

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 8097 and PSDTX138M5

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) (5) (7)	PM/PM <sub>10</sub>	13.04	52.14
		CO	77.86	311.42
		NO <sub>x</sub>	5.75	23.0
		SO <sub>2</sub>	4.81	18.66
		VOC	29.66	118.64
		Pb	0.043	0.17
		Hg	0.0029	0.012
		Cr	0.0011	0.0042
		Cd	0.0016	0.0064
02A	Bar Mill Reheat Furnace (6) (Permit Number 1635)	PM/PM <sub>10</sub>	1.19	5.21
		NO <sub>x</sub>	24.95	109.27
		CO	2.20	9.63
		SO <sub>2</sub>	0.08	0.37
		VOC	0.53	2.34
05A	Medium Section Mill Reheat Furnace (6) (Permit Number 8099)	PM/PM <sub>10</sub>	2.15	6.22
		NO <sub>x</sub>	45.10	130.52
		CO	16.11	46.61
		SO <sub>2</sub>	3.03	0.37
		VOC	1.14	3.29
06	Meltshop Overhead Canopy	PM/PM <sub>10</sub>	22.0	88.00

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
	Hoods Baghouse "B" Stack (5) (7)	CO	133.85	535.38
		NO <sub>x</sub>	9.88	39.53
		SO <sub>2</sub>	8.27	32.07
		VOC	50.99	203.96
		Pb	0.073	0.30
		Hg	0.0050	0.0100
		Cr	0.0018	0.0073
		Cd	0.0027	0.011
07	Furnaces "A" and "B" 4th Hole Evacuation System Baghouse "C" Stack	PM/PM <sub>10</sub>	17.37	69.49
		CO	284.29	1137.16
		NO <sub>x</sub>	63.08	252.31
		SO <sub>2</sub>	28.58	114.34
		VOC	24.58	98.34
		Pb	0.0229	0.0914
		Hg	0.11	0.44
		Cr	0.0022	0.0088
		Cd	0.0013	0.0053
54	Roof Monitor Baghouse "D" Stack (7)	PM/PM <sub>10</sub>	3.73	14.93
		CO	5.23	20.92
		NO <sub>x</sub>	0.32	1.27
		SO <sub>2</sub>	0.32	1.27
		VOC	2.01	8.05
		Pb	0.0029	0.0115
		Hg	0.0002	0.0008
		Cr	0.0001	0.0003
		Cd	0.0001	0.0004
55	Roof Monitor Baghouse "E" Stack (7)	PM/PM <sub>10</sub>	3.73	14.93
		CO	5.23	20.92
		NO <sub>x</sub>	0.32	1.27

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			lb/hr	TPY
		SO <sub>2</sub>	0.32	1.27
		VOC	2.01	8.05
		Pb	0.0029	0.0115
		Hg	0.0002	0.0008
		Cr	0.0001	0.0003
		Cd	0.0001	0.0004
08	Air Cascade Separator Auto Shredder Primary Collection System (6) (Permit Number 3026)	PM/PM <sub>10</sub>	2.50	2.20
09	Large Section Mill Reheat Furnace	PM/PM <sub>10</sub>	3.38	14.82
		NO <sub>x</sub>	95.34	417.59
		SO <sub>2</sub>	6.36	1.17
		CO	37.39	163.76
		VOC	2.45	10.72
10C	"B" Side Ladle Heaters Sidewall Vent	PM/PM <sub>10</sub>	0.15	0.58
		CO	1.61	6.43
		NO <sub>x</sub>	1.91	7.65
		SO <sub>2</sub>	0.27	0.05
		VOC	0.11	0.42
10D	"A" Side Ladle Heaters Side Wall Vent	PM/PM <sub>10</sub>	0.04	0.18
		CO	0.49	1.97
		NO <sub>x</sub>	0.59	2.34
		SO <sub>2</sub>	0.08	0.014
		VOC	0.03	0.13
11A	Outdoor Alloy Handling (4)	PM	0.0023	0.0089
		PM <sub>10</sub>	0.0011	0.0042
12	Scrap Steel Handling (4)	PM	0.48	1.93
		PM <sub>10</sub>	0.23	0.91

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
13	Baghouse Dust Railcar Fugitives (4)	PM	0.00057	0.0023
		PM <sub>10</sub>	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 <sub>10</sub>	0.079	0.054
15A	Pelletizer Silo Baghouse Stack	PM/PM <sub>10</sub>	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 <sub>10</sub>	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) (6) (Permit Number 3026)	PM	0.0056	0.014
		PM <sub>10</sub>	0.0024	0.006
17	Residue Transfer at Magnetic Separator (4) (6) (Permit Number 3026)	PM	0.010	0.026
		PM <sub>10</sub>	0.0049	0.0123
20A	Unprocessed Residue Storage Pile (4) (6) (Permit Number 3026)	PM/PM <sub>10</sub>	--	0.14

