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	Emission Rates 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 Cartridge Filter	PM_{10}	0.651	2.623
		VOC	0.062	0.014
		NO_x	0.370	1.619
		SO_2	0.002	0.010

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Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
		CO	0.078	0.340
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

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Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
		CO	0.053	0.213
HF-22	Sodium Antimonate Hygiene Baghouse 2	$NaSbO_3$	0.354	1.427
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	0.320
		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_2S_3	0.078	0.315
HF-20	Compounding Plant Baghouse	PM_{10}	0.275	1.109

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Emission Point No. (1) *	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	Emission Rates TPY
HF-21	Pilot Plant Baghouse	PM_{10}	0.025	0.101
HF-24	Flexkleen Baghouse	Zinc Borate	0.070	0.283
HF-25	Feed Hopper Baghouse	PM_{10}	0.064	0.260
HF-26	Calciner, Milling, and Classifying Baghouse	PM_{10}	0.430	1.732
PF-11	Milling Baghouse	PM_{10}	0.142	0.571
SAF-2	Calciner Furnace	PM_{10}	0.030	0.121
		VOC	0.013	0.053
		NO_x	0.251	1.011
		SO_2	0.002	0.006
		CO	0.053	0.212
ZBPLNT1	Building Vent 1 (4)	Zinc Borate	0.004	0.015
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190
ZBPLNT2	Building Vent 2 (4)	Zinc Borate	0.004	0.015
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190
ZBPLNT3	Building Vent 3 (4)	Zinc Borate	0.004	0.015
		ZnO	0.019	0.077
		Boric Acid	0.047	0.190
ZBPLNT4	Building Vent 4 (4)	Zinc Borate	0.004	0.015
		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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		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
FUGC	Crude Building (4)	PM_{10}	0.001	0.004
FUGF	Furnace Building (4)	PM_{10}	0.001	0.004
FUGS	Sodium Antimony Building (4) 0.001	PM_{10}		<0.001
FUGB	Banbury Building (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.

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(3) PM_{10} - 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
SO_2 - sulfur dioxide
CO - carbon monoxide
PM - particulate matter
$NaSbO_3$ - sodium antimonate
ZnO - zinc oxide
MgO - magnesium oxide
Cl_2 - chlorine
$SbCl_3$ - antimony trichloride
Sb_2S_3 - antimony sulfide
TSP - total suspended particulate matter (including PM_{10})
(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 24 Days/week 7 Weeks/year 48 or Hrs/year 8,064

Dated