

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 8097 and PSD-TX-135M5

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	17.90	71.60
		CO	81.90	327.60
		NO _x	6.00	24.00
		SO ₂	5.10	19.60
		VOC	31.20	124.90
		Pb	0.045	0.18
		Hg	0.0031	0.012
		Cr	0.0011	0.0045
		Cd	0.0017	0.0067
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
05	Medium Section Mill Reheat Furnace (7) (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 Hoods Baghouse "B" Stack (6)	PM ₁₀	26.00	104.20
		CO	140.80	563.20
		NO _x	10.30	41.20
		SO ₂	8.70	33.80
		VOC	53.70	214.70
		Pb	0.077	0.31
		Hg	0.0053	0.021
		Cr	0.0019	0.0077
		Cd	0.0029	0.012

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			lb/hr	TPY
07	Furnaces "A" and "B" 4th Hole Evacuation System Baghouse "C" Stack	PM ₁₀	17.40	69.50
		CO	284.30	1137.20
		NO _x	63.10	252.30
		SO ₂	28.60	114.30
		VOC	24.60	98.30
		Pb	0.023	0.091
		Hg	0.11	0.44
		Cr	0.0022	0.0088
		Cd	0.0013	0.0053
08	Air Cascade Separator Auto Shredder Primary Collection System (7) (Permit No. 3026)	PM ₁₀	2.50	2.20
09	Large Section Mill Reheat Furnace (5)	PM ₁₀	0.70	0.90
		NO _x	26.00	37.00
		SO ₂	2.00	1.50
		CO	5.60	7.10
		VOC	0.20	0.30
10C	"B" Side Ladle Heaters Sidewall Vent	PM ₁₀	0.15	0.58
		CO	1.61	6.43
		NO _x	1.91	7.65
		SO ₂	0.27	0.05
		VOC	0.11	0.42
10D	"A" Side Ladle Heaters Side Wall Vent	PM ₁₀	0.04	0.18
		CO	0.49	1.97
		NO _x	0.59	2.34
		SO ₂	0.08	0.01
		VOC	0.03	0.13
11A	Outdoor Alloy Handling (4)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
11B	Indoor Alloy Handling	PM	<0.01	<0.01

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			lb/hr	TPY
	Monovent "A"	PM ₁₀	<0.01	<0.01
12	Scrap Steel Handling (4)	PM	0.48	1.93
		PM ₁₀	0.23	0.91
13	Baghouse Dust Railcar Fugitives (4)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		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	0.08	0.05
		PM ₁₀	0.08	0.05
15A	Pelletizer Silo Baghouse Stack	PM ₁₀	0.03	0.13
		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	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		Pb	0.000015	0.000059
		Hg	0.000000009	0.00000004
		Cr	0.00000097	0.0000039
		Cd	0.00000042	0.0000017
16	Shredder Fugitives (4) and (7) (Permit No. 3026)	PM	0.01	0.01
		PM ₁₀	0.01	0.01
17	Residue Transfer at Magnetic Separator (4) and (7) (Permit No. 3026)	PM	0.01	0.03
		PM ₁₀	<0.01	<0.01
20A	Unprocessed Residue Storage Pile (4) and (7)	PM ₁₀	--	0.14

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			lb/hr	TPY
	(Permit No. 3026)			
21	Residue Storage Pile at Separation Facility (4) and (7) (Permit No. 3026)	PM ₁₀	--	0.14
22	Vibrating Screen (4) and (7) (Permit No. 3026)	PM PM ₁₀	0.15 0.02	0.65 0.07
23	Material Handling (4) and (7) (Permit No. 3026)	PM PM ₁₀	0.32 0.15	1.41 0.67
24	Fines Storage Pile (4) and (7) (Permit No. 3026)	PM PM ₁₀	-- --	0.14 0.14
25	Fines and Course Sand Storage (4) and (7) (Permit No. 3026)	PM PM ₁₀	-- --	0.14 0.14
26	Light Organic Material Storage (4) and (7) (Permit No. 3026)	PM PM ₁₀	-- --	0.14 0.14
30	In-Plant Vehicle Traffic (4)	PM PM ₁₀	-- --	34.80 12.50
S1	Slag Raw Feed (4) and (7) (Permit No. 5983)	PM PM ₁₀	3.25 1.63	1.95 0.98
S3	Grizzly to Stock (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S4	Grizzly to Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	0.03 0.01	0.02 <0.01
S5	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	0.03 0.01	0.02 <0.01

