

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 9074

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 | | Air Contaminant | | Emission Rates * | |
|---------------------------|--|----------|-------------------------------|-----|------------------|--------|
| | Name (2) | Name (3) | lb/hr | TPY | | |
| 120 | Emergency Generator No. 1 | | SO ₂ | | 0.82 | 0.01 |
| | | | NO _x | | 9.62 | 0.13 |
| | | | TSP | | 0.96 | 0.01 |
| | | | CO | | 2.5 | 0.03 |
| | | | VOC | | 0.25 | 0.003 |
| 121 | Waste Treatment Scrubber System | | HCl | | 0.92 | 0.28 |
| | | | Cl ₂ | | 0.29 | 0.011 |
| | | | FC | | 84.0 | 18.4 |
| 122 | Main Sniff Scrubber | | HCl | | 0.02 | 0.09 |
| | | | Cl ₂ | | 0.03 | 0.13 |
| | | | FC | | 0.09 | 0.39 |
| 123 | Fugitive Emissions (4) | | HCl | | 0.0092 | 0.04 |
| 126 | Fugitive Emissions (4) | | HCl | | 0.117 | 0.512 |
| 135 | Backup Sniff Scrubber | | HCl | | 0.02 | 0.09 |
| | | | Cl ₂ | | 0.03 | 0.13 |
| | | | FC | | 0.09 | 0.39 |
| 166 | H ₂ O ₂ Storage Tank | | H ₂ O ₂ | | 0.32 | 0.0038 |
| 170 | Boiler | | SO ₂ | | 8.33 | 32.84 |
| | | | NO _x | | 12.83 | 50.58 |
| | | | TSP | | 0.8 | 3.16 |
| | | | CO | | 24.86 | 98.01 |
| | | | VOC | | 4.49 | 17.7 |
| 175 | Fugitive Emissions (4) | | FC | | 0.86 | 3.78 |

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|---|------------------|-----|------|------|
| 179 | Cooling Tower | TSP | 1.6 | 7.01 |
| 186 | Neutralizer Vent | | | |
| | Process A | FC | 0.47 | 2.06 |
| | Process B | FC | 0.46 | 2.02 |

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CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | lb/hr | <u>Emission Rates *</u> TPY | |
|---------------------------|------------------------|-----------------------------|--------|--------------------------------|--|
| 187 | Fugitive Emissions (4) | FC | 8.622 | 37.731 | |
| 188 | Emergency Vent | | | | |
| | Process A | FC | 410.00 | 0.269 | |
| | Process B | FC | 410.00 | 0.222 | |
| 189 | Afterburner Stack | FC | 1.84 | 8.06 | |
| | Process A | NO _x | 1.0 | 4.4 | |
| | | CO | 1.0 | 4.4 | |
| | | TSP | 0.3 | 1.3 | |
| | | VOC | 0.2 | 0.9 | |
| | | SO ₂ | 0.1 | 0.4 | |
| | | HCl | 0.0008 | 0.0035 | |
| | | HF | 0.0018 | 0.008 | |
| | | Cl ₂ | 0.12 | 0.43 | |
| | Process B | FC | 1.58 | 6.92 | |
| | | NO _x | 1.0 | 4.4 | |
| | | CO | 1.0 | 4.4 | |
| | | TSP | 0.3 | 1.3 | |
| | | VOC | 0.2 | 0.9 | |
| | | SO ₂ | 0.1 | 0.4 | |
| | | HCl | 0.0007 | 0.003 | |
| | | HF | 0.0018 | 0.008 | |
| | | Cl ₂ | 0.12 | 0.43 | |
| 191 | Carbon Canister 1 | FC | 5.00 | 0.5 | |
| 192 | Afterburner Stack | FC | 1.87 | 8.19 | |
| | | NO _x | 0.89 | 3.9 | |
| | | CO | 0.54 | 2.37 | |
| | | TSP | 0.23 | 1.01 | |
| | | VOC | 0.84 | 1.84 | |
| | | SO ₂ | 0.12 | 0.53 | |
| | | Benzene | <0.001 | <0.001 | |
| | | HF | 0.192 | 0.84 | |
| | | HCl | 0.135 | 0.59 | |

