Emission Sources - Maximum Allowable Emission Rates

Permit Number 2489A

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 (6)	
			lbs/hour	TPY (4)
ST-B8	Electric Arc Furnace-2 Baghouse Stack	CO	24.85	39.76
		NO_x	5.08	8.14
		PM	0.86	2.26
		PM_{10}	0.86	2.26
		$PM_{2.5}$	0.86	2.26
		SO_2	1.08	1.73
		VOC	1.58	2.52
ST-B24	Electric Arc Furnace-3, Ladle Drying and Scrap Drying Baghouse Stack	CO	8.63	24.81
		NO_x	2.27	6.29
		PM	0.26	1.08
		PM_{10}	0.26	1.08
		$PM_{2.5}$	0.26	1.08
		SO_2	1.20	3.49
		VOC	1.77	5.13
BLDGFUG	Ladle Drying and Scrap Drying, AOD Preheater, Ladle Preheater, Ladle Preheater, Shell Core Making, Manual Core Making, South Foundry Building Fugitives	CO	0.67	1.28
		NO_x	0.70	1.51
		PM	0.09	0.15
		PM_{10}	0.09	0.15
		$PM_{2.5}$	0.07	0.13
		SO_2	<0.01	<0.01
		VOC	0.70	1.49

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ST-B18	Argon Oxygen Decarburization, AOD Preheater, Ladle Preheater, and Ladle and Scrap Drying Baghouse Stack	CO	12.95	6.09
		NO_x	5.95	3.57
		PM	0.72	1.14
		PM_{10}	0.72	1.14
		$PM_{2.5}$	0.72	1.14
		SO_2	1.12	0.45
		VOC	1.67	0.72
ST-B21	Core and Mold Making, New Sand Silo 1, Return Sand Silo, New Sand Silo 2, Existing Sand Transporter Vent1, Reclaim Sand Silo, Reclaim Transporter Vent, Electric Tunnel Mold Dryer, Mixer Supply Hopper Assembly, Electric Sand Heaters, Articulating Sand Mold Mixer, Existing Sand Transporter Vent 2, Palmer 200 Core Sand Mixer, New Sand Surge Tank, Palmer 100 Core Sand Mixer, Palmer 300 Core Sand Mixer, Chromite Transporter Vent, and Iron Oxide Transporter Vent Baghouse Stack	PM	0.26	0.85
		PM_{10}	0.26	0.85
		$PM_{2.5}$	0.26	0.85
		VOC	0.82	1.95
ST-B26	Hard Face Welders, Grinding and Welding Tables, North Arc Wash Booth, North Torch Tables 1 and 2, Southeast Arc Wash Booth A, Southwest Arc Wash Booth B, Robotic Grinding, Torch Cutting Baghouse Stack	CO	<0.01	<0.01
		NO_x	<0.01	<0.01
		PM	0.90	2.98
		PM_{10}	0.90	2.98
		$PM_{2.5}$	0.90	2.98
		SO_2	<0.01	<0.01
		VOC	0.05	0.12
ST-SCR2	Cold Box Core Making Scrubber Stack	VOC	0.23	1.55
ST-B22	Target Foundry (TF) Sand Molding, Mold Line Heaters, Sand Mold Drying, Return Sand Tank, Rotary Screen, Muller,	CO	0.57	1.04
		NO_x	0.61	1.24

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		PM	0.38	1.59
		PM_{10}	0.38	1.59
		$PM_{2.5}$	0.38	1.59
		SO_2	<0.01	<0.01
		VOC	11.70	24.78
ST-B23	Target Foundry (TF) Sand Molding, Mold Line Heaters, Sand Mold Drying, Return Sand Bin and Tank, Rotary Screen, Muller, Hot Sand Elevators, Multi Cooler, Shake Out, Sand Return Conveyor, Punch Out, Sand Tank, Bentonite Bin and Tank, Sand Dryer and Reclaimer, and Pouring and Cooling Baghouse Stack	CO	0.57	1.04
		NO_x	0.61	1.24
		PM	0.33	1.40
		PM_{10}	0.33	1.40
		$PM_{2.5}$	0.33	1.40
		SO_2	<0.01	<0.01
		VOC	11.70	24.78
ST-B22 and ST-B23	Target Foundry (TF) Sand Molding, Mold Line Heaters, Sand Mold Drying, Return Sand Tank, Rotary Screen, Muller, Hot Sand Elevators, Multi Cooler, Shake Out, Sand Return Conveyor, Punch Out, Sand Tank, Bentonite Bin and Tank, Sand Dryer and Reclaimer, and Pouring and Cooling Baghouse Stack	CO	-	1.04
		NO_x	-	1.24
		SO_2	-	<0.01
		VOC	-	24.78
TFBLDGFUG	Target Foundry Building Fugitives (5)	PM	0.07	0.18
		PM_{10}	0.07	0.18
		$PM_{2.5}$	0.06	0.13

