EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 5221

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)	Emission Rates * lb/hr	TPY
PA1-S39	Group 1 Tank Scrubber (4)	H_2SO_4	0.01	
		HNO_3	0.01	
		IOC-U	0.01	
		HCl	0.01	
		CrO_3	0.01	
		VOC	0.01	
		NH_3	0.05	
		PM_{10}	0.01	
PA1-S39A	Group 1 Tank Scrubber (4)	H_2SO_4	0.01	
		HNO_3	0.01	
		IOC-U	0.01	
		HCl	0.01	
		CrO_3	0.01	
		VOC	0.01	
		NH_3	0.05	
		PM_{10}	0.01	
PA1-S41	Group 1 Tank Scrubber (4)	H_2SO_4	0.01	
		HNO_3	0.01	
		IOC-U	0.01	
		HCl	0.03	
		CrO_3	0.01	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		VOC	0.02	
		NH_3	0.05	
		PM_{10}	0.01	
Total Annual Allowables for PA1-S39, S39A, S41		H_2SO_4		0.01
		HNO_3		0.01
		IOC-U		0.01
		HCl		0.01
Total Annual Allowables for PA1-S39, S39A, S41 (con't)		CrO_3		0.01
		VOC		0.01
		NH_3		0.05
		PM_{10}		0.01
PA1-T5010	Process Surge Tank T5010	H_2SO_4	0.01	0.01
		HNO_3	0.09	0.01
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5020	Process Surge Tank T5020	H_2SO_4	0.01	0.01
		HNO_3	0.09	0.01
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5040	WWPT Tank T5040	H_2SO_4	0.01	0.01
		HNO_3	0.11	0.03
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5120	WWPT Tank T5120	H_2SO_4	0.01	0.01
		HNO_3	0.11	0.03
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5130	WWPT Tank T5130	H_2SO_4	0.01	0.01
		HNO_3	0.11	0.03
		IOC-U	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5150	Process BPCTank T5150	H_2SO_4	0.01	0.01
		HNO_3	0.06	0.03
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		NH_3	0.15	0.07
		VOC	0.01	0.01
PA1-T5170	WWPT Tank T5170	H_2SO_4	0.01	0.01
		HNO_3	0.11	0.03
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5310	WWPT Tank T5310	H_2SO_4	0.01	0.01
		HNO_3	0.11	0.03
		IOC-U	0.01	0.01
		HCl	0.01	0.01
		VOC	0.01	0.01
PA1-T5629	Check Tank T5629	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5630	Check Tank T5630	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5631	Check Tank T5631	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5632	Check Tank T5632	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
PA1-T5633	Check Tank T5633	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5634	Check Tank T5634	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T715120	Feed Tank T715120	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		HCl	0.08	0.36
		VOC	0.17	0.73
		PM	0.02	0.10
		PM_{10}	0.01	0.03
		Pb	0.01	0.02
PA1-TKLOAD	Tank Nos. T5250/T5260 ESP Ash Loading	PM	0.46	0.05
		PM_{10}	0.16	0.02
		Pb	0.07	0.01
PA2-S14	Group 2 Tank Water Scrubber	H_2SO_4	0.01	
		HNO_3	0.01	
		IOC-U	0.01	
		HCl	0.05	
		CrO_3	0.01	
		VOC	0.03	
		NH_3	0.05	
		PM_{10}	0.05	
PA2-S15	Group 2 Tank Water Scrubber	H_2SO_4	0.01	
		HNO_3	0.01	
		IOC-U	0.01	
		HCl	0.05	
		CrO_3	0.01	
		VOC	0.03	
		NH_3	0.05	
		PM_{10}	0.05	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
Total Annual Allowables for PA2-S14 and S15		H_2SO_4		0.01
		HNO_3		0.01
		IOC-U		0.01
		HCl		0.04
		CrO_3		0.01
		VOC		0.02
		NH_3		0.05
		PM_{10}		0.04
PA2-T5058	Thickener Tank No. 1	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.16	0.71
PA2-T5059	Thickener Tank No. 2	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.16	0.71
PA2-T5060	Thickener Tank No. 3	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.16	0.71
PA2-T5061	Thickener Tank No. 4	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.10	0.42
PA2-T5062	Thickener Tank No. 5	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.10	0.42
PA2-T5063	Thickener Tank No. 6	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.10	0.42

