

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 7694 METHANOL PLANT

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* | | |
|---------------------------|-------------------------------------------|-----------------------------|-----------------|-------|-------|
| | | | lbs/hr | TPY | |
| 59A | E38 Vent | | VOC | 1.58 | 0.65 |
| 59B | E39 Vent | | VOC | 21.16 | 0.64 |
| 59C | E40 Vent | | VOC | 17.67 | 1.26 |
| 59D | E41 Vent | | VOC | 17.67 | 0.68 |
| 59E | E42 Vent | | VOC | 17.67 | 1.26 |
| 59F | E43 Vent | | VOC | 17.67 | 2.05 |
| 64 | Loading Rack | | VOC | | 6.8 |
| 36, 37, 38 | Desulfurizers | | VOC | | <0.01 |
| 53 | Compressor Seal Leakage Collection Pot | | CO | 36 | 151.2 |
| 32, 33 | Reformer F-101 Heater | | SO2 | 2.5 | 1.5 |

- (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
CO - carbon monoxide
SO2 - sulfur dioxide

* 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

Revised_____

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 7694 MTBE PLANT

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) | <u>Emission Rates *</u> | |
|---------------------------|---------------------|-----------------------------|-------------------------|-------|
| | | | lb/hr | TPY |
| 201 | Regenerator Exhaust | NOx | 16.59 | 72.64 |
| | | CO | 6.06 | 26.53 |
| | | SO2 | 19.85 | 16.25 |
| | | VOC | 6.27 | 27.48 |
| | | PM10 | 0.32 | 1.41 |
| 202 | Steam Boiler | NOx | 13.20 | 57.82 |
| | | CO | 4.95 | 21.68 |
| | | SO2 | 6.60 | 7.56 |
| | | VOC | 0.55 | 2.43 |
| | | PM10 | 0.99 | 4.33 |
| 203 | Steam Boiler | NOx | 13.20 | 57.82 |
| | | CO | 4.95 | 21.68 |
| | | SO2 | 6.60 | 7.56 |
| | | VOC | 0.55 | 2.43 |
| | | PM10 | 0.99 | 4.33 |
| 204 | Steam Boiler | NOx | 13.20 | 57.82 |
| | | CO | 4.95 | 21.68 |
| | | SO2 | 6.60 | 7.56 |
| | | VOC | 0.55 | 2.43 |
| | | PM10 | 0.99 | 4.33 |
| 205 | Waste Gas Flare | NOx | 0.64 | 1.05 |
| | | CO | 4.59 | 7.56 |
| | | VOC | 8.59 | 1.32 |
| 206 | Emergency Generator | NOx | 4.14 | 0.43 |
| | | CO | 0.89 | 0.09 |
| | | SO2 | 0.28 | 0.03 |

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| VOC | 0.39 | 0.04 |
| PM10 | 0.30 | 0.03 |

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | lb/hr | <u>Emission Rates *</u> TPY | |
|---------------------------|----------------------|-----------------------------|-------|--------------------------------|--|
| 207 | Fire Water Engine | NOx | 2.10 | 0.05 | |
| | | CO | 0.43 | 0.01 | |
| | | SO2 | 0.13 | 0.003 | |
| | | VOC | 0.19 | 0.005 | |
| | | PM10 | 0.14 | 0.004 | |
| 208 | Fire Water Engine | NOx | 2.10 | 0.05 | |
| | | CO | 0.43 | 0.01 | |
| | | SO2 | 0.13 | 0.003 | |
| | | VOC | 0.19 | 0.005 | |
| | | PM10 | 0.14 | 0.004 | |
| 210 | MTBE Storage Tank | MTBE | 2.43 | 3.76 | |
| 211 | MTBE Storage Tank | MTBE | 2.43 | 3.76 | |
| 212 | MTBE Storage Tank | MTBE | 2.43 | 3.76 | |
| 213 | Diesel Storage Tank | Diesel | 2.89 | 0.02 | |
| 214 | Disulfide Oil Tank | VOC | 0.13 | 0.02 | |
| 215 | Slop Oil Tank | VOC | 1.37 | 0.11 | |
| 220 | Cooling Tower (4) | VOC | 2.52 | 11.04 | |
| 221 | CPI Separator | VOC | 4.20 | 0.54 | |
| 222 | Wastewater Treatment | VOC | 0.15 | 0.13 | |

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|-----|-------------------------------|----------|------|-------|
| 223 | Chlorine Fugitives (4) | Chlorine | 0.01 | 0.04 |
| 224 | Merox Unit Fugitives (4) | VOC | 0.38 | 1.66 |
| 225 | Dehydrogenation Fugitives (4) | VOC | 2.92 | 12.79 |
| 226 | MTBE Facilities Fugitives (4) | VOC | 1.41 | 6.18 |

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| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | lb/hr | <u>Emission Rates *</u> TPY | |
|------------------------|-----------------------------------------|--------------------------|-------|--------------------------------|-----------|
| 227 | PSA Facilities Fugitives (4) | | | VOC | 0.14 0.61 |
| 228 | Tank Area Fugitives (4) | | | VOC | 0.48 2.10 |
| 229 | Wastewater Treatment Area Fugitives (4) | | | VOC | 0.05 0.22 |

- (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) PM10 - particulate matter less than 10 microns
VOC - volatile organic compounds as defined in General Rule 101.1
NOx - total oxides of nitrogen
SO2 - sulfur dioxide
CO - carbon monoxide
MTBE - methyl-tert-butyl-ether
- (4) Fugitive and cooling tower emissions are an estimate only and should not be considered as a maximum allowable emission rate.

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- * 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