### Permit Number 8647

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)	<u>Emissior</u> lb/hr	n Rates TPY*
		Name (o)	10/111	
SPECIAL METALS P	PLANT			
29	Autoclave East (6) (7) Combining Tank	PM <sub>10</sub> /H <sub>2</sub> SO <sub>4</sub> SO <sub>2</sub>	<1.00 <1.00	<1.00 <1.00
SMPFUG	Sulfuric Acid Transfers (4) (6) (Indoors and Outdoors)	(7) PM <sub>10</sub> /H <sub>2</sub> SO <sub>4</sub>	<0.46	<2.00
ANODE CASTING				
7-1	West Anode Casting (5) Baghouse	$CO$ $NO_x$ $SO_2$ $PM_{10}$ $Pb$ $Cu$ $VOC$	69.40 3.80 15.70 3.81 0.01 0.01 0.44	120.20 6.60 16.72 9.91 0.10 0.10 0.80
7-2	Middle Anode Casting (5) Baghouse	$CO$ $NO_x$ $SO_2$ $PM_{10}$ $Pb$ $Cu$ $VOC$	69.40 3.80 15.70 3.81 0.01 0.01 0.44	120.20 6.60 16.72 9.91 0.10 0.10 0.80
7-3	East Anode Casting (5) Baghouse	CO NO <sub>x</sub> SO <sub>2</sub>	69.40 3.80 15.70	120.20 6.60 16.72

# AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY*	
		PM <sub>10</sub> Pb Cu VOC	3.81 0.01 0.01 0.44	9.91 0.10 0.10 0.80	
CASTINGFUG	Anode Casting Building (6)	$CO$ $NO_x$ $SO_2$ $PM_{10}$ $VOC$	1.28 1.52 0.22 1.12 0.08	3.36 3.99 0.58 2.92 0.21	
54	Anode Casting Wheel (6) Cooling Vent	PM <sub>10</sub>	1.00	2.60	
TANKHOUSE					
TKFUG	Tankhouse (4) (6) (7)	$PM_{10}$ $CO$ $NO_{x}$ $H_{2}SO_{4}$ $SO_{2}$ $VOC$	1.59 0.08 0.10 1.58 0.01 0.01	6.93 0.36 0.43 6.91 0.06 0.02	
NICKEL CARBONAT	TE PLANT	VOC	0.01	0.02	
NSPFUG1	Outdoor Fugitives (4) (6) (7)	$PM_{10}/H_2SO_4$ AsH <sub>3</sub>	0.69 0.04	3.00 0.15	
NSPFUG2	Building Fugitives (4) (6)	PM <sub>10</sub>	<0.23	<1.00	

### AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	<u>Emissior</u>	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY*	
49	Tankhouse Pumps (6) Emergency Generator	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	1.79 8.31 0.59 0.55 0.67	0.78 3.64 0.26 0.24 0.30	
50	Water Treating (6) Emergency Generator	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	1.12 5.18 0.37 0.34 0.42	0.49 2.27 0.16 0.15 0.18	
52	Firewater Pump (6)	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	0.87 4.03 0.29 0.27 0.33	0.38 1.77 0.13 0.12 0.14	
MISCELLANEOUS FACILITIES/PROCESSES					
PAINTFUG	Outdoor Painting (4) (6)	VOC PM <sub>10</sub>	6.00 0.77	10.00 1.29	
REVERTSFUG	Reverts Storage (4) (6) Building	PM <sub>10</sub>	0.02	0.09	
DTKFUG	Diesel Storage Tanks (4) (6)	VOC	<1.20	<6.00	
GT01FUG	Gasoline Tank (4) (6)	VOC	<0.10	<0.50	
UOTKFUG	Used Oil Tanks (4) (6)	VOC	<0.04	<0.20	
HOTKFUG	Hydraulic Oil Tanks (4) (6)	VOC	0.16	<0.80	

<sup>(1)</sup> Emission point identification - either specific equipment designation or emission point number from a plot plan.

<sup>(2)</sup> Specific point source names. For fugitive sources, use an area name or fugitive source name.

(3) H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

CO - carbon monoxide

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

 $PM_{10}$  - 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 Cu - copper

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1

AsH<sub>3</sub> - arsine

- (4) Fugitive emissions are an estimate only.
- (5) Anode casting furnaces cannot operate simultaneously and are limited to a total of 5,200 hours of operation.
- (6) Emissions are from permitted sources that were previously exempted.
- (7)  $H_2SO_4$  emissions included in the  $PM_{10}$ .
- \* Compliance with annual emission limits is based on a rolling 12-month period.

Dated November 1, 2010