

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 34017

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**
FT02000600	Sulfuric Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
FT02003700	Sulfuric Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
FU10500001	HCl Complex Component Fugitives (4)	VOC	0.12	0.54
		HCl	0.33	1.48
		H <sub>2</sub> SO <sub>4</sub>	0.06	0.13
		Phosgene	0.01	0.01
FV11514600	Off-Gas Incinerator/Scrubber	VOC	0.22	0.96
		NO <sub>x</sub>	2.84	12.44
		CO	0.72	3.15
		HCl	0.28	1.23
		Cl <sub>2</sub>	0.51	2.23
FV11621600	Off-Gas Incinerator/Scrubber	VOC	0.22	0.96
		NO <sub>x</sub>	2.84	12.44
		CO	0.72	3.15
		HCl	0.28	1.23
		Cl <sub>2</sub>	0.51	2.23
FV11514000	Tank Farm Scrubber Vent	VOC	0.54	2.37
		HCl	3.83	9.89
		Cl <sub>2</sub>	0.02	0.10
FV10510300	Lube Oil Reservoir Blower	VOC	0.03	0.01
FV10510700	Lube Oil Reservoir Blower	VOC	0.03	0.01
FL10531600	Solvent Truck Loading Rack Uncollected Fugitives	VOC	0.04	0.01

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FV11000422	Vac. Sep. TK O/F Seal Loop No. 2 Vent	HCl	0.01	0.01
FV11011600	Hydrogen Vent Stack	Cl <sub>2</sub>	0.01	0.01
FV11012101	HCl Fume Scrubber O/F Vent	HCl	0.01	0.01
FV11014000	Waste Gas Vent Stack	HCl	0.09	0.01
		VOC	0.01	0.01
FV11014300	005 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FV11014400	005 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FT11014401	28 percent HCl Storage Tank Seal Pot - 005	HCl	0.01	0.01
FV11014500	006 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FV11014600	006 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FT11014601	36 percent HCl Storage Tank Seal Pot - 006	HCl	0.01	0.01
FT11015300	Waste Water Sump Tank	HCl	0.01	0.01
FV11500401	Waste Gas Hdr O/F Seal Loop Vent	HCl	0.01	0.01
FV11500412	Vac. Sep. TK O/F Seal Loop No. 2 Vent	HCl	0.01	0.01
FV11511300	Hydrogen Vent Stack	Cl <sub>2</sub>	0.01	0.01
FV11514601	Inc Abs O/F Seal Loop Vents No. 1	HCl	0.01	0.01
FV11514602	Inc Abs O/F Seal Loop	HCl	0.01	0.01

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	Vents No. 2			
FV11621601	Inc Abs O/F Seal Loop Vents No. 1	HCl	0.01	0.01
FV11621602	Inc Abs O/F Seal Loop Vents No. 2	HCl	0.01	0.01
FV11522100	Waste Gas Blower Condensate Seal Loop Vent	VOC HCl	0.01 0.01	0.01 0.01
FV11514700	159 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FV11514800	159 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FT11514801	36 percent HCl Stg. Tank Seal Pot-159	HCl	0.01	0.01
FV11500411	Waste Gas Vent Stack	HCl VOC	0.09 0.01	0.01 0.01
FV12002011	Lube Oil Reservoir Vent Eductor	VOC	0.02	0.01
FV12002022	Lube Oil Reservoir Vent Eductor	VOC	0.02	0.01
FV12005900	Cl <sub>2</sub> Absorption Tower	Cl <sub>2</sub>	0.01	0.01
FG12009300	HCl Generator	NO <sub>x</sub>	11.12	0.56
		CO	0.88	0.04
		VOC	0.88	0.04
		PM	0.24	0.01
FV12013300	H <sub>2</sub> Vent Scrubber (Startup and Shutdown)	HCl	0.01	0.01
		Cl <sub>2</sub>	0.01	0.01
FT12014600	120 Sump Drain Tanks No. 1 and No. 2	HCl	1.10	0.06

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FT12018000	Mainframe Lube Oil Reservoir	VOC	0.02	0.01
FV12018100	High-Pressure Hydrogen Vent Stack	Cl <sub>2</sub>	0.01	0.01
		VOC	0.01	0.01
FT12018700	Mainframe Lube Oil Storage Tank	VOC	0.02	0.01
FT12018800	Cylinder Lube Oil Storage Tank	VOC	0.02	0.01
FV12502022	Lube Oil Reservoir Vent Eductor	VOC	0.02	0.01
FV12505900	Cl <sub>2</sub> Absorption Tower	Cl <sub>2</sub>	0.01	0.01
FG12509300	HCl Generator	NO <sub>x</sub>	11.12	0.56
		CO	0.88	0.04
		VOC	0.88	0.04
		PM	0.24	0.01
FV12514500	H <sub>2</sub> Vent Scrubber (Startup and Shutdown)	HCl	0.01	0.01
		Cl <sub>2</sub>	0.01	0.01
FT12514900	125 Sump Drain Tanks No. 1 and No. 2	HCl	1.10	0.06
FT83001600	Sulfuric Acid Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
FC83000100	Cooling Tower	VOC	0.01	0.01
FV12005900	Cl <sub>2</sub> Absorption Tower - Startup and Shutdown	Cl <sub>2</sub>	0.01	0.01
FV12505900 and Shutdown	Cl <sub>2</sub> Absorption Tower - Startup	Cl <sub>2</sub>	0.01	0.01
FG11609300	HCl Generator	NO <sub>x</sub>	11.12	0.56
		CO	0.88	0.04
		VOC	0.88	0.04

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		PM	0.24	0.01
FV11602000	Waste Gas Vent Stack	HCl	0.09	0.01
		VOC	0.01	0.01
FV11601200	009 Tk Seal Pot O/F Vent	HCl	0.01	0.01
FS72005100	HCl Scrubber	HCl	0.04	0.12
FU10500002	HCl Loading Component Fugitives(4)	HCl	0.16	0.69

- (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
- PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>
- PM<sub>10</sub> - 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.
- NO<sub>x</sub> - total oxides of nitrogen
- CO - carbon monoxide
- SO<sub>2</sub> - sulfur dioxide
- Cl<sub>2</sub> - chlorine
- HCl - hydrogen chloride
- H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

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

Hrs/day 24 Days/week 7 Weeks/year 52

\*\* Compliance with the annual limits shall be based on a 12-month rolling basis.

Dated August 31, 2011