EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 38296

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

| Source | Air | Contaminant | Emission Rates * | | | |
|---|--|---|---|---|--|--|
| Name (2) | | Name (3) | lb/hr | TPY** | | |
| Mothanal Reformer | | CO | 62.54 | 278.32 | | |
| Methanol Reformer | CO (7 | | | 210.32 | | |
| | CO (1 | - | | 1,243.79 | | |
| | | | | 28.01 | | |
| | PM ₁₀ | | | 20.01 | | |
| | 1 14110 | | | 26.19 | | |
| | | • | | 16.31 | | |
| | | | | 13.51 | | |
| | | | | 4.88 | | |
| | | • | | 3.14 | | |
| | | Hexane | 1.13 | 1.67 | | |
| | | | | | | |
| Methanol Unit Emergency Fla | are (6) | CO | 1.24 | 4.53 | | |
| | NO_x | 0.14 | 0.53 | | | |
| | | VOC | 0.09 | 0.28 | | |
| Mathanal Linit Cooling Tower | NAT 10 | MaQU | 2.27 | 0.02 | | |
| Methanol Unit Cooling Tower | M11-T8 | меон | 2.21 | 9.93 | | |
| Storage Tank Scrubber Syste | m T-43 | 3 МеОН | 6.28 | 13.15 | | |
| Acrylates I Incinerators (5) or Acrylates II Incinerators | | MeOH | 0.02 | 0.01 | | |
| | | | | | | |
| Methanol Unit Equipment Process Fugitives (4) | | CO MeOH Propane Butane Ethanol | 0.30 0.76 0.01 0.01 0.01 | 1.30 3.27 0.06 0.05 0.02 | | |
| | Methanol Reformer Methanol Unit Emergency Flat Methanol Unit Cooling Tower Storage Tank Scrubber Syste Acrylates I Incinerators (5) or Acrylates II Incinerators Methanol Unit Equipment | Methanol Reformer CO (7 PM ₁₀ Methanol Unit Emergency Flare (6) NO _x Methanol Unit Cooling Tower MT-18 Storage Tank Scrubber System T-43 Acrylates I Incinerators (5) or Acrylates II Incinerators Methanol Unit Equipment | Methanol Reformer CO CO (7) NO _x MeOH PM ₁₀ 12.47 Propane Isobutane N-Butane Isopentane N-Pentane Hexane Methanol Unit Emergency Flare (6) NO _x MeOH VOC Methanol Unit Cooling Tower MT-18 MeOH Storage Tank Scrubber System T-43 MeOH Acrylates I Incinerators (5) or Acrylates II Incinerators Methanol Unit Equipment Process Fugitives (4) MeOH Propane Butane | Name (2) Name (3) lb/hr Methanol Reformer CO (7) 63.54 CO (7) 1400.68 NO _x 283.97 MeOH 14.65 14.65 PM ₁₀ 12.47 54.61 57.6 Propane 5.76 1sobutane 7.59 N-Butane 7.59 N-Butane 9.94 Hexane 1.13 1.89 N-Pentane Hexane 1.13 0.94 Methanol Unit Emergency Flare (6) CO 1.24 0.14 0.53 VOC 0.09 Nox 0.14 0.53 MeOH 0.28 0.28 Acrylates I Incinerators (5) or Acrylates II Incinerators MeOH 0.76 Propane 0.01 0.01 Butane 0.01 0.01 | | |

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- (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) CO carbon monoxide
 - NO_x total oxides of nitrogen
 - MeOH methanol (methyl alcohol)
 - PM₁₀ particulate matter (PM) less than or equal to 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - VOC volatile organic compounds as defined in the Title 30 Texas Administrative Code Section 101.1
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emissions generated by methanol tank truck/railcar loading operations are routed under vacuum to the Acrylates I Incinerators operating under Permit No. 264 or the Acrylates II Incinerators operating under Permit No. 31178. Products of MeOH combustion are included in Permit Nos. 264 and 31178.
- (6) Maximum allowable emissions listed for the flare are based on combustion of the fuel gas flow to the flare pilots only. Upset and maintenance-related emissions from the flare are not shown and are subject to the 30 TAC Chapter 101.
- (7) CO emissions are limited to Special Condition No. 2.

| * | Emiss sche | | are | based | on ar | nd the | facilities | are | limited | by | the | following | maximum | operating |
|---|---------------|---------|-----|-------|-------|--------|------------|------|---------|----|-----|-----------|---------|-----------|
| | 24 | Hrs/day | 7 | Days/ | /week | 52 | Weeks | /yea | r | | | | | |

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

Dated February 26, 2002