Permit Number 1147A

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.

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
18	Hard Lead Ventilation	PM	0.98	3.38
	Baghouse Stack	PM_{10}	0.98	3.38
		Pb	0.06	0.24
		NO_x	11.28	0.60
		SO_2	0.04	0.17
		CO	8.26	4.26
		VOC	1.65	4.85
		Trace Compounds	0.01	0.01
21	Soft Lead Refining	PM	1.58	5.99
	Baghouse Stack	PM_{10}	1.58	5.99
	3	SO ₂	5.33	12.49
		NOx	11.92	9.33
		CO	26.44	64.14
		Pb	0.17	0.38
		VOC	15.39	48.23
		HCI	0.18	0.74
		H_2SO_4	0.27	1.17
		Trace Compounds	0.01	0.01
22	Specialty Alloy	PM	1.28	4.51
	Baghouse Stack	PM ₁₀	1.28	4.51
	Bagilouse Stack	Pb	0.02	0.08
		NO _x	11.03	0.58
		SO ₂	0.42	1.00
		CO	8.08	5.00
		VOC	1.62	4.75
		Trace Metals	0.04	0.10
23	Refining Building	PM	0.21	0.56
	Vacuum Stack	PM_{10}	0.21	0.56
	Vacadin Stack	Pb	0.03	0.11
		1 0	0.00	0.11

Emission	Source	Air Contaminant	<u>Emissio</u>	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>	
37	Reverberatory/Blast Furnaces Fugitives Baghouse Stack	PM PM ₁₀ Pb NO _x SO ₂ CO VOC HCI H ₂ SO ₄ SiO ₂ Trace Metals	8.21 8.21 0.16 0.48 21.68 8.75 15.16 0.21 2.82 0.02 0.01	30.49 30.49 0.39 2.08 68.31 28.32 45.81 0.92 12.34 0.03 0.04	
38	Reverberatory/Blast Furnaces Metallurgical Scrubber Stack	PM PM ₁₀ Pb NO _x SO ₂ CO VOC Cd SiO ₂ HCl H ₂ SO ₄ Trace Metals	4.63 4.63 0.64 14.60 445.59 298.58 7.61 0.02 0.09 0.74 4.96 0.04	19.12 19.12 1.62 59.53 1199.51 1190.35 33.32 0.05 0.41 3.23 21.74 0.10	
45	Raw Material Storage/Shredder Baghouse Stack	PM PM ₁₀ Pb	2.85 2.85 0.20	10.57 10.57 0.77	
48	Battery Breaker Scrubber Stack	PM PM_{10} Pb H_2SO_4	2.45 2.45 0.06 0.06	4.68 4.68 0.13 0.14	
48FUG	Battery Breaker Scrubber	H ₂ SO ₄	0.05	0.22	
51	Sodium Bicarbonate	PM	0.17	0.75	

Emission	Source	Air Contaminant	Emission	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>	
	Filter Vent	PM_{10}	0.17	0.75	
54	Soft Lead Kettle Heating	$\begin{array}{c} PM \\ PM_{10} \\ VOC \\ NO_{x} \\ CO \\ SO_{2} \end{array}$	0.07 0.07 0.03 0.60 0.50 <0.01	0.32 0.32 0.14 2.63 2.21 0.02	
55	Hard Lead Kettle Heating	$\begin{array}{c} PM \\ PM_{10} \\ VOC \\ NO_{x} \\ CO \\ SO_2 \end{array}$	0.07 0.07 0.03 0.60 0.50 <0.01	0.32 0.32 0.14 2.63 2.21 0.02	
44	Raw Material Storage (4)	PM PM ₁₀ Pb	1.43 0.72 0.03	5.72 2.86 0.11	
10 and 35	Furnace Fugitives (4)	PM PM ₁₀ Pb Cd Trace Metals	1.83 1.83 0.27 0.01 <0.01	8.00 8.00 1.20 0.04 <0.04	
36	Refining/Casting (4)	PM PM ₁₀ Pb Trace Metals	0.03 0.03 <0.01 <0.01	0.10 0.10 <0.01 <0.01	
52	Slag Handling (4)	PM PM ₁₀ Pb Trace Metals	0.07 0.07 0.01 <0.01	0.31 0.31 0.05 <0.01	

Source	Air Contaminant	Emission Rates *	
Name (2)	Name (3)	lb/hr	TPY
• •			
Vehicle Traffic (4)	PM		0.63
, ,	PM_{10}		0.31
	Pb		0.31
Material Handling (4)	PM	4.51	1.38
	PM_{10}	0.45	0.14
	Pb	0.32	0.10
•			3.12
Baghouse Stack			3.12
			0.11
	Al	0.05	0.10
Reagent Silo No.1	PM	0.36	0.38
•			0.38
	10		0.00
Reagent Silo No. 2	PM	0.36	0.38
Baghouse Stack	PM ₁₀	0.36	0.38
	Vehicle Traffic (4) Material Handling (4) Slag Fixation Baghouse Stack Reagent Silo No.1 Baghouse Stack Reagent Silo No.2	Name (2) Vehicle Traffic (4) PM	Name (2) Name (3) Ib/hr Vehicle Traffic (4) PM PM10 PM10 Material Handling (4) PM 4.51 PM10 0.45 0.45 Pb 0.32 Slag Fixation PM 1.71 Baghouse Stack PM10 1.71 Pb 0.12 0.12 Al 0.05 Reagent Silo No.1 PM 0.36 Reagent Silo No. 2 PM 0.36

- (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 particulate matter, suspended in the atmosphere, including PM₁₀
 - PM_{10} particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - Pb lead and lead compounds as lead
 - NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - CO carbon monoxide
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - HCI hydrochloric acid mist/fumes
 - H₂SO₄ sulfuric acid mist/fumes
 - SiO₂ silica
 - Cd cadmium and cadmium compounds as cadmium
 - Al aluminum Trace Compounds
 - **Trace Metals**

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES
* Emission rates are based on and the facilities are limited by the following maximum operating schedule and maximum production rates:
24_Hrs/day7_Days/week52_Weeks/year or _8,760_Hrs/year
Maximum Allowable Molten Lead Production Rates:
Reverberatory Furnace: <u>20</u> Tons/hour
Blast Furnace: <u>12</u> Tons/hour
Combined Maximum Molten Lead Production:
400 Tons/day and 72,000 Tons/year
Dated January 14, 2003