

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 23499

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
E1	Furnace Crucible No. 1 1,200 lb. Tilt (4)	TSP	1.14	0.86
		PM <sub>10</sub>	1.14	0.86
		NO <sub>x</sub>	0.25	0.19
		CO	0.38	0.28
E2	Furnace Crucible No. 2 1,200 lb. Tilt (4)	TSP	1.14	0.86
		PM <sub>10</sub>	1.14	0.86
		NO <sub>x</sub>	0.25	0.19
		CO	0.38	0.28
E3	Furnace Crucible No. 3 1,200 lb. Tilt (4)	TSP	1.14	0.86
		PM <sub>10</sub>	1.14	0.86
		NO <sub>x</sub>	0.25	0.19
		CO	0.38	0.28
E4	Furnace Crucible No. 4 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.26
		CO	0.18	0.38
E5	Furnace Crucible No. 5 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.26
		CO	0.18	0.38
E6	Furnace Crucible No. 6 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.26
		CO	0.18	0.38
E7	Furnace Crucible No. 7 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.26

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		CO	0.18	0.38
E8	Furnace Crucible No. 8 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.26
		CO	0.18	0.38
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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
E9	Furnace Crucible No. 9 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.26
		CO	0.18	0.38
E10	Furnace Crucible No. 10 600 lb. (4)	TSP	0.57	0.64
		PM <sub>10</sub>	0.57	0.64
		NO <sub>x</sub>	0.12	0.14
		CO	0.18	0.20
E11	Furnace Crucible No. 11 600 lb. (4)	TSP	0.57	0.64
		PM <sub>10</sub>	0.57	0.64
		NO <sub>x</sub>	0.12	0.14
		CO	0.18	0.20
E12	Shell Core Machine No. 1 (4)	TSP	1.03	1.55
		PM <sub>10</sub>	1.03	1.55
		NO <sub>x</sub>	0.01	0.01
		CO	0.015	0.015
E13	Shell Core Machine No. 2 (4)	TSP	1.03	1.55
		PM <sub>10</sub>	1.03	1.55
		NO <sub>x</sub>	0.017	0.017
		CO	0.26	0.26
E14	Shell Core Machine No. 3 (4)	TSP	1.03	1.55
		PM <sub>10</sub>	1.03	1.55
		NO <sub>x</sub>	0.033	0.033
		CO	0.05	0.05
E15	Shell Core Machine No. 4 (4)	TSP	1.03	1.55
		PM <sub>10</sub>	1.03	1.55

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		NO <sub>x</sub>	0.033	0.033
		CO	0.05	0.05
E16	Shell Core Machine No. 5 (4)	TSP	1.03	1.55
		PM <sub>10</sub>	1.03	1.55
		NO <sub>x</sub>	0.033	0.033
		CO	0.05	0.05
E17	Airset Sand Molding Machine No. 1 (4)	VOC	0.50	1.0

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
E18	Airset Sand Molding Machine No. 2 (4)	VOC	1.50	3.00
E19	Airset Sand Molding Machine No. 3 (4)	VOC	5.0	10.00
E20	Airset Sand Molding Machine No. 4 (4)	VOC	5.0	10.00
E21	Shake-out Olivine (4)	TSP	4.34	8.68
		PM <sub>10</sub>	2.17	4.34
E22, 23, 24, 26, and 27	Olivine Handling/ Molding (4)	TSP	4.86	9.72
E28	Induction Brass Furnace No. 1 Baghouse Stack Inside (4)	TSP	0.015	0.011
		PM <sub>10</sub>	0.015	0.011
E29	Induction Brass Furnace No. 2 Baghouse Stack Inside (4)	TSP	0.015	0.011
		PM <sub>10</sub>	0.015	0.015
E30	Induction Steel Furnace	TSP	0.025	0.013

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	No. 1 Baghouse Stack Inside (4)	PM <sub>10</sub>	0.025	0.013
E31	Roto-Blast Machine	TSP	0.015	0.011
	No. 1 Baghouse Stack Inside (4)	PM <sub>10</sub>	0.015	0.011
E33	Roto-Blast Machine	TSP	0.015	0.011
	No. 2 Baghouse Stack Inside (4)	PM <sub>10</sub>	0.015	0.011
E35	Electric Arc Furnace (Steel) Baghouse Stack Inside (4)	TSP	1.70	4.25
		PM <sub>10</sub>	1.70	4.25
		CO	20.00	50.00
EPN-5	EIF 4 And 4A/Mold Pour Baghouse Stack Inside (4)	TSP	2.14	9.37
		PM <sub>10</sub>	2.14	9.37

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
EPN-23A	Anneal Furnace No. 1 Exhaust	TSP	0.10	0.20
		PM <sub>10</sub>	0.10	0.20
		NO <sub>x</sub>	0.20	0.50
		CO	0.30	0.80
EPN-23B	Anneal Furnace No. 2 Exhaust	TSP	0.10	0.20
		PM <sub>10</sub>	0.10	0.20
		NO <sub>x</sub>	0.10	0.25
		CO	0.15	0.40
F-1	Material Handling/ Storage (4)	TSP	0.80	1.20
		PM <sub>10</sub>	0.40	0.60

- (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) TSP - total particulate matter including PM<sub>10</sub>

PM<sub>10</sub> - particulate matter less than 10 microns in diameter

NO<sub>x</sub> - total oxides of nitrogen

CO - carbon monoxide

VOC - volatile organic compounds

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule and production rates:

Hrs/day 16 Days/week 5 Weeks/year 50

Maximum iron/steel casting rate: Tons/hour 2.07 Tons/year 8,300

Maximum aluminum casting rate: Tons/hour 4.5 Tons/year 18,000

Maximum brass/bronze casting rate: Tons/hour 0.3 Tons/year 450

Dated\_\_\_\_\_

