Emission Sources - Maximum Allowable Emission Rates

Permit Number 20178

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, sources, and related activities. 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 (6) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| 6-47 | East Scrubbers A/B | EtO | 1.09 | 0.42 |
| 6-38 | West Scrubbers C/D | EtO | 0.97 | 0.34 |
| 6-113 | East Abator | EtO | 0.01 | 0.02 |
| 6-112 | West Abator | EtO | 0.01 | 0.02 |
| 6-154 | Sterilizer SS-1 DLC (5) | EtO | 0.01 | <0.01 |
| 6-139 | Sterilizer SS-2 DLC (5) | EtO | 0.01 | <0.01 |
| 6-75 | Sterilizer SS-3 DLC (5) | EtO | 0.01 | <0.01 |
| 6-125 | Sterilizer SP-1 DLC (5) | EtO | 0.01 | <0.01 |
| 6-96 | Sterilizer SP-2 DLC (5) | EtO | 0.01 | <0.01 |
| 6-87 | Sterilizer SP-3 DLC (5) | EtO | 0.01 | <0.01 |
| 6-163 | EDF Suites DLC (5) | EtO | 0.02 | 0.01 |
| 6-52 | East Scrubber A/B DLC (5) | EtO | 0.01 | 0.06 |
| 6-43 | West Scrubber C/D DLC (5) | EtO | 0.01 | 0.06 |
| 6-165 | EDF Pump Suite DLC (5) | EtO | 0.03 | 0.11 |
| 6-175 | Cooling Water Units | VOC | <0.01 | <0.01 |
| 6-FUG | HVAC Building Exhaust (5) | EtO | 0.01 | 0.06 |

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| | | | | |
|---|---|---|---|---|
| 6-170 | 2 MMBtu/hr West Abator Heater | VOC | 0.01 | 0.05 |
| | | PM | 0.02 | 0.06 |
| | | $PM_{10}$ | 0.02 | 0.06 |
| | | $PM_{2.5}$ | 0.02 | 0.06 |
| | | $NO_x$ | 0.20 | 0.86 |
| | | CO | 0.17 | 0.72 |
| | | $SO_2$ | <0.01 | 0.01 |
| 6-171 | 2 MMBtu/hr East Abator Heater | VOC | 0.01 | 0.05 |
| | | PM | 0.02 | 0.06 |
| | | $PM_{10}$ | 0.02 | 0.06 |
| | | $PM_{2.5}$ | 0.02 | 0.06 |
| | | $NO_x$ | 0.20 | 0.86 |
| | | CO | 0.17 | 0.72 |
| | | $SO_2$ | <0.01 | 0.01 |
| 6-65 | Boiler 6E | $NO_x$ | 1.53 | 0.23 |
| | | CO | 0.75 | 0.18 |
| | | $SO_2$ | 1.92 | 0.08 |
| | | VOC | 0.05 | 0.02 |
| | | PM | 0.20 | 0.03 |
| | | $PM_{10}$ | 0.20 | 0.03 |
| | | $PM_{2.5}$ | 0.20 | 0.03 |
| 6-31 | Boiler 6W | $NO_x$ | 2.04 | 0.31 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | CO | 1.00 | 0.24 |
| | | $SO_2$ | 2.56 | 0.10 |
| | | VOC | 0.07 | 0.03 |
| | | PM | 0.26 | 0.03 |
| | | $PM_{10}$ | 0.26 | 0.03 |
| | | $PM_{2.5}$ | 0.26 | 0.03 |
| 1-217 | Tool & Die Shop | PM | 0.03 | 0.03 |
| | | $PM_{10}$ | 0.02 | 0.02 |
| | | $PM_{2.5}$ | <0.01 | <0.01 |
| 1-220 | Project Vapor Recovery | VOC | 1.40 | 0.21 |
| 1-21 | Print Shop | VOC | 2.46 | 5.27 |
| 1-27 | Needles Shop, Parts Washer, Epoxy Ovens, Heat Treating Ovens, and Plasma Oven | VOC | 0.33 | 0.33 |
| 1-25 | Silicone Mixing Room | VOC | 0.38 | 0.81 |
| | | HAP (xylene) | <0.01 | 0.02 |
| 1-29 | Machine Shop, Parts Washer, and Welding Booth | VOC | 0.08 | 0.08 |
| | | PM | 0.05 | 0.05 |
| | | $PM_{10}$ | 0.05 | 0.05 |
| | | $PM_{2.5}$ | 0.05 | 0.05 |
| Hot Room | Hot Room (5) | EtO | <0.01 | <0.01 |
| 2-1 | Maintenance Building, Welding Booth, and Abrasive Blast Cleaning | VOC | 0.05 | 0.05 |
| | | PM | 0.11 | 0.15 |

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| | | | | |
|---|---|---|---|---|
| | | $PM_{10}$ | 0.08 | 0.10 |
| | | $PM_{2.5}$ | 0.05 | 0.05 |
| 3-70 | Lab Source A | VOC | <0.01 | 0.03 |
| 3-71 | Lab Source B | VOC | <0.01 | 0.03 |
| 3-76 | Lab Source C | VOC | <0.01 | 0.03 |
| 3-77 | Mechanics Shop and Parts Washer | VOC | 0.03 | 0.03 |
| B-43 | Boiler 43 | $NO_x$ | 2.97 | 0.45 |
| | | CO | 1.47 | 0.35 |
| | | $SO_2$ | 3.73 | 0.14 |
| | | VOC | 0.10 | 0.03 |
| | | PM | 0.37 | 0.04 |
| | | $PM_{10}$ | 0.37 | 0.04 |
| | | $PM_{2.5}$ | 0.37 | 0.04 |
| B-44 | Boiler 44 | $NO_x$ | 2.97 | 0.45 |
| | | CO | 1.47 | 0.35 |
| | | $SO_2$ | 3.73 | 0.14 |
| | | VOC | 0.10 | 0.03 |
| | | PM | 0.37 | 0.04 |
| | | $PM_{10}$ | 0.37 | 0.04 |
| | | $PM_{2.5}$ | 0.37 | 0.04 |
| Fugitives | Maintenance Activities and Hand-held Equipment (5) | VOC | 0.10 | 0.10 |
| | | PM | 0.20 | 0.20 |
| | | $PM_{10}$ | 0.20 | 0.20 |
| | | $PM_{2.5}$ | 0.10 | 0.10 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| ETHSA1 | 25,000 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA7 | 200 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA8 | 500 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA9 | 700 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA10 | 300 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA11 | 250 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA12 | 150 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA13 | 225 gal Sulfuric Acid Tank | $H_2SO_4$ | <0.01 | <0.01 |
| ETHSA14 | 225 gal Caustic Soda Tank | NaOH | <0.01 | <0.01 |
| ETHSA15 | 55 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA16 | 169 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |
| ETHSA20 | 6,000 gal Glycol Tank | HAP (ethylene glycol) | <0.01 | <0.01 |
| ETHSA22 | 300 gal Distallate Fuel Oil Tank | VOC | <0.01 | <0.01 |

(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) EtO -ethylene oxide
VOC -volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
$NO_x$ -total oxides of nitrogen
$SO_2$ -sulfur dioxide

Emission Sources - Maximum Allowable Emission Rates

PM -total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$, as represented
$PM_{10}$ -total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ -particulate matter equal to or less than 2.5 microns in diameter
CO -carbon monoxide
HAP -hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
$H_2SO_4$ -sulfuric acid
NaOH -sodium hydroxide
DLC -Damage Limiting Construction
EDF -ethylene oxide Dispensing Facility

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: October 3, 2013