Emission Sources - Maximum Allowable Emission Rates

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, sources, and related activities. 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	
			lbs/hour	TPY (4)
39A	Slag Treatment Enclosure Baghouse Stack	PM	0.55	2.43
		PM_{10}	0.55	2.43
		Pb	0.0388	0.0668
		Al	0.05	0.10
48A	Battery Breaker Enclosure Baghouse Stack	PM	1.12	4.92
		PM_{10}	1.12	4.92
		Pb	0.0117	0.0228
		H_2SO_4	0.05	0.22
35A	RF, Refining, and Casting Enclosure Baghouse Stack	PM	1.12	4.92
		PM_{10}	1.12	4.92
		Pb	0.0238	0.0462
10A	Blast Furnace Enclosure Baghouse Stack	PM	1.12	4.92
		PM_{10}	1.12	4.92
		Pb	0.0238	0.0462
BUILDFUG	Total Enclosure Fugitives	PM	0.0436	0.1454
		PM_{10}	0.0310	0.1141
		Pb	0.0026	0.0062
		Cd	0.0001	0.0004
		Trace Metals	0.0003	0.0006

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ROADFUG	Vehicle Traffic Fugitives (5&7)	PM	-	0.10
		PM_{10}	-	0.02
		Pb	-	0.0073
41, 42, 43	Vehicle Traffic Fugitives (5), (7), (8)	PM	--	0.63
		PM_{10}	--	0.31
		Pb	--	0.17
18	Hard Lead Ventilation Baghouse Stack (6)	PM	0.98	3.38
		PM_{10}	0.98	3.38
		Pb (9)	0.07	0.29
		Pb (10)	0.0150	0.0657
		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 and Feed Dryer Baghouse Stack (6)	PM	1.58	5.99
		PM_{10}	1.58	5.99
		Pb (9)	0.25	0.73
		Pb (10)	0.0850	0.3723
		SO_2	5.33	12.49
		NO_x	11.92	9.33
		CO	26.44	64.14

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		VOC	15.39	48.23
		HCl	0.18	0.74
		Trace Compounds	0.01	0.01
		H_2SO_4	0.27	1.17
22	Specialty Alloy Baghouse Stack (6)	PM	1.28	4.51
		PM_{10}	1.28	4.51
		Pb (9)	0.02	0.08
		Pb (10)	0.0122	0.0533
		SO_2	0.42	1.00
		NO_x	11.03	0.58
		CO	8.08	5.00
		VOC	1.62	4.75
		Trace Metals	0.04	0.10
23	Refining Building Vacuum Stack	PM	0.21	0.56
		PM_{10}	0.21	0.56
		Pb (9)	0.03	0.11
		Pb (10)	0.0020	0.0088
37	Reverberatory/Blast Furnace Fugitives Baghouse Stack (6)	PM	8.21	30.49
		PM_{10}	8.21	30.49
		Pb (9)	0.09	0.39
		Pb (10)	0.04500	0.1971
		SO_2	21.68	68.31
		NO_x	0.48	2.08
		CO	8.75	28.32
		VOC	15.16	45.81

Emission Sources - Maximum Allowable Emission Rates

		HCl	0.21	0.92
		Trace Metals	0.01	0.04
		H_2SO_4	2.82	12.34
		SiO_2	0.02	0.03
38	Reverberatory/Blast Metallurgical Scrubber Baghouse Stack (6)	PM	4.63	19.12
		PM_{10}	4.63	19.12
		Pb (9)	0.20	0.89
		Pb (10)	0.0769	0.3367
		SO_2	445.59	1199.51
		NO_x	14.60	59.53
		CO	298.58	1190.35
		VOC	7.61	33.32
		HCl	0.74	3.23
		Trace Metals	0.04	0.10
		H_2SO_4	4.96	21.74
		SiO_2	0.09	0.41
		Cd	0.02	0.05
45	Raw Material Storage/Shredder Baghouse Stack	PM	2.85	10.57
		PM_{10}	2.85	10.57
		Pb (9)	0.25	1.10
		Pb (10)	0.0850	0.3723
48	Battery Breaker Scrubber Stack	PM	2.45	4.68
		PM_{10}	2.45	4.68

