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 (5)	PM	0.98	3.38
	Baghouse Stack	PM_{10}	0.98	3.38
		Pb	0.07	0.29
		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 (5)	PM	1.58	5.99
	and Feed Dryer	PM ₁₀	1.58	5.99
	Baghouse Stack	SO ₂	5.33	12.49
	•	NO_x	11.92	9.33
		CO	26.44	64.14
		Pb	0.25	0.73
		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 (5)	PM	1.28	4.51
<i></i>	Baghouse Stack	PM ₁₀	1.28	4.51
	9	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

Emission	Source	Air Contaminant		n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
23	Refining Building Vacuum Stack	PM PM ₁₀ Pb	0.21 0.21 0.03	0.56 0.56 0.11
37	Reverberatory/Blast (5) 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 0.09 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 (5) Furnaces Metallurgical Scrubber Stack	PM PM $_{10}$ Pb NO $_{x}$ SO $_{2}$ CO VOC Cd SiO $_{2}$ HCI H $_{2}$ SO $_{4}$ Trace Metals	4.63 4.63 0.20 14.60 445.59 298.58 7.61 0.02 0.09 0.74 4.96 0.04	19.12 19.12 0.89 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 0.25	10.57 10.57 1.10
48	Battery Breaker Scrubber Stack	PM PM ₁₀	2.45 2.45	4.68 4.68

Emission	Source	Air Contaminant	Emission	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		Pb H₂SO₄	0.06 0.06	0.13 0.14
48FUG	Battery Breaker Scrubber	H ₂ SO ₄	0.05	0.22
51	Sodium Bicarbonate Filter Vent	PM PM ₁₀	0.17 0.17	0.75 0.75
54	Soft Lead Kettle Heating Stack	$\begin{array}{c} PM \\ PM_{10} \\ VOC \\ NO_{x} \\ CO \\ SO_{2} \end{array}$	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 Stack	$\begin{array}{c} PM \\ PM_{10} \\ VOC \\ NO_{x} \\ CO \\ SO_2 \end{array}$	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) (6)	PM PM ₁₀ Pb Cd Trace Metals	1.83 1.83 0.08 0.01 <0.01	8.00 8.00 0.37 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 <0.04 <0.01

Emission	mission Source A		Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
52	Slag Handling (4)	PM	0.07	0.31
		PM_{10}	0.07	0.31
		Pb	0.01	0.05
		Trace Metals	< 0.01	<0.01
41, 42, and 43	Vehicle Traffic (4) (6)	PM		0.63
		PM_{10}		0.31
		Pb		0.17
53	Material Handling (4)	PM	1.00	0.41
	3()	PM_{10}	0.45	0.14
		Pb	0.13	0.05
00	Olas E' atias	DIA	4 74	0.40
39	Slag Fixation	PM	1.71	3.12
	Baghouse Stack	PM_{10}	1.71	3.12
		Pb	0.12	0.11
		Al	0.05	0.10
49	Reagent Silo No.1	PM	0.36	0.38
	Baghouse Stack	PM ₁₀	0.36	0.38
50	Reagent Silo No. 2	PM	0.36	0.38
	Baghouse Stack	PM_{10}	0.36	0.38

⁽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 PM_{10}

PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM 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

HCl - hydrochloric acid mist/fumes

H₂SO₄ - sulfuric acid mist/fumes

SiO₂ - silica

Cd - cadmium and cadmium compounds as cadmium

Al - aluminum

- (4) Fugitive emissions are an estimate only.
- (5) Trace compounds and metals are addressed in the permit file.
- (6) Emission rate (ER) values are the total for all listed EPNs, i.e. not an individual ER for each EPN.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule and maximum production rates:

<u>24</u> Hrs/day <u>7</u> Days/week <u>52</u> Weeks/year or <u>8,760</u> Hrs/year

Dated December 28,2010