Emission Sources - Maximum Allowable Emission Rates

Permit Number 169075

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 | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| F-501 | F-501 Gasoline Loop SU Heater | VOC | 0.24 | 1.05 |
| | | NOx | 1.72 | 6.13 |
| | | CO | 1.27 | 5.58 |
| | | $SO_2$ | 0.21 | 0.91 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.26 | 1.13 |
| | | $PM_{10}$ | 0.26 | 1.13 |
| | | $PM_{2.5}$ | 0.26 | 1.13 |
| F-590A | F-590A Gasoline Loop Regeneration Heater | VOC | 0.10 | 0.30 |
| | | NOx | 0.45 | 1.60 |
| | | CO | 0.33 | 1.46 |
| | | $SO_2$ | 0.05 | 0.24 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.07 | 0.29 |
| | | $PM_{10}$ | 0.07 | 0.29 |
| | | $PM_{2.5}$ | 0.07 | 0.29 |
| F-590B | F-590B Gasoline Loop Regeneration Heater | VOC | 0.10 | 0.30 |
| | | NOx | 0.45 | 1.60 |
| | | CO | 0.33 | 1.46 |
| | | $SO_2$ | 0.05 | 0.24 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.07 | 0.29 |
| | | $PM_{10}$ | 0.07 | 0.29 |
| | | $PM_{2.5}$ | 0.07 | 0.29 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| F-801 | F-801 Gasoline Splitter Reboiler | VOC | 0.17 | 0.74 |
| | | NOx | 1.23 | 4.35 |
| | | CO | 0.90 | 3.96 |
| | | $SO_2$ | 0.15 | 0.65 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.18 | 0.80 |
| | | $PM_{10}$ | 0.18 | 0.80 |
| | | $PM_{2.5}$ | 0.18 | 0.80 |
| F-902 | F-902 Isomerization Effluent Stabilizer Reboiler | VOC | 0.02 | 0.09 |
| | | NOx | 0.15 | 0.53 |
| | | CO | 0.11 | 0.48 |
| | | $SO_2$ | 0.02 | 0.08 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.02 | 0.10 |
| | | $PM_{10}$ | 0.02 | 0.10 |
| | | $PM_{2.5}$ | 0.02 | 0.10 |
| F-901 | F-901 Isomerization Heater | VOC | 0.02 | 0.09 |
| | | NOx | 0.15 | 0.52 |
| | | CO | 0.11 | 0.47 |
| | | $SO_2$ | 0.02 | 0.08 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.02 | 0.09 |
| | | $PM_{10}$ | 0.02 | 0.09 |
| | | $PM_{2.5}$ | 0.02 | 0.09 |
| F-951 | F-951 Hydrocracker Heater | VOC | 0.02 | 0.07 |
| | | NOx | 0.12 | 0.43 |
| | | CO | 0.09 | 0.39 |
| | | $SO_2$ | 0.01 | 0.06 |
| | | $H_2S$ | <0.01 | <0.01 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | PM | 0.02 | 0.08 |
| | | $PM_{10}$ | 0.02 | 0.08 |
| | | $PM_{2.5}$ | 0.02 | 0.08 |
| FUG | Fugitives | VOC | 2.44 | 10.70 |
| | | CO | 0.07 | 0.31 |
| | | $H_2S$ | <0.01 | 0.01 |
| | | $NH_3$ | <0.01 | 0.02 |
| F-1701A | Steam Boiler F-1701A | VOC | 1.43 | 6.26 |
| | | NOx | 10.30 | 14.05 |
| | | CO | 7.61 | 26.66 |
| | | $SO_2$ | 1.25 | 5.46 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | $NH_3$ | 0.93 | 4.05 |
| | | PM | 1.53 | 6.72 |
| | | $PM_{10}$ | 1.53 | 6.72 |
| | | $PM_{2.5}$ | 1.53 | 6.72 |
| F-1701B | Steam Boiler F-1702B | VOC | 1.43 | 6.26 |
| | | NOx | 10.30 | 14.05 |
| | | CO | 7.61 | 26.66 |
| | | $SO_2$ | 1.25 | 5.46 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | $NH_3$ | 0.93 | 4.05 |
| | | PM | 1.53 | 6.72 |
| | | $PM_{10}$ | 1.53 | 6.72 |
| | | $PM_{2.5}$ | 1.53 | 6.72 |
| CT-1 | Cooling Tower | VOC | 1.30 | 5.69 |
| | | PM | 0.16 | 0.71 |
| | | $PM_{10}$ | 0.13 | 0.58 |
| | | $PM_{2.5}$ | <0.01 | <0.01 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| TK-2006 | TK-2006 Off-spec Gasoline Storage Tank | VOC | 0.59 | 1.62 |
