)(9)	PM PM ₁₀	0.32 0.15	1.41 0.67
24	Fines Storage Pile (4)(9)	PM ₁₀	--	0.14
25	Fine and Coarse Sand Storage (4)(9)	PM ₁₀	--	0.14
26	Light Organic Material Storage (4)(9)	PM ₁₀	--	0.14
30	In-Plant Vehicle Traffic (4)	PM PM ₁₀	--- ---	34.8 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.

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- (3) PM - particulate matter suspended in the atmosphere, including
PM₁₀ - particulate matter equal to or less than 10 microns in diameter.
Where PM is not listed, it shall be assumed that no PM 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
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

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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>