

## 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) WITH DUCT BURNER FIRING				
CTDB3-A	CT/HRSG Unit 3-A 75 MW-Gas-Fired Combustion Turbine 165-MMBtu/hr Duct Burner	NO <sub>x</sub> (4)	9.5	--
		CO (4)	50.8	--
		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-BA 75-MW Gas-Fired Combustion Turbine 165-MMBtu/hr Duct Burner	NO <sub>x</sub> (4)	9.5	--
		CO (4)	50.8	--
		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	--

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

CTDB3-A	CT/HRSG Unit 3-A 75-MW Gas-Fired Combustion Turbine	NO <sub>x</sub> (4)	8.2	--
		CO (4)	44.3	--
		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-BA 75-MW Gas-Fired Combustion Turbine	NO <sub>x</sub> (4)	8.2	--
		CO (4)	44.3	--
		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 OR SHUTDOWN**

CTDB3-A	CT/HRSG Unit 3-A 75-MW Gas-Fired Combustion Turbine	NO <sub>x</sub>	600	--
		CO	1000	--
		SO <sub>2</sub>	1.7	--
		PM/PM <sub>10</sub>	10.5	--
		VOC	60	--
		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-BA 75-MW Gas-Fired Combustion Turbine	NO <sub>x</sub>	600	--
		CO	1000	--
		VOC	1.7	--
		SO <sub>2</sub>	10.5	--
		PM/PM <sub>10</sub>	60	--
		VOC	0.2	--

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H <sub>2</sub> SO <sub>4</sub>	10.8	--
NH <sub>3</sub>	0.3	--
HCHO	0.2	--
Toluene		

**ANNUAL EMISSIONS GENERAL ELECTRIC PG7121(EA) WITH OR WITHOUT DUCT BURNER FIRING**

CTDB3-A	CT/HRSG Unit 3-A 75-MW Gas-Fired Combustion Turbine 165-MMBtu/hr Duct Burner	NO <sub>x</sub>	--	50.9
		CO	--	206.0
		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-BA 75-MW Gas-Fired Combustion Turbine 165-MMBtu/hr Duct Burner	NO <sub>x</sub>	--	50.9
		CO	--	206.0
		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
EG3		NO <sub>x</sub>	27.3	0.5
		CO	7.3	0.2
		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		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

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CD13	Cooling Tower Cell 13	VOC	0.9	0.02
		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

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- (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
  - 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
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid mist
  - NH<sub>3</sub> - ammonia
  - HCHO - formaldehyde
- (4) Rolling 24 hour average

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

\_\_\_\_Hrs/day \_\_\_\_Days/week \_\_\_\_Weeks/year or 8,760 Hrs/year

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

Dated April 17, 2008