Emission Sources - Maximum Allowable Emission Rates

Permit Number 152783

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 (5) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| ENG1 | Caterpillar G3516 Tale Off Gas Compressor Engine 1 | $NO_x$ | 4.78 | 19.38 |
| | | CO | 1.48 | 6.50 |
| | | $SO_2$ | 0.01 | 0.02 |
| | | PM | 0.09 | 0.40 |
| | | $PM_{10}$ | 0.09 | 0.40 |
| | | $PM_{2.5}$ | 0.09 | 0.40 |
| | | VOC | 0.60 | 2.62 |
| ENG5 | Caterpillar G3516 Tale Off Gas Compressor Engine 2 | $NO_x$ | 4.78 | 20.95 |
| | | CO | 1.36 | 5.91 |
| | | $SO_2$ | 0.01 | 0.02 |
| | | PM | 0.09 | 0.40 |
| | | $PM_{10}$ | 0.09 | 0.40 |
| | | $PM_{2.5}$ | 0.09 | 0.40 |
| | | VOC | 0.65 | 2.83 |
| ENG6 | Caterpillar G3516B Off Gas Compressor Engine 3 | $NO_x$ | 1.83 | 8.00 |
| | | CO | 1.48 | 6.48 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.10 | 0.44 |
| | | $PM_{10}$ | 0.10 | 0.44 |
| | | $PM_{2.5}$ | 0.10 | 0.44 |
| | | VOC | 1.38 | 6.06 |
| ENG7 | Caterpillar G3606 LE Off Gas Compressor Engine 4 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 4.30 | 18.85 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.13 | 0.59 |
| | | $PM_{10}$ | 0.13 | 0.59 |
| | | $PM_{2.5}$ | 0.13 | 0.59 |
| | | VOC | 1.04 | 4.58 |

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| | | | | |
|---|---|---|---|---|
| ENG8 | Caterpillar G3606 LE Off Gas Compressor Engine 5 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 4.30 | 18.85 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.13 | 0.59 |
| | | $PM_{10}$ | 0.13 | 0.59 |
| | | $PM_{2.5}$ | 0.13 | 0.59 |
| | | VOC | 0.70 | 3.05 |
| ENG9 | Caterpillar G3606 LE Inlet Gas Compressor Engine 1 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 1.08 | 4.71 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.13 | 0.59 |
| | | $PM_{10}$ | 0.13 | 0.59 |
| | | $PM_{2.5}$ | 0.13 | 0.59 |
| | | VOC | 0.50 | 2.19 |
| ENG10 | Caterpillar G3606 LE Inlet Gas Compressor Engine 2 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 1.08 | 4.71 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.13 | 0.59 |
| | | $PM_{10}$ | 0.13 | 0.59 |
| | | $PM_{2.5}$ | 0.13 | 0.59 |
| | | VOC | 0.50 | 2.19 |
| ENG11 | Caterpillar G3606 LE Inlet Gas Compressor Engine 3 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 1.08 | 4.71 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.13 | 0.59 |
| | | $PM_{10}$ | 0.13 | 0.59 |
| | | $PM_{2.5}$ | 0.13 | 0.59 |
| | | VOC | 0.50 | 2.19 |
| ENG12 | Caterpillar G3606 LE Inlet Gas Compressor Engine 4 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 1.08 | 4.71 |

