

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. 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)	<u>Emission Rates</u>	
			lb/hr	TPY
ST-B8	Baghouse B-8 Exhaust Stack [Electric Arc Furnance (EAF)-1 and EAF-2]	PM/PM ₁₀	0.22	0.90
		SO ₂	0.80	1.05
		NO _x	17.43	70.23
		CO	37.26	154.76
		VOC	3.93	16.34
ST-B1	Baghouse B-1 Exhaust Stack [NF Mold Machines, NF Pouring Floor Ladle-2 (PRV - 5/6)]	PM/PM ₁₀	0.09	0.36
		SO ₂	0.05	0.06
		NO _x	1.30	4.25
		CO	2.29	8.62
		VOC	3.86	16.18
ST-B2	Baghouse B-2 Exhaust Stack [Royer Handling Machine]	PM/PM ₁₀	0.06	0.24
		SO ₂	0.01	0.01
		NO _x	0.29	0.21
		CO	0.24	0.18
		VOC	1.94	2.44
		NH ₃	0.02	0.06
ST-B18	B18 Baghouse Exhaust Stack [Power Roof Vents (PRV- 1/2/3/4, North Foundry (NF) Sand Tanks and Bins, NF Bentonite Bin, NF Muller, NF Rotary Screen and NFS and Reclaimer] (7)	PM/PM ₁₀	0.28	1.15
		SO ₂	0.05	(4)
		NO _x	1.30	(4)
		CO	2.29	(4)
		VOC	3.86	(4)
ST-B19	Baghouse B-19 Exhuast Stack [Mold Machines, Vibramill, Oscillating Conveyors, Didion, NF Pouring Floor, NF Shakeout Exhaust (SOE)-1] (7)	PM/PM ₁₀	0.34	1.41
		SO ₂	0.05	(4)
		NO _x	1.30	(4)
		CO	2.29	(4)
		VOC	3.86	(4)

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
ST-B9	Baghouse B-9 Exhaust Stack [South Foundry (SF) Shakeout (SOE-2), SF Pouring Floor (PF), No-Bake Molds (Air Set), and Core Room]	PM/PM ₁₀	0.13	0.54
		SO ₂	0.01	0.01
		NO _x	0.28	0.28
		CO	0.24	0.24
		VOC	17.69	71.47
		Non-VOC	0.14	0.37
ST-B20	Baghouse B-20 Exhaust Stack [SF Shakeout Exhaust (SOE-2), SF PF, Vibramill Sand Reclaim, SF Sand Tanks, No-Bake Molds (Air Set), Core Room] (7)	PM/PM ₁₀	0.16	0.67
		VOC	17.69	(5)
		SO ₂	0.01	(5)
		NO _x	0.28	(5)
		CO	0.24	(5)
		Non-VOC	0.14	(5)
ST-B21	Baghouse B-21 Exhaust Stack [SF PF, SF Rotary Screen, South Foundry Muller (SFM), SF Sand Elevator, SF Sand Tanks, Air Set/ No-Bake Molds, Core Room] (7)	PM/PM ₁₀	0.13	0.54
		VOC	17.69	(5)
		SO ₂	0.01	(5)
		NO _x	0.28	(5)
		CO	0.24	(5)
		Non-VOC	0.14	(5)
ST-SCR2	Core Room Scrubber Exhaust Stack	PM/PM ₁₀	0.06	0.23
		VOC	<0.01	<0.01
		SO ₂	<0.01	<0.01
ST-B22	Sand Plant/Sand System Baghouse Stack (7)	PM/PM ₁₀	0.19	0.79
		VOC	5.47	(6)
ST-B23	Pouring and Cooling Baghouse Stack	PM/PM ₁₀	0.19	0.79
		VOC	5.47	22.94
LADLE-3	Ladle Transfer	PM/PM ₁₀	0.01	0.02
		VOC	0.02	0.04
		SO ₂	0.01	0.01
		NO _x	0.06	0.13
		CO	0.08	0.19

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	AIR CONTAMINANTS DATA Emission Rates	
			lb/hr	TPY
OVENFUG-1	Heat Treat Oven No. 1 (8)	PM/PM ₁₀	0.10	0.42
		VOC	<0.10	<0.10
		NO _x	0.80	3.50
		CO	0.17	0.74
		SO ₂	<0.01	<0.01
OVENFUG-2	Heat Treat Oven No. 2 (8)	PM/PM ₁₀	0.10	0.42
		VOC	<0.10	<0.10
		NO _x	0.80	3.50
		CO	0.17	0.74
		SO ₂	<0.01	<0.01
OVENFUG-3	Heat Treat Oven No. 3 (8)	PM/PM ₁₀	0.10	0.42
		VOC	<0.10	<0.10
		NO _x	0.80	3.50
		CO	0.17	0.74
		SO ₂	<0.01	<0.01
OVENFUG-4	Heat Treat Oven No. 4 (8)	PM/PM ₁₀	0.10	0.42
		VOC	<0.10	<0.10
		NO _x	0.80	3.50
		CO	0.17	0.74
		SO ₂	<0.01	<0.01
ST-B17	34 Cu. Ft. Shot Blast Machine (8)	PM/PM ₁₀	0.26	1.13
CLEAN-2	Manual and Booth Grinding Stations (10 each) (8)	PM/PM ₁₀	1.42	6.20
ST-WOOD	Pattern Shop Cyclone (8)	PM	3.60	15.77
		PM ₁₀	1.80	7.88
BTH-1 and BTH-2	Spray Paint Booths (8)	PM/PM ₁₀	0.28	0.38
		VOC	4.73	7.28
		NH ₃	0.13	0.17

(1) Emission point identification - either specific equipment designation or emission point number

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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 PM₁₀.
PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
SO₂ - sulfur dioxide
NO_x - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1.
non-VOC - gaseous emissions that are not considered VOC
NH₃ - ammonia
- (4) Annual emissions included in total rates specified for EPN ST-B1.
- (5) Annual emissions included in total rates specified for EPN ST-B9.
- (6) Annual emissions included in total rates specified for EPN ST-B23.
- (7) Emissions from these sources can exit any of all the associated Stacks (EPNs ST-B18, ST-B19, ST-B20, ST-21, and/or ST-B22).
- (8) Sources are authorized by Texas Commission on Environmental Quality permit by rule and emission rates are estimates.

Dated August 4, 2009