

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 82244 and PSD-TX-1098

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

CTDB3-A	CT/HRSG Unit 3-A, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO <sub>x</sub>	23.7	---
		CO	74.5	---
		SO <sub>2</sub>	2.0	---
		PM/PM <sub>10</sub>	12.4	---
		VOC	3.7	---
		H <sub>2</sub> SO <sub>4</sub>	0.3	---
		NH <sub>3</sub>	12.3	---
		HCHO	0.4	---
		Toluene	0.2	---
CTDB3-B	CT/HRSG Unit 3-B, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO <sub>x</sub>	23.7	---
		CO	74.5	---
		SO <sub>2</sub>	2.0	---
		PM/PM <sub>10</sub>	12.4	---
		VOC	3.7	---
		H <sub>2</sub> SO <sub>4</sub>	0.3	---
		NH <sub>3</sub>	12.3	---
		HCHO	0.4	---
		Toluene	0.2	---

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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CTDB3-A	CT/HRSG Unit 3-A, 75 MW Gas Turbine	NO <sub>x</sub>	20.4	---
		CO	61.3	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---
		VOC	2.1	---
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB3-B	CT/HRSG Unit 3-B, 75 MW Gas Turbine	NO <sub>x</sub>	20.4	---
		CO	61.3	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---
		VOC	2.1	---
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---
		Toluene	0.2	---

**SCENARIO 3: GENERAL ELECTRIC PG7121 (EA) DURING START UP, SHUT DOWN, OR MAINTENANCE (4)**

CTDB3-A	CT/HRSG Unit 3-A, 75 MW Gas Turbine	NO <sub>x</sub>	600	---
		CO	1000	---
		VOC	60	---
		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	---
CTDB3-B	CT/HRSG Unit 3-B, 75 MW Gas Turbine	NO <sub>x</sub>	600	---
		CO	1000	---
		VOC	60	---
		SO <sub>2</sub>	1.7	---
		PM/PM <sub>10</sub>	10.5	---

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		H <sub>2</sub> SO <sub>4</sub>	0.2	---
		NH <sub>3</sub>	10.8	---
		HCHO	0.3	---
		Toluene	0.2	---

## ANNUAL EMISSIONS GENERAL ELECTRIC PG7121 (EA) AND 165 MMBTU/HR DUCT BURNER

CTDB3-A	CT/HRSG Unit 3-A, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO <sub>x</sub>	---	81.8
		CO	---	253.2
		SO <sub>2</sub>	---	6.8
		PM/PM <sub>10</sub>	---	49.0
		VOC	---	10.9
		H <sub>2</sub> SO <sub>4</sub>	---	0.8
		NH <sub>3</sub>	---	42.3
		HCHO	---	1.3
		Toluene	---	0.6
CTDB3-B	CT/HRSG Unit 3-B, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO <sub>x</sub>	---	81.8
		CO	---	253.2
		SO <sub>2</sub>	---	6.8
		PM/PM <sub>10</sub>	---	49.0
		VOC	---	10.9
		H <sub>2</sub> SO <sub>4</sub>	---	0.8
		NH <sub>3</sub>	---	42.3
		HCHO	---	1.3
		Toluene	---	0.6
AUX3	Auxiliary Boiler Unit 3 17 MMBtu/hr	NO <sub>x</sub>	0.7	1.9
		CO	1.1	2.9
		SO <sub>2</sub>	0.02	0.07
		PM/PM <sub>10</sub>	0.2	0.5
		VOC	0.3	0.8
EG3	Emergency Generator Unit 1	NO <sub>x</sub>	27.3	0.5
		CO	7.3	0.2

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## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		SO <sub>2</sub>	0.5	0.01
		PM	0.6	0.01
		PM <sub>10</sub>	0.5	0.01
		VOC	0.8	0.01
FWP3	Fire Water Pump Unit 3	NO <sub>x</sub>	11.3	0.2
		CO	2.5	0.04
		SO <sub>2</sub>	0.2	0.01
		PM/PM <sub>10</sub>	0.8	0.01
		VOC	0.9	0.02
CD13	Cooling Tower Cell 13	PM	0.2	0.9
		PM <sub>10</sub>	0.1	0.5
CD14	Cooling Tower Cell 14	PM	0.2	0.9
		PM <sub>10</sub>	0.1	0.5
CD15	Cooling Tower Cell 15	PM	0.2	0.9
		PM <sub>10</sub>	0.1	0.5
CD16	Cooling Tower Cell 16	PM	0.2	0.9
		PM <sub>10</sub>	0.1	0.5
CD17	Cooling Tower Cell 17	PM	0.2	0.9
		PM <sub>10</sub>	0.1	0.5
CD18	Cooling Tower Cell 18	PM	0.2	0.9
		PM <sub>10</sub>	0.1	0.5

(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) NO<sub>x</sub> - total oxides of nitrogen

CO - carbon monoxide

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**

SO<sub>2</sub> - sulfur dioxide

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.

PM<sub>10</sub> - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

NH<sub>3</sub> - ammonia

HCHO - formaldehyde

(4) Start-up, shutdown, or maintenance events shall not exceed the time limits of Special Condition No. 2; emissions shall be averaged over the entire event.

\* 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\_\_