

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 83378 and PSDTX1105

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 Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
SCENARIO 1: GENERAL ELECTRIC PG7121 (EA) AND 165 MMBTU/HR DUCT BURNER				
CTDB1-A	CT/HRSG Unit 1-A	NO <sub>x</sub>	9.5	---
		CO	56.8	---
		SO <sub>2</sub>	1.95	---
		PM/PM <sub>10</sub>	12.2	---
		VOC	3.7	---
		H <sub>2</sub> SO <sub>4</sub>	0.22	---
		Pb	0.0007	---
		NH <sub>3</sub>	12.3	---
		HAPs	1.01	---
CTDB1-B	CT/HRSG Unit 1-B	NO <sub>x</sub>	9.5	---
		CO	56.8	---
		SO <sub>2</sub>	1.95	---
		PM/PM <sub>10</sub>	12.2	---
		VOC	3.7	---
		H <sub>2</sub> SO <sub>4</sub>	0.22	---
		Pb	0.0007	---
		NH <sub>3</sub>	12.3	---
		HAPs	1.01	---
CTDB2-A	CT/HRSG Unit 2-A	NO <sub>x</sub>	9.5	---
		CO	56.8	---
		SO <sub>2</sub>	1.95	---
		PM/PM <sub>10</sub>	12.2	---
		VOC	3.7	---
		H <sub>2</sub> SO <sub>4</sub>	0.22	---
		Pb	0.0007	---
		NH <sub>3</sub>	12.3	---
		HAPs	1.01	---

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CTDB2-B	CT/HRSG Unit 2-B	NO <sub>x</sub>	9.5	---
		CO	56.8	---
		SO <sub>2</sub>	1.95	---
		PM/PM <sub>10</sub>	12.2	---
		VOC	3.7	---
		H <sub>2</sub> SO <sub>4</sub>	0.22	---
		Pb	0.0007	---
		NH <sub>3</sub>	12.3	---
		HAPs	1.01	---

**SCENARIO 2: GENERAL ELECTRIC PG7121 (EA) OPERATING WITHOUT DUCT BURNER**

CTDB1-A	CT/HRSG Unit 1-A	NO <sub>x</sub>	8.2	---
		CO	43.6	---
		SO <sub>2</sub>	1.70	---
		PM/PM <sub>10</sub>	10.3	---
		VOC	2.1	---
		H <sub>2</sub> SO <sub>4</sub>	0.20	---
		Pb	0.0006	---
CTDB1-B	CT/HRSG Unit 1-B	NO <sub>x</sub>	8.2	---
		CO	43.6	---
		SO <sub>2</sub>	1.70	---
		PM/PM <sub>10</sub>	10.3	---
		VOC	2.1	---
		H <sub>2</sub> SO <sub>4</sub>	0.20	---
		Pb	0.0006	---
CTDB2-A	CT/HRSG Unit 2-A	NO <sub>x</sub>	8.2	---
		CO	43.6	---
		SO <sub>2</sub>	1.70	---
		PM/PM <sub>10</sub>	10.3	---
		VOC	2.1	---
		H <sub>2</sub> SO <sub>4</sub>	0.20	---
		Pb	0.0006	---
CTDB2-B	CT/HRSG Unit 2-B	NO <sub>x</sub>	8.2	---
		CO	43.6	---
		SO <sub>2</sub>	1.70	---

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PM/PM <sub>10</sub>	10.3	---
VOC	2.1	---
H <sub>2</sub> SO <sub>4</sub>	0.20	---
Pb	0.0006	---

**SCENARIO 3: GENERAL ELECTRIC PG7121 (EA) DURING START UP & SHUT DOWN**

CTDB1-A	CT/HRSG Unit 1-A	NO <sub>x</sub>	600.0	---
		CO	1000.0	---
		VOC	60.0	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---
		Toluene	0.2	---

CTDB1-B	CT/HRSG Unit 1-B	NO <sub>x</sub>	600.0	---
		CO	1000.0	---
		VOC	60.0	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---
		Toluene	0.2	---

CTDB2-A	CT/HRSG Unit 2-A	NO <sub>x</sub>	600.0	---
		CO	1000.0	---
		VOC	60.0	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---

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CTDB2-B	CT/HRSG Unit 2-B	Toluene	0.2	---
		NO <sub>x</sub>	600.0	---
		CO	1000.0	---
		VOC	60.0	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---
		Toluene	0.2	---

## COMBINED ANNUAL EMISSIONS FOR ALL FOUR GENERAL ELECTRIC PG7121 (EA) UNITS AND 165 MMBTU/HR DUCT BURNER

CTDB1-A	CT/HRSG Unit 1-A	NO <sub>x</sub> (5)	---	196.0
CTDB1-B	1-B,2-A, AND 2-B	CO (5)	---	1124.0
CTDB2-A		SO <sub>2</sub>	---	26.96
CTDB2-B		PM/PM <sub>10</sub>	---	193.0
		VOC	---	43.48
		H <sub>2</sub> SO <sub>4</sub>	---	3.08
		Pb	---	0.0096
		NH <sub>3</sub>	---	168.8
		HAPs	---	12.6
EG1	Emergency Generator	NO <sub>x</sub>	27.30	1.64
		CO	7.25	0.44
		VOC	0.77	0.05
		SO <sub>2</sub>	0.43	0.03
		PM	0.59	0.04
		PM <sub>10</sub>	0.49	0.03
		HAPs	1.45E-02	8.72E-04
FWP1	Fire Water Pump	NO <sub>x</sub>	11.22	0.67
		CO	2.42	0.15
		VOC	0.89	0.05
		SO <sub>2</sub>	0.13	0.01
		PM	0.79	0.05
		PM <sub>10</sub>	0.79	0.05

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		HAPs	1.68E-02	1.01E-03
CT1	Cooling Tower for Unit 1	PM	4.2	18.4
		PM <sub>10</sub>	2.1	9.2
CT2	Cooling Tower for Unit 2	PM	4.2	18.4
		PM <sub>10</sub>	2.1	9.2

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an 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.
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - HAPs - hazardous air pollutants as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
  - CHCO - formaldehyde
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Includes emissions from start-up and shutdown.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

- \*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated August 18, 2009