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
21	Residue Storage Pile at Separation Facility (4) (6) (Permit Number 3026)	PM/PM <sub>10</sub>	--	0.14
22	Vibrating Screen (4) (6) (Permit Number 3026)	PM PM <sub>10</sub>	0.15 0.015	0.65 0.065
23	Material Handling (4) (6) (Permit Number 3026)	PM PM <sub>10</sub>	0.32 0.15	1.41 0.67
24	Fines Storage Pile (4) (6) (Permit Number 3026)	PM PM <sub>10</sub>	-- --	0.14 0.14
25	Fines and Course Sand Storage (4) (6) (Permit Number 3026)	PM PM <sub>10</sub>	-- --	0.14 0.14
26	Light Organic Material Storage (4) (6) (Permit Number 3026)	PM PM <sub>10</sub>	-- --	0.14 0.14
30	In-Plant Vehicle Traffic (4)	PM PM <sub>10</sub>	-- --	34.8 12.5
S1	Raw Feed (4) (6) (Permit Number 5983)	PM PM <sub>10</sub>	3.25 1.63	1.95 0.98
S3	Grizzly to Stock (4) (6) (Permit Number 5983)	PM PM <sub>10</sub>	<0.01 <0.01	<0.01 <0.01
S4	Grizzly to Conveyor (4) (6) (Permit Number 5983)	PM PM <sub>10</sub>	0.03 0.01	0.02 <0.01
S5	Conveyor To Conveyor (4) (6) (Permit Number 5983)	PM PM <sub>10</sub>	0.03 0.01	0.02 <0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
S6	Conveyor To Feeder (4) (6) (Permit Number 5983)	PM	0.06	0.04
		PM <sub>10</sub>	0.03	0.02
S8	Feeder to Conveyor (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S10	Screen (4) (6) (Permit Number 5983)	PM	0.07	0.04
		PM <sub>10</sub>	0.03	0.02
S12	Conveyor To Conveyor (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S17	Conveyor To Conveyor (4) (6) (Permit Number 5983)	PM	0.02	0.01
		PM <sub>10</sub>	0.01	<0.01
S18	Conveyor To Bin (4) (6) (Permit Number 5983)	PM	0.02	0.01
		PM <sub>10</sub>	0.01	<0.01
S19	Bin to Truck (4) (6) (Permit Number 5983)	PM	0.02	0.01
		PM <sub>10</sub>	0.01	<0.01
S21	Conveyor to Stock (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S23	Conveyor to Stock (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S25	Feeder to Conveyor (4) (6) (Permit Number 5983)	PM	0.06	0.04
		PM <sub>10</sub>	0.03	0.02
S27	Screen (4) (6) (Permit Number 5983)	PM	1.02	0.61
		PM <sub>10</sub>	0.48	0.29
S33	Conveyor To Conveyor (4) (6) (Permit Number 5983)	PM	0.04	0.02
		PM <sub>10</sub>	0.02	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
S34A	Molten Slag Pot Dump (4) and (6) (Permit Number 5983)	PM/PM <sub>10</sub>	1.19	5.25
S34B	Slag Skull Pot Dump (4) (6) (Permit Number 5983)	PM	0.13	0.59
		PM <sub>10</sub>	0.07	0.29
S35	Front-End Loader Drop (4) (6) (Permit Number 5983)	PM	0.44	1.95
		PM <sub>10</sub>	0.22	0.98
SBH-2/3	FerroCut Baghouse Stack (6) (Permit Number 5983)	PM <sub>10</sub>	1.61	1.93
		NO <sub>x</sub>	0.78	3.49
		CO	0.13	0.60
		VOC	0.02	0.09
S37	Stockpile (4) (6) (Permit Number 5983)	PM	--	0.48
		PM <sub>10</sub>	--	0.24
S40	Conveyor to Conveyor (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S41	Conveyor to Swing Conveyor (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S42	Swing Conveyor to Conveyor (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S43	"B" Scrap Feed (4) (6) (Permit Number 5983)	PM	0.07	0.04
		PM <sub>10</sub>	0.04	0.02
S44	"B" Scrap Feed to Conveyor (4) (6) (Permit Number 5983)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
S45	Conveyor to Conveyor (4) (6)	PM	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
	(Permit Number 5983)	PM <sub>10</sub>	<0.01	<0.01
S31	Hazmag Crusher Fugitives	PM	0.07	--
	(4) (6)	PM <sub>10</sub>	0.03	--
	(Permit Number 5983)			
S46	Cone Crusher Fugitives	PM	0.07	--
	(4) (6)	PM <sub>10</sub>	0.03	--
	(Permit Number 5983)			
	Hazmag Crusher and Cone	PM	--	0.04
	Crusher Fugitives (4) (6) (8)	PM <sub>10</sub>	--	0.02
	(Permit Number 5983)			
SBH-1	Hazmag Crusher and Cone Crusher Baghouse (6) (Permit Number 5983)	PM/PM <sub>10</sub>	0.34	0.21



EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (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 PM<sub>10</sub>  
PM<sub>10</sub> - 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<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - 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 collected in the canopy hood are combined in a mixing chamber before splitting to the two baghouses.
  - (6) For reference only. These emissions points are authorized under other Texas Commission on Environmental Quality air quality permits as indicated above.
  - (7) Indoor coke storage silo baghouse emits inside the building and its emissions are included in the values shown.
  - (8) The maximum annual combined fugitive emissions from the hazmag crusher and the cone crusher. **(12/05)**
- \* Emission rates are based on a rolling 12 months.

Dated June 25, 2010