

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 51.8 Hoods Baghouse "A" Stack (Positive Pressure 15.7 Baghouse) (6)		PM ₁₀	13.0
		CO	72.5	289.9
		NO _x		3.9
		SO ₂	3.9	15.6
		VOC	27.1	108.3
		Pb	0.036	0.14
		Hg	0.0024	0.0098
		Cr	0.00089	0.0036
		Cd	0.0013	0.0053
02A	Bar Mill Reheat Furnace (7) (Permit No. 1635)	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	10.5	42.0
		CO	5.2	20.7
		NO _x	0.28	1.12
		SO ₂	0.28	1.12
		VOC	1.94	7.75
		Pb	0.214	0.85
		Hg	0.00015	0.00062
		Cr	0.0087	0.035
		Cd	0.0068	0.027

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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	10.5	42.0
		CO	5.2	20.7
		NO _x	0.28	1.12
		SO ₂	0.28	1.12
		VOC	1.94	7.75
		Pb	0.214	0.85
		Hg	0.00015	0.00062
		Cr	0.0087	0.035
		Cd	0.0068	0.027
05	Medium Section Mill Reheat Furnace (8) (Permit No. 8099)	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 87.4 Hoods Baghouse "B" Stack (6)	PM ₁₀		21.9
		CO	124.6	498.3
		NO _x	6.7	26.9
		SO ₂	6.7	26.9
		VOC	46.6	186.2
		Pb	0.061	0.24
		Hg	0.0042	0.017
		Cr	0.0015	0.0061
		Cd	0.0023	0.0092
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	54.8	219.3
		SO ₂	24.8	99.4
		VOC	21.4	85.5

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			<u>lb/hr</u>	<u>TPY</u>
		Pb	0.020	0.079
		Hg	0.096	0.38
		Cr	0.0019	0.0076
		Cd	0.0011	0.0046
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	1.7	7.6
		NO _x	72.9	319.2
		SO ₂	5.0	0.9
		CO	13.9	60.8
		VOC	0.5	2.1
10A	Meltshop Roof Monitor Monovent "A"	PM ₁₀	0.18	0.70
		CO	0.31	1.23
		NO _x	1.47	5.88
		SO ₂	0.21	0.04
		VOC	0.08	0.31
10B	Meltshop Roof Monitor Monovent "B"	PM ₁₀	0.18	0.70
		CO	0.31	1.23
		NO _x	1.47	5.88
		SO ₂	0.21	0.04
		VOC	0.08	0.31
10C	"B" Side Ladle Heaters 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
10D	"A" Side Ladle Heaters Side Wall Vent	PM ₁₀	0.07	0.29
		CO	0.12	0.49
		NO _x	0.59	2.34
		SO ₂	0.08	0.014
		VOC	0.03	0.12

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			<u>lb/hr</u>	<u>TPY</u>
11A	Outdoor Alloy Handling (4) 0.0089	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) 1.68	PM		0.42
		PM ₁₀	0.20	0.79
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	0.00011
		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) 0.014	PM		0.0056
	(Permit No. 3026)	PM ₁₀	0.0024	0.006

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			<u>lb/hr</u>	<u>TPY</u>
17	Residue Transfer at Magnetic Separator (4)(9) 0.012 (Permit No. 3026)	PM (4)(9)	0.010 PM ₁₀	0.026 0.0049
20A	Unprocessed Residue Storage Pile (4)(9) (Permit No. 3026)	PM ₁₀	--	0.14
21	Residue Storage Pile at Separation Facility (4)(9) (Permit No. 3026)	PM ₁₀ (4)(9)	--	0.14
22	Vibrating Screen (4)(9) (Permit No. 3026)	PM PM ₁₀	0.15 0.015	0.65 0.065
23	Material Handling (4)(9) 1.41 (Permit No. 3026)	PM PM ₁₀	PM 0.15	0.32 0.67
24	Fines Storage Pile(4)(9) (Permit No. 3026)	PM PM ₁₀	PM --	-- 0.14 0.14
25	Fines and Course Sand Storage (4)(9) (Permit No. 3026)	PM PM ₁₀	-- --	0.14 0.14
26	Light Organic Material Storage (4)(9) (Permit No. 3026)	PM PM ₁₀	-- --	0.14 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.

- (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 347 MMBtu/hr of natural gas fuel for a maximum of 8,760 hrs/yr.

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- (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 8,760
Hrs/year