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			lb/hr	TPY
S6	Conveyor To Feeder (4) and (7) (Permit No. 5983)	PM PM ₁₀	0.06 0.03	0.04 0.02
S7	Feeder to Feeder (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S8	Feeder to Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S9	Conveyor To Screen (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S10	Screen (4) and (7) (Permit No. 5983)	PM PM ₁₀	0.07 0.03	0.04 0.02
S11	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S12	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S13	Conveyor To Screen (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S14	Screen (4) and (7) (Permit No. 5983)	PM PM ₁₀	0.03 0.01	0.02 <0.01
S15	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S16	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S17	Conveyor To Conveyor (4) and (7)	PM	0.02	0.01

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			lb/hr	TPY
		PM ₁₀	0.01	<0.01
S18	Conveyor To Bin (4) and (7) (Permit No. 5983)	PM	0.02	0.01
		PM ₁₀	0.01	<0.01
S19	Bin to Truck (4) and (7) (Permit No. 5983)	PM	0.02	0.01
		PM ₁₀	0.01	<0.01
S20	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S21	Conveyor to Stock (4) and (7) (Permit No. 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S22	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S23	Conveyor to Stock (4) and (7) (Permit No. 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S24	Feeder to Feeder (4) and (7) (Permit No. 5983)	PM	0.06	0.04
		PM ₁₀	0.03	0.02
S25	Feeder to Conveyor (4) and (7) (Permit No. 5983)	PM	0.06	0.04
		PM ₁₀	0.03	0.02
S26	Conveyor to Screen (4) and (7) (Permit No. 5983)	PM	0.06	0.04
		PM ₁₀	0.03	0.02
S27	Screen (4) and (7) (Permit No. 5983)	PM	1.02	0.61
		PM ₁₀	0.48	0.29
S28	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM	0.02	0.01
		PM ₁₀	0.01	<0.01

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			lb/hr	TPY
S29	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM	0.04	0.02
		PM ₁₀	0.02	0.01
S30	Conveyor to Crusher (4) and (7) (Permit No. 5983)	PM	0.06	<0.01
		PM ₁₀	<0.01	<0.01
S31	Crusher With Baghouse (7) (Permit No. 5983)	PM	0.07	0.04
		PM ₁₀	0.03	0.02
S32	Crusher to Conveyor (4) and (7) (Permit No. 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
SBH-1	Crusher Baghouse (7) (Permit No. 5983)	PM	0.34	0.20
		PM ₁₀	0.34	0.20
S33	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM	0.04	0.02
		PM ₁₀	0.02	0.01
S34A	Molten Slag Pot Dump (4) and (7) (Permit No. 5983)	PM ₁₀	1.19	5.30
S34B	Slag Skul Pot Dump (4) and (7) (Permit No. 5983)	PM	0.13	0.59
		PM ₁₀	0.07	0.29
S35	Front-End Loader Drop at Mixing Building (4) and (7) (Permit No. 5983)	PM	0.44	1.95
		PM ₁₀	0.22	0.98
SBH-2/3	FerroCut Baghouse (7) (Permit No. 5983)	PM ₁₀	1.61	1.93
		NO _x	0.78	3.49
		CO	0.13	0.59
		VOC	0.02	0.09
S37	Stockpile (4) and (7) (Permit No. 5983)	PM	--	0.43
		PM ₁₀	--	0.21
S38	Slag Road Emissions (4) and (7)	PM	--	21.26

(Permit No. 5983)

PM₁₀

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10.63

- (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 30 Texas Administrative Code Section 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.
- (6) Emissions collected in the canopy hood are combined in a mixing chamber before splitting to the two baghouses.
- (7) For reference only. These emissions points are authorized under other TNRCC air quality permits as indicated above.

* 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

Except for 8,000 Hrs/year for each electric arc furnace

Dated _____