

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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>

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Permit No. 21826

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.

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Emission	Source	Air Contaminant	<u>Emission Rates *</u>	
Point No. (1)	Name (2)	Name (3)	<u>lb/hr</u>	<u>TPY</u>
F-1	Melting Furnace 1	PM ₁₀	0.70	3.05
		VOC	0.04	0.19
		NO _x	2.06	9.03
		SO ₂	0.01	0.04
		CO	0.52	2.26
		HF	0.02	0.09
F-2	Melting Furnace 2	PM ₁₀	0.45	1.97
		VOC	0.02	0.11
		NO _x	1.23	5.41
		SO ₂	0.01	0.03
		CO	0.31	1.35
		HF	0.01	0.06
F-3	Melting Furnace 3	PM ₁₀	0.27	1.18
		VOC	0.02	0.07
		NO _x	0.82	3.61

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
		SO ₂	<0.01	0.02
		CO	0.21	0.90
		HF	0.01	0.04
F-4	Melting Furnace 4	PM ₁₀	0.70	3.05
		VOC	0.04	0.19
		NO _x	2.06	9.03
		SO ₂	0.01	0.04
		CO	0.52	2.26
		HF	0.02	0.09
WE-1	Water Evaporator (SAMSCO) Stack	PM ₁₀	0.01	0.04
		VOC	<0.01	0.01
		VOC (a)	<0.01	<0.01
		NO _x	0.08	0.33
		SO ₂	<0.01	<0.01
		CO	0.02	0.07
WE-2	Water Evaporator (Landa) Stack	PM ₁₀	<0.01	0.03
		VOC	<0.01	0.01
		NO _x	0.06	0.25
		SO ₂	<0.01	<0.01
		CO	0.01	0.05
DH-1	Holding Furnaces 1, 2, 3, 0.01	PM		0.02
	4, 14, 15, 16, 17, PM ₁₀		0.01	0.01
	19, 20, and Zinc VOC		0.01	0.01
	Holding Furnace (4)	NO _x	0.25	0.18
		SO ₂	<0.01	<0.01
		CO	0.21	0.15
DH-2	Holding Furnaces 5, 6, and 18 (4)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01

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			lb/hr	TPY
		VOC	<0.01	<0.01
		NO _x	0.07	0.05
		SO ₂	<0.01	<0.01
		CO	0.06	0.04
DH-3	Holding Furnaces 8, 9, and 10	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	0.07	0.05
		SO ₂	<0.01	<0.01
		CO	0.06	0.04
DH-4	Holding Furnaces 11, 12, and 13 (4)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	0.07	0.05
		SO ₂	<0.01	<0.01
		CO	0.06	0.04
EF -1, 2 and 3	Holding Furnaces 21 and 22 (4)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	0.05	0.03
		SO ₂	<0.01	<0.01
		CO	0.04	0.03
EF -6	Holding Furnaces 25 and 26 (4)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	0.05	0.03
		SO ₂	<0.01	<0.01
		CO	0.04	0.03

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
EF -7	Holding Furnaces 24 (4)	PM	<0.01	<0.01
		<0.01		
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	0.02	0.02
		SO ₂	<0.01	<0.01
EF -8	Holding Furnaces 23 (4)	CO	0.02	0.01
		PM	<0.01	<0.01
		<0.01		
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	0.02	0.02
HTF -1	Heat Treat Oven Stack	SO ₂	<0.01	<0.01
		CO	0.02	0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		VOC	<0.01	<0.01
		NO _x	<0.01	0.01
VD-1	ALMCO Vibratory Dryer Stack	SO ₂	<0.01	<0.01
		CO	0.01	0.01
		PM	<0.01	0.03
		PM ₁₀	<0.01	0.01
		VOC	<0.01	0.01
		NO _x	0.05	0.22
VD-2	Roto Finish Dryer Stack	SO ₂	<0.01	<0.01
		CO	0.04	0.18
		PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		VOC	<0.01	0.01
		NO _x	0.08	0.24
		SO ₂	<0.01	<0.01
		CO	0.07	0.21

WDC	Wheelabrator Cartridge Filter	PM ₁₀	1.15	5.03
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- (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) PM - total particulate suspended in the atmosphere, including PM₁₀.
 PM₁₀ - particulate matter less than or equal to 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
- VOC - volatile organic compounds as defined in General Rule 101.1
 VOC(a) - for VOC emitted during evaporation process
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- CO - carbon monoxide
- HF - hydrogen fluoride

Permit No. 21826
 Page 5

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- (4) Fugitive emissions are an estimate only.
- * Emission rates are based on and the furnaces are limited to the maximum hourly aluminum production of 4,500 pounds for Furnace 1, 3,000 pounds for Furnace 2, 1,800 pounds for Furnace 3, and 4,500 pounds for Furnace 4 with a maximum annual plant throughput of 45,000,000 pounds of aluminum. Additionally, emission rates are based on and the water evaporators are limited to the maximum hourly wastewater throughput of 63 gallons for the SAMSCO water evaporator and 50 gallons for the Landa water evaporator with a maximum annual

plant throughput of 989,880 gallons.

Hrs/day_____Days/week_____Weeks/year_____or Hrs/year 8,760

Dated_____