

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 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)(8)	PM/PM ₁₀	17.9	71.6
		CO	81.9	327.6
		NO _x	6.0	24.0
		SO ₂	5.1	19.6
		VOC	31.2	124.9
		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 Number 1635)	PM/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 Number 8099)	PM/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)(8)	PM/PM ₁₀	26.0	104.2
		CO	140.8	563.2
		NO _x	10.3	41.2
		SO ₂	8.7	33.8
		VOC	53.7	214.7
		Pb	0.077	0.31
		Hg	0.0053	0.021
		Cr	0.0019	0.007
		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/PM ₁₀	17.4	69.5
		CO	284.3	1137.2
		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
		Cd	0.0013	0.0053
54	Roof Monitor Baghouse "D" Stack (7)(8) (Permit Number 46420)	PM/PM ₁₀	3.73	14.93
		CO	5.57	22.27
		NO _x	0.41	1.63
		SO ₂	0.34	1.34
		VOC	2.12	8.49
		Pb	0.012	0.049
		Hg	0.0001	0.0002
		Cr	0.003	0.012
		Cd	0.002	0.01
55	Roof Monitor Baghouse "E" Stack (7)(8) (Permit Number 46420)	PM/PM ₁₀	3.73	14.93
		CO	5.57	22.27
		NO _x	0.41	1.63
		SO ₂	0.34	1.34
		VOC	2.12	8.49
		Pb	0.012	0.049
		Hg	0.0001	0.0002
		Cr	0.003	0.012
		Cd	0.002	0.01
08	Air Cascade Separator Auto Shredder Primary Collection System (7) (Permit Number 3026)	PM/PM ₁₀	2.50	2.20

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			lb/hr	TPY
09	Large Section Mill Reheat Furnace (5)	PM/PM ₁₀	2.3	9.9
		NO _x	95.3	417.6
		SO ₂	6.5	1.2
		CO	18.2	79.5
		VOC	0.6	2.8
10C	"B" Side Ladle Heaters Sidewall Vent	PM/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/PM ₁₀	0.04	0.18
		CO	0.49	1.97
		NO _x	0.59	2.34
		SO ₂	0.08	0.014
		VOC	0.03	0.13
11A	Outdoor Alloy Handling (4)	PM	0.0023	0.0089
		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

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			lb/hr	TPY
		PM ₁₀	0.079	0.054
15A	Pelletizer Silo	PM/PM ₁₀	0.0324	0.1296
	Baghouse Stack	Pb	0.00085	0.0034
		Hg	0.0000005	0.000002
		Cr	0.000055	0.00022
		Cd	0.000024	0.000095
15B	Railcar Loading From	PM	0.00057	0.0023
	Pelletizer Silo (4)	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) and (7)	PM	0.0056	0.014
	(Permit Number 3026)	PM ₁₀	0.0024	0.006
17	Residue Transfer at	PM	0.010	0.026
	Magnetic Separator (4) and (7)	PM ₁₀	0.0049	0.012
	(Permit Number 3026)			
20A	Unprocessed Residue	PM/PM ₁₀	--	0.14
	Storage Pile (4) and (7)			
	(Permit Number 3026)			
21	Residue Storage Pile at	PM/PM ₁₀	--	0.14
	Separation Facility (4) and (7)			
	(Permit Number 3026)			
22	Vibrating Screen (4) and (7)	PM	0.15	0.65
	(Permit Number 3026)	PM ₁₀	0.015	0.065
23	Material Handling (4) and (7)	PM	0.32	1.41
	(Permit Number 3026)	PM ₁₀	0.15	0.67