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ST-B19	Shot Blast Machine 7 and Grinding and Welding Operations Baghouse Stack	PM	0.60	1.99
		PM_{10}	0.60	1.99
		$PM_{2.5}$	0.60	1.99
		VOC	<0.01	0.02
ST-B25	Pouring Hoods for Pouring Lines, Mold Cooling Hoods for Cooling Line, Primary Reclamation System, Flask Punchout Baghouse Stack	CO	15.58	45.10
		NO_x	0.02	0.04
		PM	1.37	4.34
		PM_{10}	1.37	4.34
		$PM_{2.5}$	1.37	4.34
		SO_2	4.34	7.10
		VOC	12.23	35.39
ST-B27_1	Thermal Reclaim System Baghouse Stack	CO	0.71	2.26
		NO_x	1.08	3.41
		PM	0.19	0.62
		PM_{10}	0.19	0.62
		$PM_{2.5}$	0.19	0.62
		SO_2	<0.01	0.02
		VOC	0.05	0.16
ST-B27_2	Mechanical Reclaim System Baghouse Stack	PM	0.12	0.38
		PM_{10}	0.12	0.38
		$PM_{2.5}$	0.12	0.38
ST-B28	Thermal Reclaim System Baghouse Stack	CO	0.71	2.26
		NO_x	1.08	3.41
		PM	0.19	0.62
		PM_{10}	0.19	0.62
		$PM_{2.5}$	0.19	0.62

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		SO_2	5.31	16.83
		VOC	0.05	0.16
AUSTFURN5	Austenitizing Furnace 5 Stack			
		PM	<0.01	0.01
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	0.01
		CO	0.05	0.06
		NO_x	0.13	0.17
		SO_2	<0.01	<0.01
AUSTFURN6	Austenitizing Furnace 6 Stack	VOC	<0.01	<0.01
		PM	<0.01	0.01
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	0.01
		CO	0.05	0.06
		NO_x	0.13	0.17
		SO_2	<0.01	<0.01
BTH-1	Spray Paint Booth 1 Stack	VOC	<0.01	<0.01
		PM	0.01	0.02
		PM_{10}	0.01	0.02
BTH-2	Spray Paint Booth 2 Stack	$PM_{2.5}$	0.01	0.02
		VOC	3.78	3.95
		PM	<0.01	0.02
		PM_{10}	<0.01	0.02
		$PM_{2.5}$	<0.01	0.02

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		VOC	2.10	3.95
BTH-1 BTH-2	Spray Paint Booth Stacks Annual Cap	PM	-	0.02
		PM_{10}	-	0.02
		$PM_{2.5}$	-	0.02
		VOC	-	3.95
PBHTR1	Paint Booth Heater 1 Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		CO	0.02	0.05
		NO_x	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01
PBHTR2	Paint Booth Heater 2 Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		CO	0.02	0.05
		NO_x	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01
PBHTR3	Paint Booth Heater 3 Stack	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		CO	0.02	0.05
		NO_x	<0.01	0.02
		SO_2	<0.01	<0.01
		VOC	<0.01	<0.01

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BLDGFUG	Inspection Area Fugitives (5)	PM	0.03	<0.01
		PM_{10}	0.02	<0.01
		$PM_{2.5}$	0.01	<0.01
STGBLDGFUG	Aerosol Can Puncturing Station Carbon Filter (5)	VOC	0.14	<0.01
SP1	Byproduct Storage Area Pile 1 (5)	PM	0.08	0.27
		PM_{10}	0.04	0.13
		$PM_{2.5}$	<0.01	0.02
SP2	Byproduct Storage Area Pile 2 (5)	PM	0.02	0.07
		PM_{10}	<0.01	0.03
		$PM_{2.5}$	<0.01	<0.01
ROADFUG	Road Fugitives (5) Receive Driveway, Air-set	PM	2.03	2.84
		PM_{10}	0.44	0.66
		$PM_{2.5}$	0.08	0.10
		VOC	7.26	1.27

(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
(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) Planned startup and shutdown emissions are included. Maintenance activities, except for those specified in Special Condition No. 30, are not authorized by this permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119.

Date: October 20, 2021