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
PA2-T5075	Wash Tank No. 2	H_2SO_4	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.35	1.52
PA2-T5080	Thickener Tank No. 7	H_2SO_4	0.01	<0.01
		IOC-U	0.01	<0.01
		VOC	0.08	0.34
PA2-T5128	Wash Tank No. 1	H_2SO_4	0.01	<0.01
		IOC-U	0.01	<0.01
		VOC	0.35	1.52
PA2-T605080	H_2SO_4 Storage Tank	H_2SO_4	0.01	<0.01
PA2-T605070	NaOH Storage Tank	NaOH	0.01	<0.01
PA2-T655170	Feed Tank T655170	H_2SO_4	0.01	<0.01
		IOC-U	0.01	<0.01
		HCl	0.08	0.36
		VOC	0.17	0.73
		PM	0.02	<0.01
		PM_{10}	0.01	<0.01
		Pb	0.01	<0.01
PA2-T823042	Outdoor NaOH Storage Tank	NaOH	0.01	<0.01
PA2-T823043	Outdoor NaOH Storage Tank	NaOH	0.01	<0.01
PA2-B7	Soda Ash Hopper Baghouse	PM/PM_{10}	0.43	0.21
PA2-DRY1	Combustion By-Product Emissions Dryer No. 1	NO_x	0.47	2.05
		CO	0.10	0.43
		VOC	0.02	0.11
		PM/PM_{10}	0.83	3.64
		SO_2	<0.01	0.01
PA2-DRY2	Combustion By-Product	NO_x	0.47	2.05

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
	Emissions Dryer No. 2	CO	0.10	0.43
		VOC	0.02	0.11
		PM/PM_{10}	0.83	3.64
		SO_2	<0.01	0.01
PA2-CONV1	Conveying of Product to Rail or Bin	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA2-CONV2	Conveying of Product Direct to Dryer Feed	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA2-RBLOAD	Loading Dryer Material Railcar or Bin	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA2-LSTLO	Solid Waste Loading to Leach Surge Tank	PM	0.04	0.01
		PM_{10}	0.01	<0.01
		Pb	<0.01	<0.01
		VOC	0.04	0.17
PA4-S1111	Scrubber	H_2SO_4	<0.01	0.01
		HNO_3	<0.01	<0.01
		IOC-U	<0.01	<0.01
		HCl	0.01	0.05
		CrO_3	<0.01	<0.01
		VOC	0.01	0.02
		H_2S	0.01	0.05
		PM/PM_{10}	0.02	0.06
PA4-B5246	Storage Hopper Baghouse	PM/PM_{10}	0.10	0.45
		Pb	0.03	0.13
PA4-SMSCR	Smelter Matte Screening	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
PA4-SMXFER1	Smelter Matte Belt Transfer	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA4-SMXFER2	Smelter Matte Transfer to Diverter/Mixer	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA4-SMSCU	Smelter Matte Crushing	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA4-SMUNL	Smelter Matte Railcar Unloading	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
PA4-SMLOAD	Smelter Matte Hopper Loading	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
NTB-AT-10	H_2SO_4 Storage Tank	H_2SO_4	<0.01	<0.01
NP-AT-13	H_2SO_4 Storage Tank	H_2SO_4	<0.01	<0.01
CTB-T226004	NaOH Storage Tank 1	NaOH	<0.01	<0.01
CTB-T226002	NaOH Storage Tank 2	NaOH	<0.01	<0.01
CTB-T226001	H_2SO_4 Storage Tank	H_2SO_4	<0.01	<0.01
GR-1 LDA	Gondola Loading Fugitives (4) (East)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
GR-1 LDB	Gondola Loading Fugitives (4) (West)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01
NP-LS-BF	Neutralizing Plant	PM/PM_{10}	0.17	0.75
MPSB-FUG	Main Product Storage (5)	PM	0.67	2.92

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
	Building Fugitives	PM_{10}	0.23	1.02
		Pb	0.08	0.37
		VOC	0.35	1.55
EPSB-FUG	East Product Storage (5)	PM	0.05	0.13
	Building Fugitives	PM_{10}	0.02	0.05
		Pb	<0.01	<0.01
GR3-LOAD	Gondola Railcar Loading	PM	<0.01	<0.01
	(North of Building B)	PM_{10}	<0.01	<0.01
		Pb	<0.01	<0.01

(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 Section 101.1
IOC-U - inorganic compounds (unspeciated)
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM_{10}.
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.
CO - carbon monoxide
HNO_3 - nitric acid
CrO_3 - chromium trioxide
NH_3 - ammonia
H_2SO_4 - sulfuric acid
HCl - hydrogen chloride
H_2S - hydrogen sulfide
Pb - lead
NaOH - sodium hydroxide
(4) No more than three tanks may be routed to any one scrubber at the same time.
(5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* Emission rates are based on and the facilities are limited by the following maximum operating

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY

schedule:

_____Hrs/day ___Days/week ___Weeks/year or 8,760 Hrs/year

Dated_____