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| | | | | |
|---|---|---|---|---|
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.12 | 0.52 |
| | | $PM_{10}$ | 0.12 | 0.52 |
| | | $PM_{2.5}$ | 0.12 | 0.52 |
| | | VOC | 2.05 | 9.00 |
| ENG13 | Caterpillar CG137-12<br>Condensate Pipeline Pump Engine | $NO_x$ | 0.93 | 4.06 |
| | | CO | 2.65 | 11.59 |
| | | $SO_2$ | <0.01 | 0.01 |
| | | PM | 0.05 | 0.22 |
| | | $PM_{10}$ | 0.05 | 0.22 |
| | | $PM_{2.5}$ | 0.05 | 0.22 |
| | | VOC | 0.93 | 4.06 |
| ENG14 | Caterpillar G3606 LE<br>Inlet Gas Compressor Engine 5 | $NO_x$ | 2.35 | 10.28 |
| | | CO | 1.08 | 4.71 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.12 | 0.52 |
| | | $PM_{10}$ | 0.12 | 0.52 |
| | | $PM_{2.5}$ | 0.12 | 0.52 |
| | | VOC | 2.05 | 9.00 |
| ENG17 | Caterpillar CG137-12<br>Condensate Pipeline Pump Engine | $NO_x$ | 0.93 | 4.06 |
| | | CO | 2.65 | 11.59 |
| | | $SO_2$ | 0.00 | 0.01 |
| | | PM | 0.05 | 0.22 |
| | | $PM_{10}$ | 0.05 | 0.22 |
| | | $PM_{2.5}$ | 0.05 | 0.22 |
| | | VOC | 0.93 | 4.06 |
| TURB1 | 5 Combined Capstone C200NG Microturbines | $NO_x$ | 0.46 | 1.99 |
| | | CO | 1.20 | 5.27 |
| | | $SO_2$ | <0.01 | 0.02 |
| | | PM | 0.08 | 0.33 |
| | | $PM_{10}$ | 0.08 | 0.33 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | $PM_{2.5}$ | 0.08 | 0.33 |
| | | VOC | 0.11 | 0.48 |
| TURB2 | 5 Combined Capstone C200NG Microturbines | $NO_x$ | 0.46 | 1.99 |
| | | CO | 1.20 | 5.27 |
| | | $SO_2$ | <0.01 | 0.02 |
| | | PM | 0.08 | 0.33 |
| | | $PM_{10}$ | 0.08 | 0.33 |
| | | $PM_{2.5}$ | 0.08 | 0.33 |
| | | VOC | 0.11 | 0.48 |
| HT1 | Amine Reboiler | $NO_x$ | 1.52 | 6.66 |
| | | CO | 1.28 | 5.59 |
| | | $SO_2$ | 0.01 | 0.04 |
| | | PM | 0.12 | 0.51 |
| | | $PM_{10}$ | 0.12 | 0.51 |
| | | $PM_{2.5}$ | 0.12 | 0.51 |
| | | VOC | 0.08 | 0.37 |
| HT2 | Glycol Reboiler 1 Gas Combustion | $NO_x$ | 0.10 | 0.43 |
| | | CO | 0.08 | 0.36 |
| | | $SO_2$ | <0.01 | <0.01 |
| | | PM | 0.01 | 0.03 |
| | | $PM_{10}$ | 0.01 | 0.03 |
| | | $PM_{2.5}$ | 0.01 | 0.03 |
| | | VOC | 0.01 | 0.02 |
| HT2 (HT2SV) | Glycol Reboiler 1 Uncombusted Still Vent | VOC | 0.62 | 2.70 |
| | | $H_2S$ | <0.01 | <0.01 |
| HT3 | Condensate Stabilizer 1 Heater | $NO_x$ | 1.23 | 5.37 |
| | | CO | 1.03 | 4.51 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.09 | 0.41 |
| | | $PM_{10}$ | 0.09 | 0.41 |
| | | $PM_{2.5}$ | 0.09 | 0.41 |
| | | VOC | 0.07 | 0.30 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| HT4 | Condensate Stabilizer 2 Heater | $NO_x$ | 0.54 | 2.36 |
| | | CO | 0.45 | 1.98 |
| | | $SO_2$ | <0.01 | 0.01 |
| | | PM | 0.04 | 0.18 |
| | | $PM_{10}$ | 0.04 | 0.18 |
| | | $PM_{2.5}$ | 0.04 | 0.18 |
| | | VOC | 0.03 | 0.13 |
| HT5 | Glycol Reboiler 2 Gas Combustion | $NO_x$ | 0.07 | 0.32 |
| | | CO | 0.06 | 0.27 |
| | | $SO_2$ | <0.01 | <0.01 |
| | | PM | 0.01 | 0.02 |
| | | $PM_{10}$ | 0.01 | 0.02 |
| | | $PM_{2.5}$ | 0.01 | 0.02 |
| | | VOC | <0.01 | 0.02 |
| HT5 (HT5SV) | Glycol Reboiler 2 Uncombusted Still Vent | VOC | 0.41 | 1.80 |
| | | $H_2S$ | 0.00 | 0.00 |
| HT6 | Glycol Reboiler 3 Gas Combustion | $NO_x$ | 0.15 | 0.64 |
| | | CO | 0.12 | 0.54 |
| | | $SO_2$ | <0.01 | <0.01 |
| | | PM | 0.01 | 0.05 |
| | | $PM_{10}$ | 0.01 | 0.05 |
| | | $PM_{2.5}$ | 0.01 | 0.05 |
| | | VOC | 0.01 | 0.04 |
| HT6 (HT6SV) | Glycol Reboiler 3 Uncombusted Still Vent | VOC | 0.62 | 2.70 |
| | | $H_2S$ | <0.01 | <0.01 |
| HT7 | Condensate Stabilizer 3 Heater | $NO_x$ | 1.52 | 6.66 |
| | | CO | 1.28 | 5.59 |
