

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 24450

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 * | Source | Air Contaminant | <u>Emission Rates</u> | |
|---------------|--|---|---|--|
| Point No. (1) | Name (2) | Name (3) | <u>lb/hr</u> | <u>TPY</u> |
| 23-3501 | Regeneration Gas Heater (9.631 MMBTU/hr) | VOC NO _x SO ₂ PM ₁₀ CO | 0.01 0.96 0.01 0.12 0.20 | 0.03 4.22 0.03 0.50 0.89 |
| 25-6901A | Auxiliary Boiler A (6 MMBTU/hr) | VOC NO _x SO ₂ PM ₁₀ CO | <0.01 0.60 <0.01 0.07 0.13 | 0.02 2.63 0.02 0.31 0.55 |
| 25-6901B | Auxiliary Boiler B (6 MMBTU/hr) | VOC NO _x SO ₂ PM ₁₀ CO | <0.01 0.60 <0.01 0.07 0.13 | 0.02 2.63 0.02 0.31 0.55 |
| 29-1101 | Thermal Oxidizer Vent | VOC NO _x SO ₂ PM ₁₀ CO H ₂ S COS CS ₂ | 0.01 0.75 30.93 0.09 1.43 0.18 0.07 0.03 | 0.03 3.29 135.46 0.39 6.24 0.80 0.32 0.13 |
| 33-5801 | Amine Tank | MDEA | 0.07 | <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 |
| 33-9101 | Glycol Tank | TEG | <0.01 | <0.01 |
| 42-6201A | Residue Gas Compressor A (1,375 Hp) | VOC | 0.43 | 1.90 |
| | | NO _x | 6.06 | 26.56 |
| | | SO ₂ | 0.01 | 0.03 |
| | | CO | 9.09 | 39.83 |
| 42-6201B | Residue Gas Compressor B (1,375 Hp) | VOC | 0.43 | 1.90 |
| | | NO _x | 6.06 | 26.56 |
| | | SO ₂ | 0.01 | 0.03 |
| | | CO | 9.09 | 39.83 |
| 42-6202A | Inlet Gas Compressor A (800 Hp) | VOC | 2.94 | 12.87 |
| | | NO _x | 6.88 | 30.13 |
| | | SO ₂ | 0.01 | 0.02 |
| | | CO | 6.00 | 26.27 |
| 42-6202B | Inlet Gas Compressor B (800 Hp) | VOC | 2.94 | 12.87 |
| | | NO _x | 6.88 | 30.13 |
| | | SO ₂ | 0.01 | 0.02 |
| | | CO | 6.00 | 26.27 |
| 42-6202C | Inlet Gas Compressor C (800 Hp) | VOC | 2.94 | 12.87 |
| | | NO _x | 6.88 | 30.13 |
| | | SO ₂ | 0.01 | 0.02 |
| | | CO | 6.00 | 26.27 |
| 42-6202D | Inlet Gas Compressor D (800 Hp) | VOC | 2.94 | 12.87 |
| | | NO _x | 6.88 | 30.13 |
| | | SO ₂ | 0.01 | 0.02 |
| | | CO | 6.00 | 26.27 |
| 42-6202E | Inlet Gas Compressor E | VOC | 2.94 | 12.87 |
| | | NO _x | 6.88 | 30.13 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission * | Source | Air Contaminant | Emission Rates | |
|---------------|-------------------------|------------------|----------------|-------|
| Point No. (1) | Name (2) | Name (3) | lb/hr | TPY |
| | (800 Hp) | SO ₂ | 0.01 | 0.02 |
| | | CO | 6.00 | 26.27 |
| 42-6202F | Inlet Gas | VOC | 2.94 | 12.87 |
| | Compressor F | NO _x | 6.88 | 30.13 |
| | (800 Hp) | SO ₂ | 0.01 | 0.02 |
| | | CO | 6.00 | 26.27 |
| FLR1 | Low-Pressure Flare | VOC (5) | 2.85 | 1.48 |
| | | benzene | 0.05 | 0.03 |
| | | ethylbenzene | <0.01 | <0.01 |
| | | n-hexane | 0.51 | 0.25 |
| | | toluene | 0.03 | 0.02 |
| | | xylene | <0.01 | <0.01 |
| | | NO _x | 0.46 | 0.23 |
| | | SO ₂ | 0.04 | 0.18 |
| | | CO | 0.92 | 0.46 |
| | | H ₂ S | <0.01 | <0.01 |
| FLR2 | High-Pressure Flare | VOC (5) | 0.30 | 1.29 |
| | | benzene | 0.30 | 1.33 |
| | | ethylbenzene | 0.23 | 1.01 |
| | | n-hexane | 0.06 | 0.27 |
| | | toluene | 0.32 | 1.42 |
| | | xylene | 0.31 | 1.38 |
| | | NO _x | 0.22 | 0.97 |
| | | SO ₂ | <0.01 | <0.01 |
| | | CO | 0.44 | 1.93 |
| | | H ₂ S | <0.01 | <0.01 |
| PLANTFUG | Plant Fugitives (4) (6) | VOC | 1.97 | 8.61 |
| | | H ₂ S | 0.18 | 0.77 |
| | | COS | <0.01 | <0.01 |
| | | CS ₂ | <0.01 | <0.01 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| | | | | |
|-----------|-------------------------|------------------|-------|-------|
| PLANTFUG | Plant Fugitives (4) (7) | VOC | 2.09 | 9.14 |
| | | H ₂ S | 0.18 | 0.77 |
| | | COS | <0.01 | <0.01 |
| | | CS ₂ | <0.01 | <0.01 |
| SULFLOAD1 | Sulfur Loading | H ₂ S | 0.90 | 0.04 |

- (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 General Rule 101.1
 - MDEA - methyl diethylamine
 - TEG - triethylene glycol
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter
 - CO - carbon monoxide
 - H₂S - hydrogen sulfide
 - COS - carbonyl sulfide
 - CS₂ - carbon disulfide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Does not include benzene, ethylbenzene, n-hexane, toluene, and xylene emissions.
- (6) Fugitive emissions from plant prior to construction of cryogenic section.
- (7) Fugitive emissions from the plant after construction of the cryogenic section.

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

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

EMISSIONS SOURCE INFORMATION AND EMISSION RATES

AIR CONTAMINANTS DATA

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

Dated _____