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| | | | | |
|-----|------------------------|-----------------|---------|---------|
| | | Cl ₂ | 0.00253 | 0.01110 |
| 193 | Fugitive Emissions (4) | FC | 3.35 | 14.68 |
| | | Benzene | <0.001 | <0.001 |
| | | HCl | 0.004 | 0.0175 |

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CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | lb/hr | <u>Emission Rates *</u> | |
|---------------------------|------------------------------|-----------------------------|-------|-------------------------|--|
| | | | | TPY | |
| 194 | Emergency Generator No. 3 | SO ₂ | 0.82 | 0.01 | |
| | | NO _x | 9.02 | 0.12 | |
| | | TSP | 0.65 | 0.01 | |
| | | CO | 1.96 | 0.03 | |
| | | VOC | 0.72 | 0.01 | |
| 197 | Carbon Canister No. 2 | FC | 12.5 | 2.74 | |
| | | HF | 0.02 | 0.01 | |
| | | Cl ₂ | 0.08 | 0.17 | |
| | | HCl | 8.04 | 1.76 | |
| 210 | Emergency Fire Pump No. 1 | SO ₂ | 0.41 | 0.01 | |
| | | NO _x | 4.51 | 0.12 | |
| | | TSP | 0.32 | 0.008 | |
| | | CO | 0.98 | 0.026 | |
| | | VOC | 0.36 | 0.009 | |
| 211 | 50% Caustic Tank | NaOH | 0.097 | 0.234 | |
| 215 | Emergency Fire Pump No. 2 | SO ₂ | 1.23 | 0.03 | |
| | | NO _x | 13.53 | 0.35 | |
| | | TSP | 0.97 | 0.025 | |
| | | CO | 2.94 | 0.077 | |
| | | VOC | 1.08 | 0.028 | |
| 227 | Uni-Cage Bin Filter | TSP | 0.15 | 0.005 | |
| 231 | Therminol Heater | SO ₂ | 1.3 | 5.7 | |
| | | NO _x | 3.18 | 13.95 | |
| | | TSP | 0.11 | 0.5 | |
| | | CO | 0.8 | 3.49 | |
| | | VOC | 0.06 | 0.28 | |
| 237 | Hot Air Heater | SO ₂ | 0.43 | 1.9 | |
| | | NO _x | 0.75 | 3.3 | |
| | | TSP | 0.04 | 0.17 | |
| | | CO | 0.15 | 0.66 | |
| | | VOC | 0.04 | 0.18 | |

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| | | | | |
|-----|---------------------|-----------------|------|------|
| 244 | Emergency Generator | SO ₂ | 0.82 | 0.01 |
| | No. 2 | NO _x | 9.02 | 0.12 |
| | | TSP | 0.64 | 0.01 |
| | | CO | 1.96 | 0.03 |
| | | VOC | 0.72 | 0.01 |

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AIR

CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | lb/hr | <u>Emission Rates *</u> TPY | |
|---------------------------|------------------------|-----------------------------|-------|--------------------------------|-------|
| 245 | Fugitive Emissions (4) | FC | | 3.80 | 16.64 |
| | | VOC | | 0.45 | 1.962 |
| | | HF | | 0.06 | 0.25 |
| | | HCl | | 0.09 | 0.385 |
| | | Cl ₂ | | 0.05 | 0.201 |
| | | H ₂ | | 0.0153 | 0.067 |
| 247 | Spray Scrubber | HF | | 0.08 | 0.03 |
| | | HCl | | 0.08 | 0.09 |
| | | Cl ₂ | | 0.09 | 0.23 |
| | | FC | | 26.0 | 2.85 |
| 251 | CC-97 Pilot Plant | HCl | | <0.001 | 0.003 |
| | | H ₂ | | 7.00 | 30.70 |

- (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
CO - carbon monoxide
FC - fluorocarbons
HCl - hydrogen chloride
HF - hydrogen fluoride
Cl₂ - chlorine
TSP - total suspended particulate matter
SO₂ - sulfur dioxide
VOC - volatile organic compound
H₂O₂ - hydrogen peroxide
H₂ - hydrogen
NaOH - sodium hydroxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Hrs/day____Days/week____Weeks/year____/or Hrs/year 8,760

Dated _____