| | | $SO_2$ | 0.01 | 0.04 |
| | | PM | 0.12 | 0.51 |
| | | $PM_{10}$ | 0.12 | 0.51 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | $PM_{2.5}$ | 0.12 | 0.51 |
| | | VOC | 0.08 | 0.37 |
| HT8 | Condensate Stabilizer 4 Heater | $NO_x$ | 0.54 | 2.36 |
| | | CO | 0.45 | 1.98 |
| | | $SO_2$ | <0.01 | 0.01 |
| | | PM | 0.04 | 0.18 |
| | | $PM_{10}$ | 0.04 | 0.18 |
| | | $PM_{2.5}$ | 0.04 | 0.18 |
| | | VOC | 0.03 | 0.13 |
| HT9 | Condensate Stabilizer 5 Heater | $NO_x$ | 1.03 | 4.51 |
| | | CO | 0.86 | 3.79 |
| | | $SO_2$ | 0.01 | 0.03 |
| | | PM | 0.08 | 0.34 |
| | | $PM_{10}$ | 0.08 | 0.34 |
| | | $PM_{2.5}$ | 0.08 | 0.34 |
| | | VOC | 0.06 | 0.25 |
| HT10 | Glycol Reboiler 4 Gas Combustion | $NO_x$ | 0.07 | 0.32 |
| | | CO | 0.06 | 0.27 |
| | | $SO_2$ | <0.01 | <0.01 |
| | | PM | 0.01 | 0.02 |
| | | $PM_{10}$ | 0.01 | 0.02 |
| | | $PM_{2.5}$ | 0.01 | 0.02 |
| | | VOC | <0.01 | 0.02 |
| HT10 (HT10SV) | Glycol Reboiler 4 Uncombusted Still Vent | VOC | 0.41 | 1.80 |
| | | $H_2S$ | <0.01 | <0.01 |
| FL1 | Flare Maximum Normal Emissions | $NO_x$ | 0.56 | 2.44 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | CO | 4.77 | 20.88 |
| | | $SO_2$ | 54.89 | 240.42 |
| | | VOC | 0.99 | 4.34 |
| | | $H_2S$ | 0.58 | 2.56 |
| GRP-IFR | GROUP - Combined Internal Floating Roof Tanks | VOC | 0.48 | 7.01 |
| | | $H_2S$ | 0.02 | <0.01 |
| TB1 | 16 Fixed Roof Condensate Tanks (Including 6 Swing Tanks) | VOC | 13.47 | 3.99 |
| | | $H_2S$ | <0.01 | <0.01 |
| TK1 | Produced/Slop Water Tank 1 Fuel Gas Blanket & mVRU | VOC | 2.63 | 0.59 |
| | | $H_2S$ | <0.01 | <0.01 |
| TK2 | Produced/Slop Water Tank 2 Fuel Gas Blanket & mVRU | VOC | 2.63 | 0.59 |
| | | $H_2S$ | <0.01 | <0.01 |
| TK3 | Lube Oil | VOC | 0.01 | 0.01 |
| TK4 | Antifreeze | VOC | <0.01 | <0.01 |
| TK5 | Amine | VOC | <0.01 | <0.01 |
| TK6 | Glycol | VOC | <0.01 | <0.01 |
| TK7 | Methanol | VOC | 0.20 | 0.20 |
| TK8 | Diesel | VOC | 0.01 | 0.01 |
| TK9 | Used Oil | VOC | 0.01 | 0.01 |
| LD1 | Condensate Truck Loading | VOC | 15.44 | 30.76 |
| | | $H_2S$ | <0.01 | <0.01 |
| LD2 | Produced/Slop Water Truck Loading | VOC | 0.03 | 0.06 |
| | | $H_2S$ | <0.01 | <0.01 |
| FUG1 | Facilities Fugitive Emissions | VOC | 5.59 | 24.46 |
| | | $H_2S$ | <0.01 | <0.01 |
| **Scheduled Maintenance Startup and Shutdown (MSS)** | | | | |
| MSSVENT1 (IGCOMP) | Inlet Gas Compressors MSS Vents to Atmosphere | VOC | 17.20 | 0.86 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | $H_2S$ | 0.01 | <0.01 |
| MSSVENT2 (OGCOMP) | Off-Gas Compressor MSS Vents to Atmosphere | VOC | 106.35 | 11.96 |
| | | $H_2S$ | 0.02 | <0.01 |
| MSSVENT3 (PLANT) | Non-Compressor Plant Equipment MSS Vents to Atmosphere | VOC | 606.24 | 3.03 |
| | | $H_2S$ | 0.12 | <0.01 |
| MSSVENT4 (PIGREC) | Pig Receivers MSS Vents to Atmosphere | VOC | 8.90 | 3.47 |
| | | $H_2S$ | <0.01 | <0.01 |
| FL2 | Waste Streams Emission Cap | $NO_x$ | 104.19 | 12.55 |
| | | CO | 208.02 | 25.06 |
| | | $SO_2$ | 6.41 | 0.81 |
| | | VOC | 282.31 | 35.57 |
| | | $H_2S$ | 0.09 | 0.04 |
| MSSVENT5 (IFRLAND) | Internal Floating Roof Tanks Roof Landing MSS Emissions | VOC | 42.52 | 2.48 |
| | | $H_2S$ | 0.01 | <0.01 |
| MSSVENT6 (HOSEDISC) | Y-Grade Hose Disconnections | VOC | 0.36 | 0.13 |

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
$NO_x$ - total oxides of nitrogen
$SO_2$ - 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
$H_2S$ - hydrogen sulfide
(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: August 30, 2019