Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 106011 and PSDTX1310

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 (4) | TPY (5) |
| Model Option Siemens Westinghouse (SW) 5000F5 | | | | |
| CTG-7 | Simple Cycle Combustion Turbine (CT) Model - SW 5000F5 | $NO_x$ | 77.1 | 94.3 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 46.9 | 119 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 6.0 | 13.4 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 3.2 | 3.9 |
| | | PM | 10.0 | 12.3 |
| | | $PM_{10}$ | 10.0 | 12.3 |
| | | $PM_{2.5}$ | 10.0 | 12.3 |
| | | $H_2SO_4$ (7) | 0.24 | 0.3 |
| CTG-8 | Simple Cycle CT Model - SW 5000F5 | $NO_x$ | 77.1 | 94.3 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 46.9 | 119 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 6.0 | 13.4 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 3.2 | 3.9 |
| | | PM | 10.0 | 12.3 |
| | | $PM_{10}$ | 10.0 | 12.3 |
| | | $PM_{2.5}$ | 10.0 | 12.3 |
| | | $H_2SO_4$ (7) | 0.24 | 0.3 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---|---|---|---|---|
| | | | lbs/hour (4) | TPY (5) |
| Model Option General Electric (GE) 7FA.03 | | | | |
| CTG-7 | Simple Cycle CT Model - GE 7FA.03 | $NO_x$ | 60.2 | 73.3 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 26.6 | 94.4 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 6.3 | 12.0 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 2.6 | 2.9 |
| | | PM | 8.2 | 10.3 |
| | | $PM_{10}$ | 8.2 | 10.3 |
| | | $PM_{2.5}$ | 8.2 | 10.3 |
| | | $H_2SO_4$ (7) | 0.2 | 0.2 |
| CTG-8 | Simple Cycle CT Model - GE 7FA.03 | $NO_x$ | 60.2 | 73.3 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 26.6 | 94.4 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 6.3 | 12.0 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 2.6 | 2.9 |
| | | PM | 8.2 | 10.3 |
| | | $PM_{10}$ | 8.2 | 10.3 |
| | | $PM_{2.5}$ | 8.2 | 10.3 |
| | | $H_2SO_4$ (7) | 0.2 | 0.2 |

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---|---|---|---|---|
| | | | lbs/hour (4) | TPY (5) |
| Model Option GE 7FA.04 | | | | |
| CTG-7 | Simple Cycle CT Model - GE 7FA.04 | $NO_x$ | 62.6 | 75.5 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 26.6 | 94.5 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 6.6 | 12.1 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 2.5 | 3.0 |
| | | PM | 8.2 | 10.3 |
| | | $PM_{10}$ | 8.2 | 10.3 |
| | | $PM_{2.5}$ | 8.2 | 10.3 |
| | | $H_2SO_4$ (7) | 0.2 | 0.3 |
| CTG-8 | Simple Cycle CT Model - GE 7FA.04 | $NO_x$ | 62.6 | 75.5 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 26.6 | 94.5 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 6.6 | 12.1 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 2.5 | 3.0 |
| | | PM | 8.2 | 10.3 |
| | | $PM_{10}$ | 8.2 | 10.3 |
| | | $PM_{2.5}$ | 8.2 | 10.3 |
| | | $H_2SO_4$ (7) | 0.2 | 0.3 |

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---|---|---|---|---|
| | | | lbs/hour (4) | TPY (5) |
| Model Option GE 7FA.05 | | | | |
| CTG-7 | Simple Cycle CT Model - GE 7FA.05 | $NO_x$ | 70.8 | 86.0 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 30.4 | 99.0 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 7.4 | 13.0 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 2.9 | 3.4 |
| | | PM | 9.3 | 11.7 |
| | | $PM_{10}$ | 9.3 | 11.7 |
| | | $PM_{2.5}$ | 9.3 | 11.7 |
| | | $H_2SO_4$ (7) | 0.2 | 0.3 |
| CTG-8 | Simple Cycle CT Model - GE 7FA.05 | $NO_x$ | 70.8 | 86.0 |
| | | $NO_x$ MSS (6) | 108 | -- |
| | | CO | 30.4 | 99.0 |
| | | CO MSS (6) | 1,182 | -- |
| | | VOC | 7.4 | 13.0 |
| | | VOC MSS (6) | 126 | -- |
| | | $SO_2$ | 2.9 | 3.4 |
| | | PM | 9.3 | 11.7 |
| | | $PM_{10}$ | 9.3 | 11.7 |
| | | $PM_{2.5}$ | 9.3 | 11.7 |
| | | $H_2SO_4$ (7) | 0.2 | 0.3 |

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---|---|---|---|---|
| | | | lbs/hour(4) | TPY (5) |
| Auxiliary Sources | | | | |
| FP-3 | Firewater Pump Engine (Normal and MSS Operation) | $NO_x$ | 2.0 | 0.50 |
| | | CO | 1.7 | 0.43 |
| | | VOC | 0.23 | 0.06 |
| | | $SO_2$ | 0.03 | 0.01 |
| | | PM | 0.10 | 0.02 |
| | | $PM_{10}$ | 0.10 | 0.02 |
| | | $PM_{2.5}$ | 0.10 | 0.02 |
| NG1 | Natural Gas Piping Fugitives (8) | VOC | 0.11 | 0.46 |
| DE1 | Diesel Fuel Storage Tank (Normal and MSS Operation) | VOC | 0.03 | <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) $NO_x$ - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
$SO_2$ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$
$PM_{10}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
$H_2SO_4$ - sulfuric acid
(4) Compliance with the pound-per-hour CT emission limits for NOx and CO is based on a three-hour rolling average for normal operation, and a block one-hour average for maintenance, startup and shutdown (MSS) operation.
(5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual limits include normal and planned MSS emissions.
(6) Emission limits applicable during planned MSS activities. Hourly emissions of $NO_x$, CO, and VOC are the only emissions that are higher than emissions during normal operations. During CT MSS, normal operations emission limits apply to all pollutants not shown with separate MSS limits. The MSS hourly emission limits apply to any clock hour during which the CT has any operation in MSS mode.
(7) $PM/PM_{10}/PM_{2.5}$ includes $H_2SO_4$.
(8) Fugitive emission rates are estimates and are enforceable through compliance with the applicable special conditions and permit application representations.

Date: October 2, 2013