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}	17.9	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 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}	26.0	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	0.0077
		Cd	0.0029	0.012

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
07	Furnaces "A" and "B" 4th Hole Evacuation System Baghouse "C" Stack	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
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}	0.7	0.9
		NO_X	26.0	37.0
		SO_2	2.0	1.5
		CO	5.6	7.1
		VOC	0.2	0.3
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	0.014
		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	PM	0.00023	0.00089

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
	Monovent "A"	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	0.00011
		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) (Permit No. 3026)	PM	0.0056	0.014
		PM_{10}	0.0024	0.006
17	Residue Transfer at Magnetic Separator (4) and (7) (Permit No. 3026)	PM	0.010	0.026
		PM_{10}	0.0049	0.012
20A	Unprocessed Residue Storage Pile (4) and (7)	PM_{10}	--	0.14

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * 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 0.015	0.65 0.065
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}	-- --	34.8 12.5
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}	0.000383 0.00018	0.00023 0.00011
S4	Grizzly to Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0248 0.0118	0.0149 0.0071
S5	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0248 0.0118	0.0149 0.0071

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
S6	Conveyor To Feeder (4) and (7) (Permit No. 5983)	PM PM_{10}	0.062 0.029	0.037 0.018
S7	Feeder to Feeder (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0037 0.0018	0.0022 0.0011
S8	Feeder to Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0037 0.0018	0.0022 0.0011
S9	Conveyor To Screen (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0037 0.0018	0.0022 0.0011
S10	Screen (4) and (7) (Permit No. 5983)	PM PM_{10}	0.065 0.031	0.039 0.019
S11	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0016 0.00077	0.0010 0.00046
S12	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0016 0.0008	0.0010 0.00046
S13	Conveyor To Screen (4) and (7) (Permit No. 5983)	PM PM_{10}	0.0016 0.000877	0.0010 0.00046
S14	Screen (4) and (7) (Permit No. 5983)	PM PM_{10}	0.028 0.013	0.017 0.008
S15	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.00062 0.0003	0.00037 0.00018
S16	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM PM_{10}	0.00062 0.0003	0.00037 0.00018
S17	Conveyor To Conveyor (4) and (7)	PM	0.022	0.013

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
	(Permit No. 5983)	PM_{10}	0.0103	0.0062
S18	Conveyor To Bin (4) and (7)	PM	0.022	0.013
	(Permit No. 5983)	PM_{10}	0.0103	0.0062
S19	Bin to Truck (4) and (7)	PM	0.022	0.013
	(Permit No. 5983)	PM_{10}	0.0103	0.0062
S20	Screen to Conveyor (4) and (7)	PM	0.00099	0.00059
	(Permit No. 5983)	PM_{10}	0.00047	0.00028
S21	Conveyor to Stock (4) and (7)	PM	0.00099	0.00059
	(Permit No. 5983)	PM_{10}	0.00047	0.00028
S22	Screen to Conveyor (4) and (7)	PM	0.0021	0.00126
	(Permit No. 5983)	PM_{10}	0.001	0.0006
S23	Conveyor to Stock (4) and (7)	PM	0.0021	0.00126
	(Permit No. 5983)	PM_{10}	0.001	0.0006
S24	Feeder to Feeder (4) and (7)	PM	0.0581	0.0349
	(Permit No. 5983)	PM_{10}	0.0277	0.0166
S25	Feeder to Conveyor (4) and (7)	PM	0.0581	0.0349
	(Permit No. 5983)	PM_{10}	0.0277	0.0166
S26	Conveyor to Screen (4) and (7)	PM	0.0581	0.0349
	(Permit No. 5983)	PM_{10}	0.0277	0.0166
S27	Screen (4) and (7)	PM	1.02	0.61
	(Permit No. 5983)	PM_{10}	0.484	0.291
S28	Screen to Conveyor (4) and (7)	PM	0.0211	0.0127
	(Permit No. 5983)	PM_{10}	0.0101	0.0060

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
S29	Screen to Conveyor (4) and (7) (Permit No. 5983)	PM	0.037	0.0222
		PM_{10}	0.0176	0.0106
S30	Conveyor to Crusher (4) and (7) (Permit No. 5983)	PM	0.056	0.0033
		PM_{10}	0.0026	0.0016
S31	Crusher With Baghouse (7) (Permit No. 5983)	PM	0.068	0.041
		PM_{10}	0.032	0.019
S32	Crusher to Conveyor (4) and (7) (Permit No. 5983)	PM	0.0056	0.0033
		PM_{10}	0.0026	0.0016
SBH-1	Crusher Baghouse (7) (Permit No. 5983)	PM	0.3430	0.2
		PM_{10}	0.3430	0.2
S33	Conveyor To Conveyor (4) and (7) (Permit No. 5983)	PM	0.0370	0.022
		PM_{10}	0.0176	0.01
S34A	Molten Slag Pot Dump (4) and (7) (Permit No. 5983)	PM_{10}	1.1900	5.3
S34B	Slag Skul Pot Dump (4) and (7) (Permit No. 5983)	PM	0.1300	0.59
		PM_{10}	0.0650	0.29
S35	Front-End Loader Drop at Mixing Bldg. (4) and (7) (Permit No. 5983)	PM	0.4420	1.95
		PM_{10}	0.2210	0.98
SBH-2/3	FerroCut Baghouse (7) (Permit No. 5983)	PM_{10}	1.6100	1.93
		NO_X	0.78	3.49
		CO	0.134	0.589
		VOC	0.021	0.092
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)	PM_{10}	--	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 PM_{10}
PM_{10} - 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
SO_2 - 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 454 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