

Emission Sources - Maximum Allowable Emission Rates

Permit Number 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) and (7) FIN:01-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, Ladle Metallurgy Furnaces and Caster Torches	PM	13.04	52.14
		PM ₁₀	13.04	52.14
		PM _{2.5}	9.65	38.58
		CO	---	---
		NO _x	---	---
		SO ₂	---	---
		VOC	----	---
		Pb	0.042	0.14
		Hg	0.0029	0.011
		Cr	0.0011	0.0034
		Cd	0.0016	0.0051
06	Meltshop Overhead Canopy Hoods Baghouse B Stack (6 and 7) FIN: 04-EAF, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Pre-Heater, Ladle Metallurgy Furnaces and Caster Torches	PM	22.00	88.00
		PM ₁₀	22.00	88.00
		PM _{2.5}	16.28	65.12
		CO	---	---
		NO _x	---	---
		SO ₂	---	---
		VOC	---	---
		Pb	0.073	0.23
		Hg	0.0050	0.016
		Cr	0.0018	0.0059
		Cd	0.0027	0.009

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07	Furnace A and B 4 th 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	69.49
		PM ₁₀	17.37	69.49
		PM _{2.5}	12.85	51.42
		CO	---	---
		NO _x	---	---
		SO ₂	---	---
		VOC	---	---
		Pb	0.023	0.074
		Hg	0.11	0.36
		Cr	0.0022	0.0071
		Cd	0.0013	0.0042
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	14.93
		PM ₁₀	3.73	14.93
		PM _{2.5}	2.76	11.05
		CO	---	---
		NO _x	---	---
		SO ₂	---	---
		VOC	---	---
		Pb	0.0029	0.0093
		Hg	0.0002	0.0006
		Cr	0.0001	0.0002
		Cd	0.0001	0.0003
55	Roof Monitor Baghouse E Stack (7) FIN: FURNB-FUG, Tundish Pre-Heater, Ladle Pre-Heater, Shroud Ladle Metallurgy Furnaces	PM	3.73	14.93
		PM ₁₀	3.73	14.93
		PM _{2.5}	2.76	11.05
		CO	---	---

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		NO _x	---	---
		SO ₂	---	---
		VOC	---	---
		Pb	0.0029	0.0093
		Hg	0.0002	0.0006
		Cr	0.0001	0.0002
		Cd	0.0001	0.0003
01, 06, 07, 54, 55	Combined Hourly and Annual Melt Shop Gaseous Emissions	CO	506.45	1,632.13
		NO _x	156.02	314.04
		SO ₂	137.78	340.34
		VOC	109.27	352.11
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
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

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		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 (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	76.46
		SO ₂	3.03	0.37
		VOC	1.14	3.29
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
- SO₂
 - sulfur dioxide
- PM
 - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀
 - 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: June 22, 2023