

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

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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 ₂ SO 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 ₂ SO 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 ₂ SO ₄	0.01	
		HNO ₃	0.01	
		IOC-U	0.01	
		HCl	0.03	
		CrO ₃	0.01	

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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 ₂ SO 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 ₂ SO 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 ₂ SO 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 ₂ SO 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 ₂ SO 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 ₂ SO ₄	0.01	0.01
		HNO ₃	0.11	0.03
		IOC-U	0.01	0.01

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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 ₂ SO 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 ₂ SO 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 ₂ SO 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 ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5630	Check Tank T5630	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5631	Check Tank T5631	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5632	Check Tank T5632	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
PA1-T5633	Check Tank T5633	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T5634	Check Tank T5634	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.03	0.15
PA1-T715120	Feed Tank T715120	H ₂ SO 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 ₂ SO 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 ₂ SO 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	

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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 ₂ SO 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 ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.16	0.71
PA2-T5059	Thickener Tank No. 2	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.16	0.71
PA2-T5060	Thickener Tank No. 3	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.16	0.71
PA2-T5061	Thickener Tank No. 4	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.10	0.42
PA2-T5062	Thickener Tank No. 5	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.10	0.42
PA2-T5063	Thickener Tank No. 6	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.10	0.42

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
PA2-T5075	Wash Tank No. 2	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.35	1.52
PA2-T5080	Thickener Tank No. 7	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.08	0.34
PA2-T5128	Wash Tank No. 1	H ₂ SO ₄	0.01	0.01
		IOC-U	0.01	0.01
		VOC	0.35	1.52
PA2-T605080	H ₂ SO ₄ Storage Tank	H ₂ SO ₄	0.01	0.01
PA2-T605070	NaOH Storage Tank	NaOH	0.01	0.01
PA2-T655170	Feed Tank T655170	H ₂ SO 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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
PA2-CONV1	Emissions Dryer No. 2 Conveying of Product to Rail or Bin	CO	0.10	0.43
		VOC	0.02	0.11
		PM/PM ₁₀	0.83	3.64
		SO ₂	0.01	0.01
		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 ₂ SO 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 ₂ S	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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
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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 ₂ SO ₄ Storage Tank	H ₂ SO ₄	0.01	0.01
NP-AT-13	H ₂ SO ₄ Storage Tank	H ₂ SO 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 ₂ SO ₄ Storage Tank	H ₂ SO 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

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			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 (North of Building B)	PM	0.01	0.01
		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 § 101.1

IOC-U - inorganic compounds (unspeciated)

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - particulate matter, suspended in the atmosphere, including PM₁₀.

PM₁₀ - 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

HNO₃ - nitric acid

CrO₃ - chromium trioxide

NH₃ - ammonia

H₂SO₄ - sulfuric acid

HCl - hydrogen chloride

H₂S - 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 schedule:

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			lb/hr	TPY

_____Hrs/day ____Days/week ____Weeks/year or 8,760 Hrs/year

Dated_____