Emission Sources - Maximum Allowable Emission Rates

Permit Number 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, sources, and related activities. 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 (8)	
			lbs/hour	TPY (4)
01	Meltshop Overhead Canopy Hoods Baghouse A Stack FIN:01-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, and Caster Torches	PM	13.04	52.14
		PM_{10}	13.04	52.14
		$PM_{2.5}$	9.65	38.58
		CO	77.86	311.42
		NO_x	5.75	23.00
		SO_2	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
06	Meltshop Overhead Canopy Hoods Baghouse B Stack (6 and 7) FIN: 04-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, and Caster Torches	PM	22.00	88.00
		PM_{10}	22.00	88.00
		$PM_{2.5}$	16.28	65.12
		CO	133.85	535.38
		NO_x	9.88	39.53
		SO_2	8.27	32.07
		VOC	50.99	203.96
		Pb	0.073	0.30
		Hg	0.0050	0.010
		Cr	0.0018	0.0073
		Cd	0.0027	0.011

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07	Furnace A and B 4th Hole Evacuation and Meltshop Overhead Canopy Hood Baghouse C Stack (6 and 7) FIN: 01-EAF, 04-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, and Caster Torches	PM	17.37	69.49
		PM_{10}	17.37	69.49
		$PM_{2.5}$	12.85	51.42
		CO	284.29	1137.16
		NO_x	63.08	252.31
		SO_2	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
09	Large Section Mill Reheat Furnace Stack	PM	3.38	14.82
		PM_{10}	3.38	14.82
		$PM_{2.5}$	3.38	14.82
		CO	37.39	163.76
		NO_x	95.34	417.59
		SO_2	6.36	1.17
		VOC	2.45	10.72
54	Roof Monitor Baghouse D Stack (7) FIN: FURNA-FUG, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, and Caster Torches	PM	3.73	14.93
		PM_{10}	3.73	14.93
		$PM_{2.5}$	2.76	11.05
		CO	5.23	20.92
		NO_x	0.32	1.27
		SO_2	0.32	1.27
		VOC	2.01	8.05

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		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) FIN: FURNB-FUG, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, and Caster Torches	PM	3.73	14.93
		PM_{10}	3.73	14.93
		$PM_{2.5}$	2.76	11.05
		CO	5.23	20.92
		NO_x	0.32	1.27
		SO_2	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
73	ASR Dryer Baghouse Stack	PM	0.61	2.68
		PM_{10}	0.61	2.68
		$PM_{2.5}$	0.20	0.88
		NO_x	1.02	4.47
		CO	1.40	6.13
		SO_2	0.24	1.04
		VOC	0.09	0.40

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10C	B Side Ladle Heaters Sidewall Vent	PM	0.15	0.58
		PM_{10}	0.15	0.58
		$PM_{2.5}$	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 Sidewall Vent	PM	0.04	0.18
		PM_{10}	0.04	0.18
		$PM_{2.5}$	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 (5)	PM	0.0023	0.0089
		PM_{10}	0.0011	0.0042
		$PM_{2.5}$	<0.0002	<0.0007
12	Scrap Steel Handling (5)	PM	0.48	1.93
		PM_{10}	0.23	0.91
		$PM_{2.5}$	0.035	0.14
13	Baghouse Dust Railcar Fugitives (5)	PM	<0.001	0.0023
		PM_{10}	<0.001	0.0011
		$PM_{2.5}$	<0.0001	<0.0002
		Pb	<0.00002	<0.00006
		Hg	<0.000001	4.0 E-08

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		Cr	<0.000001	3.9 E-06
		Cd	<0.000001	1.7 E-06
14	Alloy Piles (5)	PM	0.079	0.054
		PM_{10}	0.079	0.054
		$PM_{2.5}$	0.079	0.054
15A	Pelletizer Silo Stack	PM	0.0324	<0.13
		PM_{10}	0.0324	<0.13
		$PM_{2.5}$	0.0324	<0.13
		Pb	<0.0009	<0.004
		Hg	5.0 E-07	2.0 E-06
		Cr	5.5 E-05	2.2 E-04
		Cd	2.4 E-05	9.5 E-05
15B	Railcar Loading From Pelletizer Silo (5)	PM	<0.0006	0.0023
		PM_{10}	<0.0003	0.00011
		$PM_{2.5}$	<0.0001	0.00002
		Pb	1.5 E-05	5.9 E-05
		Hg	9.0 E-09	4.0 E-08
		Cr	9.7 E-07	3.9 E-06
		Cd	4.2 E-07	1.7 E-06
30	In Plant Vehicle Traffic (5)	PM	-	34.8
		PM_{10}	-	12.5
		$PM_{2.5}$		1.25

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05A	Medium Section Mill Reheat Furnace Stack	PM	2.15	6.22
		PM_{10}	2.15	6.22
		$PM_{2.5}$	2.15	6.22
		CO	16.11	46.61
		NO_x	45.10	130.52
		SO_2	3.03	0.37
		VOC	1.14	3.29

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
Pb - lead and lead compounds
Hg - mercury and mercury compounds
Cr - chromium and chromium compounds
Cd - cadmium and cadmium compounds
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Emissions collected in the canopy hood are combined in a mixing chamber before splitting to the two baghouses.
(7) Indoor coke storage silo baghouse emits inside the building and its emissions are included in the values shown.
(8) Planned startup and shutdown and maintenance emissions are included.

Date: October 9, 2017