

## 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 *	Source	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2)	Name (3)	<u>lb/hr</u>	<u>TPY</u>
AT-1	Furnace Crucible No. 1 1,000 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
		SO <sub>2</sub>	<0.01	<0.01
AT-2	Furnace Crucible No. 2 1,000 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
		SO <sub>2</sub>	<0.01	<0.01
AT-3	Furnace Crucible No. 3 1,000 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
		SO <sub>2</sub>	<0.01	<0.01
A-1	Automatic Molding System And Olivene Sand Handling (4) 0.25	TSP	0.50	0.50
		PM <sub>10</sub>	0.25	0.25
A-2	Core Making ARCA (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
		SO <sub>2</sub>	<0.01	<0.01

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Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
A-3	Cutoff/Grinding (4)	TSP	1.00	1.00
		PM <sub>10</sub>	0.50	0.50
S1	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
		SO <sub>2</sub>	<0.01	<0.01
S2	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
		SO <sub>2</sub>	<0.01	<0.01
S3	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
		SO <sub>2</sub>	<0.01	<0.01
S4	Shell Core Machine No. 4 (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
		SO <sub>2</sub>	<0.01	<0.01
S5	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
		SO <sub>2</sub>	<0.01	<0.01

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Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
EF-1	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	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01

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Emission *	Source	Air Contaminant	Emission	Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
EF-2	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	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01
EF-3	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	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01
EF-4	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	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01
EF-5	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	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01
EF-6	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	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01
EF-7	Furnace Crucible No. 10 600 lb. (4)	TSP	0.57	1.20
		PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.29
		CO	0.18	0.43

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Emission *	Source	Air Contaminant	Emission	Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		SO <sub>2</sub>	<0.01	<0.01
EF-8	Furnace Crucible No. 11	TSP	0.57	1.20
	600 lb. (4)	PM <sub>10</sub>	0.57	1.20
		NO <sub>x</sub>	0.12	0.29
		CO	0.18	0.43
		SO <sub>2</sub>	<0.01	<0.01
B-1	Air Set Sand Mixer/Molding		VOC	5.00
	10.00			
	Machine No. 1 (4)			
B-2	Air Set Sand Mixer/Molding		VOC	5.00
	10.00			
	Machine No. 2 (4)			
CR-1	Air Set Sand Mixer/Molding		VOC	0.50
	0.50			
	Machine No. 3 (4)			
CR-2	Air Set Sand Mixer/Molding		VOC	1.50
	3.00			
	Machine No. 4 (4)			
AF-1	850-KVA Electric Arc	TSP	0.78	1.95
	Furnace (4)	PM <sub>10</sub>	0.78	1.95
		CO	9.19	22.97
AF-2	1,000-KVA Electric Arc	TSP	0.92	2.30
	Furnace (4)	PM <sub>10</sub>	0.92	2.30
		CO	10.81	27.03
EPN-23A	Anneal Furnace No. 1	TSP	0.10	0.20
	Exhaust	PM <sub>10</sub>	0.10	0.20

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Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		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  
 SO<sub>2</sub> - sulfur dioxide  
 CO - carbon monoxide  
 VOC - volatile organic compounds
- (4) Fugitive emissions are an estimate only.

\* 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

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Emission *	Source	Air Contaminant	Emission	Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
	Tons/year	450		

Dated\_\_\_\_\_