| TK-2005 | TK-2005 On-spec Gasoline Storage Tank | VOC | 0.61 | 1.77 |
| TK-2007A | TK-2007A Blended Gasoline 1 Storage Tank | VOC | 2.43 | 5.98 |
| TK-2007B | TK-2007B Blended Gasoline 2 Storage Tank | VOC | 2.43 | 5.98 |
| DSL-TNK | Diesel Tank | VOC | 0.11 | <0.01 |
| FPUMP1 | Firewater Pump 1 | VOC | 3.29 | 0.16 |
| | | NOx | 3.29 | 0.16 |
| | | CO | 3.34 | 0.17 |
| | | $SO_2$ | 1.03 | 0.05 |
| | | PM | 0.16 | <0.01 |
| | | $PM_{10}$ | 0.16 | <0.01 |
| | | $PM_{2.5}$ | 0.16 | <0.01 |
| FPUMP2 | Firewater Pump 2 | VOC | 3.29 | 0.16 |
| | | NOx | 3.29 | 0.16 |
| | | CO | 3.34 | 0.17 |
| | | $SO_2$ | 1.03 | 0.05 |
| | | PM | 0.16 | <0.01 |
| | | $PM_{10}$ | 0.16 | <0.01 |
| | | $PM_{2.5}$ | 0.16 | <0.01 |
| FPUMP3 | Firewater Pump 3 | VOC | 3.29 | 0.16 |
| | | NOx | 3.29 | 0.16 |
| | | CO | 3.34 | 0.17 |
| | | $SO_2$ | 1.03 | 0.05 |
| | | PM | 0.16 | <0.01 |
| | | $PM_{10}$ | 0.16 | <0.01 |
| | | $PM_{2.5}$ | 0.16 | <0.01 |
| FPUMP4 | Firewater Jockey | VOC | 1.97 | 0.10 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | NOx | 1.97 | 0.10 |
| | | CO | 2.00 | 0.10 |
| | | $SO_2$ | 0.62 | 0.03 |
| | | PM | 0.10 | <0.01 |
| | | $PM_{10}$ | 0.10 | <0.01 |
| | | $PM_{2.5}$ | 0.10 | <0.01 |
| FPUMP5 | Firewater Jockey Pump 2 | VOC | 1.97 | 0.10 |
| | | NOx | 1.97 | 0.10 |
| | | CO | 2.00 | 0.10 |
| | | $SO_2$ | 0.62 | 0.03 |
| | | PM | 0.10 | <0.01 |
| | | $PM_{10}$ | 0.10 | <0.01 |
| | | $PM_{2.5}$ | 0.10 | <0.01 |
| EGEN1 | Emergency Engine | VOC | 5.03 | 0.25 |
| | | NOx | 25.95 | 1.30 |
| | | CO | 13.36 | 0.67 |
| | | $SO_2$ | 4.10 | 0.21 |
| | | PM | 1.32 | 0.07 |
| | | $PM_{10}$ | 1.32 | 0.07 |
| | | $PM_{2.5}$ | 1.32 | 0.07 |
| WWTP | Wastewater Treatment | VOC | 0.14 | 0.61 |
| FLARE | Flare | VOC | 277.28 | 8.11 |
| | | NOx | 21.73 | 1.11 |
| | | CO | 186.33 | 9.50 |
| | | $SO_2$ | 2.94 | 2.61 |
| | | $H_2S$ | 0.03 | 0.03 |
| VCU | VCU | VOC | 9.69 | 5.79 |
| | | NOx | 1.69 | 1.58 |
| | | CO | 1.25 | 1.17 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | $SO_2$ | <0.01 | 0.02 |
| | | $H_2S$ | <0.01 | <0.01 |
| | | PM | 0.13 | 0.12 |
| | | $PM_{10}$ | 0.13 | 0.12 |
| | | $PM_{2.5}$ | 0.13 | 0.12 |
| MSS-DEGASS | Large Equipment Openings after Degassing | VOC | 34.74 | 0.05 |
| MSS-INST | Instrumentation and Metering Equipment | VOC | 0.72 | 1.44 |
| MSS-VAC | Vacuum Trucks | VOC | 0.99 | 0.16 |
| MSS-TNKOPN | Tank Openings | VOC | 10.46 | 0.01 |
| MSS-VCU | Temporary MSS VCU | VOC | 16.45 | 1.70 |
| | | NOx | 3.05 | 0.32 |
| | | CO | 2.25 | 0.24 |
| | | $SO_2$ | 0.50 | 0.05 |
| | | PM | 0.23 | 0.02 |
| | | $PM_{10}$ | 0.23 | 0.02 |
| | | $PM_{2.5}$ | 0.23 | 0.02 |
| SLOP | Slop Oil Tank and Slop Methanol Tank Truck Loading | VOC | 1.41 | 3.98 |
| All Emissions at the Site | All Sources at the Site | Individual HAPs | -- | <10.00 |
| | | Total HAPs | -- | <25.00 |

(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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
$NO_x$ - total oxides of nitrogen
$H_2S$ - hydrogen sulfide
$SO_2$ - sulfur dioxide
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
$NH_3$ - ammonia

Emission Sources - Maximum Allowable Emission Rates

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

(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.

Date: 04/13/2023