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			lb/hr	TPY
24	Fines Storage Pile (4) and (7) (Permit Number 3026)	PM	--	0.14
		PM ₁₀	--	0.14
25	Fines and Course Sand Storage (4) and (7) (Permit Number 3026)	PM	--	0.14
		PM ₁₀	--	0.14
26	Light Organic Material Storage (4) and (7) (Permit Number 3026)	PM	--	0.14
		PM ₁₀	--	0.14
30	In-Plant Vehicle Traffic (4)	PM	--	34.8
		PM ₁₀	--	12.5
S1	Raw Feed (4) and (7) (Permit Number 5983)	PM	3.25	1.95
		PM ₁₀	1.63	0.98
S3	Grizzly to Stock (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S4	Grizzly to Conveyor (4) and (7) (Permit Number 5983)	PM	0.03	0.02
		PM ₁₀	0.01	<0.01
S5	Conveyor To Conveyor (4) and (7) (Permit Number 5983)	PM	0.03	0.02
		PM ₁₀	0.01	<0.01
S6	Conveyor To Feeder (4) and (7) (Permit Number 5983)	PM	0.06	0.04
		PM ₁₀	0.03	0.02
S8	Feeder to Conveyor (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S10	Screen (4) and (7) (Permit Number 5983)	PM	0.07	0.04
		PM ₁₀	0.03	0.02

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			lb/hr	TPY
S12	Conveyor To Conveyor (4) and (7) (Permit Number 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S17	Conveyor To Conveyor (4) and (7) (Permit Number 5983)	PM PM ₁₀	0.02 0.01	0.01 <0.01
S18	Conveyor To Bin (4) and (7) (Permit Number 5983)	PM PM ₁₀	0.02 0.01	0.01 <0.01
S19	Bin to Truck (4) and (7) (Permit Number 5983)	PM PM ₁₀	0.02 0.01	0.01 <0.01
S21	Conveyor to Stock (4) and (7) (Permit Number 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S23	Conveyor to Stock (4) and (7) (Permit Number 5983)	PM PM ₁₀	<0.01 <0.01	<0.01 <0.01
S25	Feeder to Conveyor (4) and (7) (Permit Number 5983)	PM PM ₁₀	0.06 0.03	0.04 0.02
S27	Screen (4) and (7) (Permit Number 5983)	PM PM ₁₀	1.02 0.48	0.61 0.29
S33	Conveyor To Conveyor (4) and (7) (Permit Number 5983)	PM PM ₁₀	0.04 0.02	0.02 0.01
S34A	Molten Slag Pot Dump (4) and (7) (Permit Number 5983)	PM/PM ₁₀	1.19	5.25
S34B	Slag Skul Pot Dump (4) and (7) (Permit Number 5983)	PM PM ₁₀	0.13 0.07	0.59 0.29

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
S35	Front-End Loader Drop (4) and (7) (Permit Number 5983)	PM	0.44	1.95
		PM ₁₀	0.22	0.98
SBH-2/3	FerroCut Baghouse Stack (7) (Permit Number 5983)	PM ₁₀	1.61	1.93
		NO _x	0.78	3.49
		CO	0.13	0.60
		VOC	0.02	0.09
S37	Stockpile (4) and (7) (Permit Number 5983)	PM	--	0.48
		PM ₁₀	--	0.24
S40	Conveyor to Conveyor (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S41	Conveyor to Swing Conveyor (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S42	Swing Conveyor to Conveyor (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S43	"B" Scrap Feed (4) and (7) (Permit Number 5983)	PM	0.07	0.04
		PM ₁₀	0.04	0.02
S44	"B" Scrap Feed to Conveyor (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S45	Conveyor to Conveyor (4) and (7) (Permit Number 5983)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
S31	Hazmag Crusher Fugitives (4) and (7) (Permit Number 5983)	PM	0.07	--
		PM ₁₀	0.03	--

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			lb/hr	TPY
S46	Cone Crusher Fugitives (4) and (7) (Permit Number 5983)	PM	0.07	--
		PM ₁₀	0.03	--
	Hazmag Crusher and Cone Crusher Fugitives (4) (7) (9) (Permit Number 5983)	PM	--	0.04
		PM ₁₀	--	0.02
SBH-1	Hazmag Crusher and Cone Crusher Baghouse (7) (Permit Number 5983)	PM/PM ₁₀	0.34	0.21

- (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 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 Title 30 Texas Administrative Code § 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 454 MMBtu/hr of natural gas fuel for a maximum of 8,760 hours per year (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 Texas Commission on Environmental Quality air quality permits as indicated above.
- (8) Indoor coke storage silo baghouse emissions are included and are authorized through Standard Permit Number 51621.

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(9) The maximum annual combined fugitive emissions from the hazmag crusher and the cone crusher. **(12/05)**

* 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 December 29, 2005