EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

Flexible Permit No. 21865

This table lists the maximum allowable emission caps and individual emission limitations of 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 * lb/hr | TPY |
|---|---|---|---|---|
| MPP-1 | Solids Unloading Cabinet V-107 | PM | 0.113 | 0.211 |
| MPP-2 | Solids Vacuum Pump P-106 | PM | 0.215 | 0.605 |
| MPP-3 | Solution Tanks T-204 and 206 | PM | 0.198 | 0.130 |
| MPP-4 | Buffer Tank T-205 | Acetic Acid | 0.199 | 0.060 |
| MPP-5 | Packout from T-813 | Organic Peroxide | 0.531 | 0.043 |
| MPP-6 | Packout from R-301 | Organic Peroxide | 1.008 | 0.011 |
| MPP-7 | Packout from T-812 and 814 | Organic Hydroperoxide | 0.396 | 0.356 |
| | | Organic Peroxide | 0.001 | 0.001 |
| | | Alcohol | 0.012 | 0.011 |
| MPP-FUG | Piping Fugitives (4) | Organic Hydroperoxide | 0.254 | 0.901 |
| | | Acid Chloride | 0.064 | 0.281 |
| | | Diluent | 0.232 | 1.022 |
| | | Acetic Acid | 0.048 | 0.211 |
| | | Ketone | 0.038 | 0.168 |
| | | Organic Peroxide | 0.436 | 1.713 |
| | | Alcohol | 0.360 | 0.845 |
| | | Isoamylene | 0.189 | 0.317 |
| | | Chloroformate | 0.061 | 0.269 |
| MPP-WW | Wastewater | Alcohol | 0.011 | 0.022 |
| | | Organic Hydroperoxide | 0.011 | 0.033 |
| | | Organic Peroxide | 0.065 | 0.164 |
| | | Diluent | 0.305 | 0.643 |
| | | Ketone | 0.384 | 1.678 |
| PERESTER-1 | Stack Tank 403-333 | Organic Hydroperoxide | 0.043 | 0.050 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| | | Ketone | 0.026 | 0.027 |
| | | Alcohol | 0.001 | 0.001 |
| | | Diisobutylene | 0.002 | 0.002 |
| PERESTER-2 | Drying Feed Tank 403-313 | Organic Hydroperoxide | 0.001 | 0.001 |
| | | Organic Peroxide | 0.045 | 0.045 |
| | | Acid Chloride | 0.005 | 0.008 |
| | | Ketone | 0.040 | 0.047 |
| | | Alcohol | 0.035 | 0.045 |
| | | Diluent | 0.045 | 0.069 |
| | | Cumene | 0.004 | 0.004 |
| | | Diisobutylene | 0.025 | 0.020 |
| PERESTER-3 | Dilution Vessels 403-318 and 403-338 | Organic Hydroperoxide | 0.002 | 0.002 |
| | | Organic Peroxide | 2.943 | 0.414 |
| | | Ketone | 0.002 | 0.002 |
| | | Alcohol | 0.033 | 0.060 |
| | | Diluent | 0.087 | 0.159 |
| | | Cumene | 0.004 | 0.004 |
| | | Diisobutylene | 0.037 | 0.028 |
| PERESTER-4 | Tanker Pad | Organic Peroxide | 5.602 | 0.436 |
| | | Diluent | 5.360 | 0.552 |
| PERESTER-5 | Solution Tank 403-301 | PM | 0.069 | 0.028 |
| PERESTER-6 | Solution Tank 403-301 | PM | 0.246 | 0.229 |
| PERESTER-7 | Buffer Tank 403-303 | Acetic Acid | 0.046 | 0.047 |
| PERESTER-8 | Recovery Vessel 403-340 | Organic Hydroperoxide | 0.002 | 0.001 |
| | | Organic Peroxide | 0.088 | 0.011 |
| | | Ketone | 0.002 | 0.001 |
| | | Alcohol | 0.033 | 0.004 |
| | | Diluent | 0.087 | 0.011 |
| | | Cumene | 0.004 | 0.001 |
| | | Diisobutylene | 0.037 | 0.004 |

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

| Emission Point No. (1) * | Source Name (2) | Air Contaminant Name (3) | Emission Rates lb/hr | TPY |
|---|---|---|---|---|
| PEREST-FUG | Piping Fugitives (4) | Organic Hydroperoxide | 0.101 | 0.448 |
| | | Acid Chloride | 0.094 | 0.411 |
| | | Diluent | 0.411 | 1.800 |
| | | Acetic Acid | 0.055 | 0.239 |
| | | Ketone | 0.020 | 0.085 |
| | | Organic Peroxide | 0.682 | 2.987 |
| PEREST-WW | Wastewater | Alcohol | 0.011 | 0.044 |
| | | Organic Hydroperoxide | 0.022 | 0.098 |
| | | Organic Peroxide | 0.229 | 1.025 |
| | | Diluent | 0.414 | 1.831 |
| OXIDIZER | Thermal Oxidizer (5) | Organic Hydroperoxide | 0.081 | 0.146 |
| | | Organic Peroxide | 0.389 | 0.299 |
| | | Acid Chloride | 0.063 | 0.087 |
| | | Chloroformate | 0.049 | 0.084 |
| | | Ketone | 0.397 | 0.482 |
| | | Alcohol | 0.988 | 0.690 |
| | | Diluent | 0.422 | 0.631 |
| | | Acetic Acid | 0.001 | 0.004 |
| | | Acetic Anhydride | 0.005 | 0.012 |
| | | Cumene | 0.036 | 0.034 |
| | | Diisobutylene | 0.262 | 0.205 |
| | | Isoamylene | 0.102 | 0.093 |
| | | Hydrogen Peroxide | 0.005 | 0.005 |
| | | Cyclic Ether | 0.046 | 0.047 |
| | | Cyclic Peroxide | 0.017 | 0.019 |
| | | PM 0.025 | 0.110 | |
| | | $SO_2$ 0.001 | 0.005 | |
| | | $NO_x$ 0.036 | 0.157 | |
| | | CO 0.057 | 0.249 | |
| | | TOC (from Combustion) | 0.011 | 0.049 |
| | | HCl 2.180 | 4.033 | |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(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) PM - particulate matter, suspended in the atmosphere, including $PM_{10}$.
$PM_{10}$ - 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.
$SO_2$ - sulfur dioxide
$NO_x$ - total oxides of nitrogen
CO - carbon monoxide
TOC - total organic carbon from combustion of natural gas
HCl - hydrogen chloride
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) The thermal oxidizer shall start operation no later than July 1, 2001.

* 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

Dated _____