

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 9627

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)	Emission Rates *	
			lb/hr	TPY
PF-1	Revolatilizing Furnace-1 Baghouse	PM ₁₀	0.307	1.237
		VOC	0.007	0.031
		NO _x	0.185	0.810
		SO ₂	0.001	0.005
		CO	0.039	0.170
PF-2	Revolatilizing Furnace-1 Baghouse	PM ₁₀	0.352	1.420
		VOC	0.007	0.031
		NO _x	0.185	0.810
		SO ₂	0.001	0.005
		CO	0.039	0.170
PF-3	Cupola Furnace Baghouse	PM ₁₀	0.307	1.237
		VOC	0.004	0.018
		NO _x	0.109	0.477
		SO ₂	<0.001	0.003
		CO	0.023	0.100
PF-4	Cupola Furnace Baghouse	PM ₁₀	0.278	1.122
		VOC	0.004	0.018
		NO _x	0.109	0.477
		SO ₂	<0.001	0.003
		CO	0.023	0.100
PF-5	Revolatilizing Furnace-3 Baghouse	PM ₁₀	0.537	2.164
		VOC	0.014	0.062
		NO _x	0.370	1.619
		SO ₂	0.002	0.010
		CO	0.078	0.340

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			lb/hr	TPY
PF-6	MS4 Classifier Baghouse	PM ₁₀	0.246	0.493
PF-7	MS5 Classifier Baghouse	PM ₁₀	0.486	0.972
HF-1	North Fullers Blast Furnace Baghouse	PM ₁₀	0.774	3.121
		VOC	0.054	0.219
		NO _x	2.378	9.616
		SO ₂	29.840	120.310
		CO	0.171	0.691
HF-2	South Fullers Blast Furnace Baghouse	PM ₁₀	1.149	4.632
		VOC	0.054	0.219
		NO _x	2.378	9.616
		SO ₂	29.840	120.310
		CO	0.171	0.691
HF-3	Cupola Hygiene Baghouse	PM ₁₀	0.506	2.039
HF-4	Auger Packer Baghouse	PM ₁₀	0.318	1.283
HF-10	Crude Oxide Silo Hygiene Baghouse	PM ₁₀	0.037	0.148
CVS-1	Old Central Vacuum System Baghouse	PM ₁₀	0.092	0.370
CVS-2	New Central Vacuum System Baghouse	PM ₁₀	0.092	0.370
SODANTFURN	Sodium Antimonate Furnace	PM	0.019	0.076
		VOC	0.010	0.039
		NO _x	0.251	1.012
		SO ₂	0.002	0.006
		CO	0.053	0.213
HF-22	Sodium Antimonate Hygiene Baghouse 2	NaSbO ₃	0.354	1.427

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			lb/hr	TPY
HF-15	Ongard II Fugitive Baghouse	PM ₁₀	0.028	0.114
		VOC	0.014	0.058
		NO _x	0.378	1.530
		SO ₂	0.002	0.009
		CO	0.079	0.169
		ZnO	0.203	0.818
		MgO	0.304	1.227
PF-8	Ongard II Packaging Baghouse	ZnO	0.205	0.828
		MgO	0.308	1.241
ATCBLR	Antimony Trichloride Boiler	PM	0.002	0.010
		VOC	0.001	0.005
		NO _x	0.033	0.133
		SO ₂	<0.001	<0.001
		CO	0.007	0.028
ATCFUG	Antimony Trichloride Area Fugitives (4)	Cl ₂	0.078	0.100
		TSP	0.075	0.017
		PM ₁₀	0.008	0.002
WS-1	Antimony Trichloride Venturi Scrubber	SbCl ₃	0.075	0.302
PF-9	Antimony Sulfide Grinder Baghouse	Sb ₂ S ₃	0.078	0.315
HF-20	Compounding Plant Baghouse	PM ₁₀	0.275	1.109
HF-21	Pilot Plant Baghouse	PM ₁₀	0.025	0.101
ZBPLNT1	Building Vent 1 (4)	Zinc Borate	0.005	0.022
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190

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			<u>lb/hr</u>	<u>TPY</u>

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
ZBPLNT2	Building Vent 2 (4)	Zinc Borate	0.005	0.022
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190
ZBPLNT3	Building Vent 3 (4)	Zinc Borate	0.005	0.022
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190
ZBPLNT4	Building Vent 4 (4)	Zinc Borate	0.005	0.022
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190
ZNBORBLR	Zinc Borate Boiler	PM	0.001	0.005
		VOC	<0.001	0.002
		NO _x	0.015	0.061
		SO ₂	<0.001	<0.001
		CO	0.003	0.013
TF-1	Transfer System	PM ₁₀	0.184	0.740
Slgcrusher	Slag Crusher (4)(5)	TSP	0.189	0.064
		PM ₁₀	0.011	0.004
Slgscreen	Slag Screen (4)(5)	TSP	0.108	0.036
		PM ₁₀	0.081	0.027
Slgpiles	Slag Stockpile (4)	TSP		2.713
		PM ₁₀		1.308
AST-1	Diesel Tank Vent	VOC	0.014	<0.001
AST1-F	Diesel Tank System (4)	VOC	<0.001	<0.001
AST-2	Gasoline Tank Vent	VOC	2.415	0.051
AST2-F	Gasoline Tank System (4)	VOC	0.110	0.069

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FUGC	Crude Building (4)	PM ₁₀	0.001	0.004
FUGF	Furnace Building (4)	PM ₁₀	0.001	0.004
FUGS	Sodium Antimony Bldg (4)	PM ₁₀	<0.001	0.001
FUGB	Banbury Bldg (4)	PM ₁₀	<0.001	<0.001
FUGN	Inter Warehouse North (4)	PM ₁₀	0.001	0.004
FUGW	Inter Warehouse West (4)	PM ₁₀	0.001	0.004

(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 suspended particulate matter (including PM₁₀)
 PM₁₀ - particulate matter less than 10 microns in diameter
 VOC - volatile organic compounds as defined in General Rule 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 CO - carbon monoxide
 NaSbO₃ - sodium antimonate
 ZnO - zinc oxide
 MgO - magnesium oxide
 SbCl₃ - antimony chloride
 Cl₂ - chlorine
 Sb₂S₃ - antimony sulfide

(4) Fugitive emissions are an estimate only.

(5) Maximum allowable hourly throughput is 15 tons and the maximum annual throughput is 10,080 tons. Crusher and screen shall not be operated during normal plant operations and then for a maximum of 28 days per year.

* Emission rates are based on and the facilities (except slag crusher and screen) are limited by the following maximum operating schedule:

Hrs/day 7 Days/week 24 Weeks/year 48 or Hrs/year 8,064