

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 21878

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 | Emission Rates * | |
|--|---|-------------------------------|------------------|-------|
| Point No. (1) | Name (2) | | Name (3) | lb/hr |
| | TPY ** | | | |
| Industrial Gas Production Plant | | | | |
| PSA-FUG | Pressure Swing Adsorption Unit Fugitives (4) | CO | 0.95 | 4.20 |
| 7 | HyCO-1 Flare | Upset or Maintenance Use Only | | |
| 12 | HyCO-2 Flare | Upset or Maintenance Use Only | | |
| A | Fired Gas Preheater A | NO _x | 1.92 | 8.4 |
| | | PM | 0.48 | 2.1 |
| | | SO ₂ | 0.81 | 3.6 |
| | | CO | 1.15 | 5.1 |
| | | VOC | 0.09 | 0.4 |
| | | Ammonia | 0.007 | 0.03 |
| | | Cyanide | 0.0007 | 0.003 |
| B | Fired Gas Preheater B | NO _x | 1.92 | 8.4 |
| | | PM | 0.48 | 2.1 |
| | | SO ₂ | 0.81 | 3.6 |
| | | CO | 1.15 | 5.1 |
| | | VOC | 0.09 | 0.4 |
| | | Ammonia | 0.007 | 0.03 |
| | | Cyanide | 0.0007 | 0.003 |
| D | Warm Flare | NO _x | 6.9 | 3.2 |
| | | CO | 142.4 | 63.7 |
| | | SO ₂ | 1.1 | 0.5 |
| E | Cold Flare | Upset or Maintenance Use Only | | |

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| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | |
|-----------------------------------|--|-----------------------------|------------------|-------|
| | | | lb/hr | TPY** |
| F | Plant Fugitives (4) | CO | 5.13 | 22.51 |
| | | VOC | 0.28 | 1.2 |
| | | PM 0.16 | 0.02 | |
| G | Liquid Oxygen Vaporizer | NO _x (5) | 2.04 | |
| | | NO _x | 1.21 | 5.3 |
| | | PM | 0.24 | 1.1 |
| | | SO ₂ | 0.23 | 1.0 |
| | | CO | 0.55 | 2.4 |
| | | VOC | 0.05 | 0.2 |
| H | Wastewater Equalization Tank | VOC | 0.002 | 0.007 |
| | | Cyanide | 0.001 | 0.002 |
| | | Ammonia | 0.020 | 0.088 |
| | | CO | 0.14 | 0.6 |
| I | Temperature Swing Adsorption Driers | CO | 0.29 | 1.3 |
| | | Fe(CO) ₅ | 0.058 | 0.01 |
| J | MEA Storage Tank (3) | VOC | 0.02 | 0.07 |
| K | HyCO-3 Cooling Tower | PM | 1.75 | 7.64 |
| <u>Peaking Power Plant</u> | | | | |
| GT-1 | Gas Turbine No. 1 | NO _x | 32.20 | 17.60 |
| | | CO 41.80 | 12.53 | |
| | | VOC 2.40 | 0.73 | |
| | | PM ₁₀ 12.75 | 6.86 | |
| | | SO ₂ 4.29 | 2.14 | |
| GT-2 | Gas Turbine No. 2 | NO _x | 32.20 | 17.60 |
| | | CO 41.80 | 12.53 | |
| | | VOC 2.40 | 0.73 | |
| | | PM ₁₀ 12.75 | 6.86 | |
| | | | | |

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| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | |
|---------------------------|-----------------------|-----------------------------|------------------|-------|
| | | | lb/hr | TPY** |
| | | SO ₂ 4.29 | 2.14 | |
| GT-3 | Gas Turbine No. 3 | NO _x | 32.20 | 17.60 |
| | | CO 41.80 | 12.53 | |
| | | VOC 2.40 | 0.73 | |
| | | PM ₁₀ 12.75 | 6.86 | |
| | | SO ₂ 4.29 | 2.14 | |
| GT-4 | Gas Turbine No. 4 | NO _x | 32.20 | 17.60 |
| | | CO 41.80 | 12.53 | |
| | | VOC 2.40 | 0.73 | |
| | | PM ₁₀ 12.75 | 6.86 | |
| | | SO ₂ 4.29 | 2.14 | |
| HTR-1 | Natural Gas Preheater | NO _x | 0.49 | 0.30 |
| | | CO 0.41 | 0.20 | |
| | | VOC 0.03 | <0.01 | |
| | | PM ₁₀ 0.01 | <0.01 | |
| | | SO 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 30 Texas Administrative Code Section 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO - carbon monoxide

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.

Fe(CO)₅ - iron pentacarbonyl

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

(5) Firing propane (Only used during upset or routine maintenance periods).

* Emission rates except for GT-1, GT-2, GT-3, GT-4 are based on 8,760 hrs/yr operation.

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|---------------------------|--------------------|-----------------------------|-------------------------|--------------|
| | | | <u>lb/hr</u> | <u>TPY**</u> |

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated December 19, 2000