Emission Sources - Maximum Allowable Emission Rates

		Pb	0.0036	0.0157
		H_2SO_4	0.06	0.14
48FUG	Battery Breaker Fugitives (5), (11)	H_2SO_4	0.05	0.22
51	Sodium Bicarbonate Filter Vent	PM	0.17	0.75
		PM_{10}	0.17	0.75
54	Soft Lead Kettle Heating Stack	PM	0.07	0.32
		PM_{10}	0.07	0.32
		VOC	0.03	0.14
		NO_x	0.60	2.63
		CO	0.50	2.21
		SO_2	<0.01	0.02
55	Hard Lead Kettle Heating Stack	PM	0.07	0.32
		PM_{10}	0.07	0.32
		VOC	0.03	0.14
		NO_x	0.60	2.63
		CO	0.50	2.21
		SO_2	<0.01	0.02
44	Covered Raw Material Storage (5), (11)	PM	1.43	5.72
		PM_{10}	0.72	2.86
		Pb	0.03	0.11
10 and 35	Furnace Fugitives (5), (11)	PM	1.83	8.00
		PM_{10}	1.83	8.00

Emission Sources - Maximum Allowable Emission Rates

		Pb	0.08	0.37
		Cd	0.01	0.04
		Trace Metals	<0.01	<0.04
36	Refining/Casting Fugitives (5), (11)	PM	0.03	0.10
		PM_{10}	0.03	0.10
		Pb	<0.01	<0.04
		Trace Metals	<0.01	<0.01
52	Slag Handling Fugitives (5), (11)	PM	0.07	0.31
		PM_{10}	0.07	0.31
		Pb	0.01	0.05
		Trace Metals	<0.01	<0.01
53	Material Handling Fugitives (5), (11)	PM	1.00	0.41
		PM_{10}	0.45	0.14
		Pb	0.13	0.05
39	Slag Fixation Baghouse Stack (12)	PM	1.71	3.12
		PM_{10}	1.71	3.12
		Pb	0.12	0.11
		Al	0.05	0.10
49	Reagent Silo No. 1 Baghouse Stack	PM	0.36	0.38
		PM_{10}	0.36	0.38
50	Reagent Silo No. 2 Baghouse Stack	PM	0.36	0.38
		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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen

Emission Sources - Maximum Allowable Emission Rates

SO_2	- sulfur dioxide
PM	- total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10}	- total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$	- particulate matter equal to or less than 2.5 microns in diameter
CO	- carbon monoxide
HCl	-hydrochloric acid mist/fumes
H_2SO_4	-sulfuric acid mist/fumes
SiO_2	-silica
Cd	-cadmium and cadmium compounds as cadmium
Al	-aluminum

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Trace compounds and metals are addressed in the permit file.
(7) EPN ROADFUG authorized emissions supersede EPN 41, 42, and 43 authorized emissions effective upon completion of rerouting traffic as represented in the permit alteration submitted to the TCEQ on January 6, 2012 (TCEQ Project Number 173225).
(8) Emission rate (ER) values are the total for all listed EPNs, i.e., not an individual ER for each EPN.
(9) These lead emissions are authorized until such time as secondary HEPA filtration is installed in accordance with the permit alteration submitted to the TCEQ on January 6, 2012 (TCEQ Project Number 173225).
(10) These lead emissions are effective after installing secondary HEPA filtration in accordance with the permit alteration submitted to the TCEQ on January 6, 2012 (TCEQ Project Number 173225).
(11) Emissions from these fugitive sources are authorized until such time as the total enclosures are employed in accordance with the permit alteration submitted to the TCEQ on January 6, 2012 (TCEQ Project Number 173225).
(12) Emissions from EPN 39 Slag Fixation Baghouse stack are authorized until such time as the new slag treatment operation and enclosure are employed in accordance with the permit alteration submitted to the TCEQ on January 6, 2012 (TCEQ Project Number 173225).

Date: _____