EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 4449

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) Name (3) | Air Contaminant lb/hr TPY | <u>Emission</u> | Rates * |
|---------------------------|-----------------------------|------------------------------|-----------------|---------|
| 100F | Fugitives (4) (6) | VOC | 7.91 | 34.65 |
| 100F | Fugitives (4) | VOC | 8.99 | 36.23 |
| 100V30 | Tank 30 (6) | VOC | 3.09 | 0.41 |
| 100V30 | Tank 30 | VOC | 5.55 | 0.65 |
| 100V34 | Tank 34 (6) | VOC | 3.09 | 0.41 |
| 100V34 | Tank 34 | VOC | 5.55 | 0.65 |
| 100V35 | Tank 35 (6) | VOC | 3.09 | 0.41 |
| 100V35 | Tank 35 | VOC | 5.55 | 0.65 |
| 251AV866 | Tank 866 (6) | VOC | 0.17 | 0.31 |
| 251AV866 | Tank 866 | VOC | 0.21 | 0.43 |
| 251AV994 | Tank 994 (6) | VOC | 0.08 | 0.17 |
| 251AV994 | Tank 994 | VOC | 0.11 | 0.22 |
| 251AV995 | Tank 995 (6) | VOC | 0.08 | 0.17 |
| 251AV995 | Tank 995 | VOC | 0.11 | 0.22 |
| 251AV37 | Tank 37 (6) | VOC | 0.12 | 0.13 |
| 251AV37 | Tank 37 | VOC | 0.12 | 0.19 |
| 251AV119 | Tank 119 | VOC | 0.28 | 0.012 |

AIR CONTAMINANTS DATA

| Emission Source Point No. (1) Name | | Emission Rates * Ib/hr TPY | | |
|---------------------------------------|-------------------------|-------------------------------|--|--|
| 100V23 | Tank 23 | VOC | 0.04 | <0.01 |
| | | | | |
| 100V917 | Tank 917 | VOC | 0.01 | <0.01 |
| 251DTL | Truck Loading (5) | VOC | 28.78 | 2.02 |
| 251DTL | Truck Loading (6) | VOC | 0.04 | 1.10 |
| 251DTL | Truck Loading | VOC | 0.21 | 1.66 |
| 251DTC | Railcar Loading (5) | VOC | 53.82 | 6.91 |
| 251DTC | Railcar Washing (5) (7) | VOC | 383.00 | 162.35 |
| 251DTC | Railcar Loading (6) | VOC | 0.27 | 2.47 |
| 251DTC | Railcar Loading | VOC | 1.00 | 3.63 |
| 251DBL | Barge Loading (5) | VOC | 39.60 | 2.31 |
| 251DBL | Barge Loading (4) | VOC | 0.84 | 0.06 |
| 251DM1205 | Shipping Flare (5) (8) | VOC NOx SO2 CO | 16.58 3.58 <0.10 30.7 | 7.79 3.06 <0.10 26.22 |
| 251DM1205 | Shipping Flare (6) (8) | VOC NOx SO2 CO | 32.07 3.58 <0.10 30.7 | 15.36 6.61 <0.10 56.61 |
| 251DM1205 | Shipping Flare (8) | VOC NOx SO2 CO | 36.32 2.28 <0.10 19.6 | 17.08 7.40 <0.10 63.45 |
| 251DM2224 | Barge Incinerator (8) | VOC NOx SO2 CO PM | 0.70 5.00 <0.01 0.40 <0.01 | 0.12 8.78 <0.01 0.88 <0.01 |

AIR CONTAMINANTS DATA

| Emission Source Point No. (1) Nam | Air Contaminant <u>Emission</u> e (2) Name (3) lb/hr | Rates * TPY | | |
|--------------------------------------|---|-------------------------------|---|---|
| 303M1239 | Plant Flare (5) | (Nonroutine Serv | vice Only) | |
| 303M1239 | Plant Flare (6) | (Nonroutine Serv | vice Only) | |
| 303M1239 | Plant Flare | VOC NOx SO2 CO | 0.47 0.03 <0.01 0.17 | 1.98 0.14 <0.01 0.76 |
| AREA 7 | API Separators | VOC | 3.36 | 14.70 |
| 301M150 | Cooling Tower (4) | VOC | 0.10 | 0.43 |
| 100V713/4 | Rhodium Recovery (6) | VOC | 1.11 | 4.36 |
| 304M375 | Reformer | VOC NOx SO2 CO PM | 0.29 112.96 0.12 8.22 1.03 | 1.26 494.76 0.54 35.98 4.50 |
| 304M490 | Reformer | VOC NOx SO2 CO PM | 0.60 237.67 0.26 17.28 2.16 | 2.65 1,040.98 1.14 75.71 9.46 |
| 304M24 | Reformer | VOC NOX SO2 CO PM | 0.17 65.77 0.072 4.78 0.60 | 0.73 288.07 0.31 20.95 2.62 |
| 304V206 | Tank 206 | MEA | <0.01 | <0.01 |

⁽¹⁾ Emission point identification - either specific equipment designation or emission point number from plot plan.

NOx - total oxides of nitrogen

SO2 - sulfur dioxide

⁽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

PM - particulate matter

MEA - monoethanolamine

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) These are the authorized limits until completion of the items listed in Special Provision No. 3(A), or October 15, 1994, whichever date is earlier.
- (6) These are the authorized limits until completion of the items listed in Special Provision No. 3(B).
- (7) Railcar loading and railcar washing operations do not generally occur simultaneously.
- (8) These emissions represent the total emissions from the vapor combustion system.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

| * | Emission rates are based on and the facilities are limited by the following maximum operating schedule: |
|---|---|
| | Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year |
| | |
| | |
| | Dated |