

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 ₂ SO ₄ | 0.01 | 0.01 |
| FT02003700 | Sulfuric Tank | H ₂ SO ₄ | 0.01 | 0.01 |
| FU10500001 | HCl Complex Component Fugitives (4) | MCB/DCB | 0.12 | 0.53 |
| | | HCl | 0.31 | 1.38 |
| | | H ₂ SO ₄ | 0.06 | 0.13 |
| | | Phosgene | 0.01 | 0.01 |
| FV11514600 | Off-Gas Incinerator/Scrubber | VOC | 0.50 | 2.00 |
| | | NO _x | 0.50 | 2.00 |
| | | CO | 0.43 | 1.89 |
| | | HCl | 1.25 | 2.50 |
| | | Cl ₂ | 1.00 | 4.37 |
| FV11514000 | Caustic Fume Scrubber | VOC | 0.54 | 2.37 |
| | | HCl | 0.08 | 0.35 |
| | | Cl ₂ | 0.10 | 0.02 |
| 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 |
| FV11000422 | Vac. Sep. TK O/F Seal Loop No. 2 Vent | HCl | 0.01 | 0.01 |
| FV11011600 | Hydrogen Vent Stack | Cl ₂ | 0.01 | 0.01 |
| FV11012101 | HCl Fume Scrubber O/F Vent | HCl | 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 |
| 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% 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% HCl Storage Tank Seal Pot - 006 | HCl | 0.01 | 0.01 |
| FT11015300 | Waste Water Sump Tank | HCl | 1.14 | 0.07 |
| 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 ₂ | 0.01 | 0.01 |
| FT11513600 | Deaerator | VOC | 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 Vents No. 2 | HCl | 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% HCl Stg Tank Seal Pot-159 | HCl | 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 |
| FV11517900 | Waste Gas Vent Stack | HCl | 0.09 | 0.01 |
| | | VOC | 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 ₂ Absorption Tower | Cl ₂ | 0.01 | 0.01 |
| FG12009300 | HCl Generator | NO _x | 22.33 | 3.35 |
| | | CO | 13.89 | 2.09 |
| | | VOC | 0.27 | 0.04 |
| | | PM | 0.91 | 0.14 |
| FV12013300 | H ₂ Vent Scrubber (Start-Up and Shutdown) | HCl | 0.01 | 0.01 |
| | | Cl ₂ | 0.01 | 0.01 |
| FT12014600 | 120 Sump Drain Tanks No. 1 and No. 2 | HCl | 1.10 | 0.06 |
| FT12018000 | Mainframe Lube Oil Reservoir | VOC | 0.02 | 0.01 |
| FV12018100 | High Pressure Hydrogen Vent Stack | Cl ₂ | 0.01 | 0.01 |
| | | VOC | 0.01 | 0.01 |
| FT12018700 | Mainframe Lube Oil Storage Tank 0.01 | | VOC | 0.02 |
| FT12018800 | Cylinder Lube Oil Storage Tank | VOC | 0.02 | 0.01 |
| FV12502022 | Lube Oil Reservoir Vent Eductor | VOC | 0.02 | 0.01 |
| FV12505900 | Cl ₂ Absorption Tower | Cl ₂ | 0.01 | 0.01 |
| FG12509300 | HCl Generator | NO _x | 5.16 | 0.77 |
| | | CO | 0.90 | 0.14 |
| | | VOC | 0.15 | 0.02 |
| | | PM | 0.06 | 0.01 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | <u>Emission Rates *</u> | |
|---------------------------|---|--------------------------------|-------------------------|------|
| | | | lb/hr | TPY |
| FV12514500 | H ₂ Vent Scrubber (Start-Up and Shutdown) | HCl | 0.01 | 0.01 |
| | | Cl ₂ | 0.01 | 0.01 |
| FT12514900 | 125 Sump Drain Tanks No. 1 and No. 2 | HCl | 1.10 | 0.06 |
| FT83001600 | Sulfuric Acid Tank | H ₂ SO ₄ | 0.01 | 0.01 |
| FC83300100 | Cooling Tower | VOC | 0.01 | 0.01 |
| FV12005900 | Cl ₂ Absorption Tower-Start-Up and Shutdown | Cl ₂ | 0.01 | 0.01 |
| FV12505900 | Cl ₂ Absorption Tower-Start-Up and Shutdown | Cl ₂ | 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

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.

NO_x - total oxides of nitrogen

CO - carbon monoxide

SO₂ - sulfur dioxide

DCB - dichlorobenzene

MCB - monochlorobenzene

Cl₂ - chlorine

HCl - hydrogen chloride

H₂SO₄ - sulfuric acid

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | <u>Emission Rates *</u> | |
|---------------------------|--------------------|-----------------------------|-------------------------|------------|
| | | | <u>lb/hr</u> | <u>TPY</u> |

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

Hrs/day _____ Days/week _____ Weeks/year _____ or Hrs/year 8,760

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

Dated December 16, 2003