Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 8097 and PSDTX138M6

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 (6)(7) (FIN:01-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, Ladle Metallurgy Furnaces and Caster Torches)	PM	13.00	54.00
		PM_{10}	13.00	54.00
		$PM_{2.5}$	9.60	40.00
		CO	---	---
		NO_x	---	---
		SO_2	---	---
		VOC	----	---
		Pb	0.042	0.1518
		Hg	0.0029	0.011
		Cr	0.0011	0.0038
		Cd	0.0016	0.0057
06	Meltshop Overhead Canopy Hoods Baghouse B Stack (6) (7) (FIN: 04-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, Ladle Metallurgy Furnaces and Caster Torches)	PM	21.90	91.10
		PM_{10}	21.90	91.10
		$PM_{2.5}$	16.20	67.40
		CO	---	---
		NO_x	---	---
		SO_2	---	---
		VOC	---	---
		Pb	0.073	0.2609
		Hg	0.005	0.0179
		Cr	0.0018	0.0065
		Cd	0.0027	0.0098
07	Furnace A and B 4th Hole Evacuation and Meltshop Overhead Canopy Hood Baghouse C Stack (7) (FIN: 01-EAF, 04-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, Ladle Metallurgy Furnaces and Caster Torches)	PM	17.37	72.41
		PM_{10}	17.37	72.41
		$PM_{2.5}$	12.85	53.38
		CO	---	---
		NO_x	---	---
		SO_2	---	---

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		VOC	---	---
		Pb	0.023	0.0818
		Hg	0.11	0.3949
		Cr	0.0022	0.0079
		Cd	0.0013	0.0047
54	Roof Monitor Baghouse D Stack (7) (FIN: FURNAFUG, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Ladle Metallurgy Furnaces Pre-Heater, and Caster Torches)	PM	3.73	15.56
		PM_{10}	3.73	15.56
		$PM_{2.5}$	2.76	11.52
		CO	---	---
		NO_x	---	---
		SO_2	---	---
		VOC	---	---
		Pb	0.0029	0.0103
		Hg	0.0002	0.00071
		Cr	0.0001	0.00026
		Cd	0.0001	0.00039
55	Roof Monitor Baghouse E Stack (7) (FIN: FURNB-FUG, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Ladle Metallurgy Furnaces Pre-Heater, and Caster Torches)	PM	3.73	15.56
		PM_{10}	3.73	15.56
		$PM_{2.5}$	2.76	11.52
		CO	---	---
		NO_x	---	---
		SO_2	---	---
		VOC	---	---
		Pb	0.0029	0.0103
		Hg	0.0002	0.00071
		Cr	0.0001	0.00026
		Cd	0.0001	0.00039
01, 06, 07, 54, 55	Combined Hourly and Annual Melt Shop Gaseous Emissions	CO	503.80	1803.40
		NO_x	156.00	348.90
		SO_2	137.78	378.10
		VOC	59.81	94.20
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

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		NO_x	95.34	417.59
		SO_2	6.36	1.17
		VOC	2.45	10.72
11A	Outdoor Alloy Handling (5)	PM	0.0023	0.0089
		PM_{10}	0.0011	0.0042
		$PM_{2.5}$	0.0002	0.0006
12	Scrap Steel Handling (5)	PM	0.48	1.93
		PM_{10}	0.23	0.91
		$PM_{2.5}$	0.03	0.14
13	Baghouse Dust Railcar Fugitives (5)	PM	0.001	0.0023
		PM_{10}	0.0003	0.0011
		$PM_{2.5}$	0.00004	0.00016
		Pb	1.48E-05	5.91E-05
		Hg	8.72E-09	3.49E-08
		Cr	9.69E-07	3.87E-06
		Cd	4.16E-07	1.67E-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	0.032	0.13
		PM_{10}	0.032	0.13
		$PM_{2.5}$	0.032	0.13
		Pb	8.46E-04	3.38E-03
		Hg	4.99E-07	2.00E-06
		Cr	5.54E-05	2.22E-04
		Cd	2.38E-05	9.53E-05
15B	Railcar Loading From Pelletizer Silo (5)	PM	0.0006	0.0023
		PM_{10}	0.0003	0.00011
		$PM_{2.5}$	0.00004	0.00002
		Pb	1.48E-05	5.91E-05
		Hg	8.72E-09	3.49E-08
		Cr	9.69E-07	3.87E-06
		Cd	4.16E-07	1.67E-06
30	In Plant Vehicle Traffic	PM	-	34.8

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		$PM_{2.5}$		1.25
05A	Medium Section Mill Reheat Furnace Stack	PM	1.73	5.62
		PM_{10}	1.73	5.62
		$PM_{2.5}$	1.73	5.62
		CO	17.33	56.25
		NO_x	23.10	52.50
		SO_2	3.26	0.44
		VOC	1.22	3.98
73	ASR Dryer Baghouse Stack	PM	0.61	2.67
		PM_{10}	0.61	2.67
		$PM_{2.5}$	0.20	0.88
		CO	1.40	6.13
		NO_x	1.02	4.47
		SO_2	0.24	1.04
		VOC	0.09	0.40

(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 Melt Shop building and its emissions are included in the values shown.
(8) Planned startup and shutdown and maintenance emissions are included.

Date: August 18, 2023