

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 6797

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.

| Emission * Point No. (1) | Source Name (2) | AIR CONTAMINANTS DATA | | |
|--------------------------------|------------------------------|-----------------------------|----------------|--------|
| | | Air Contaminant Name (3) | Emission Rates | |
| | | | lb/hr | TPY |
| CRUVAC4-FE | No. 4 CVU Fugitives (4) | VOC | 12.29 | 53.84 |
| | | H ₂ S | 0.87 | 3.81 |
| 8-H-3 | No. 4 Vacuum Heater | NO _x | 2.51 | 10.99 |
| | | SO ₂ | 1.17 | 5.12 |
| | | CO | 3.72 | 16.29 |
| | | VOC | 0.24 | 1.05 |
| | | PM/PM ₁₀ | 0.34 | 1.49 |
| 8-H-4 | No. 4 Crude Heater | NO _x | 40.00 | 175.20 |
| | | SO ₂ | 3.78 | 16.56 |
| | | CO | 12.00 | 52.56 |
| | | VOC | 0.79 | 3.46 |
| | | PM/PM ₁₀ | 1.09 | 4.77 |
| 8-H-5 | No. 4 Vacuum Heater | NO _x | 6.92 | 30.31 |
| | | SO ₂ | 1.94 | 8.50 |
| | | CO | 0.69 | 3.02 |
| | | VOC | 0.40 | 1.75 |
| | | PM/PM ₁₀ | 0.56 | 2.45 |
| 8-H-6 | No. 4 Crude Heater | NO _x | 16.31 | 71.44 |
| | | SO ₂ | 7.60 | 33.29 |
| | | CO | 2.72 | 11.91 |
| | | VOC | 1.58 | 6.92 |
| | | PM/PM ₁₀ | 2.18 | 9.55 |
| 8-H-1 | No. 4 CVU Back-up Heater (5) | NO _x | | 9.90 |
| | | SO ₂ | 2.62 | |
| | | CO | 8.32 | |
| | | VOC | 0.54 | |
| | | PM/PM ₁₀ | 0.75 | |

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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> |
| 8-H-2 | No. 4 CVU Back-up Heater (5) | NO _x | | 9.90 |
| | | SO ₂ | 2.62 | |
| | | CO | 8.32 | |
| | | VOC | 0.54 | |
| | | PM/PM ₁₀ | 0.75 | |

(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) NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO - carbon monoxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code Section 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.

H₂S - hydrogen sulfide

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

(5) Emergency use only. These heaters will be used if an active heater is down for maintenance or becomes non-operable. Total hours of operation are not to exceed 876 hours/year.

* 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

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AIR CONTAMINANTS DATA

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

Dated_____