

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 76990 and PSD-TX-1059

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, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO _x	21.4	---
		CO	68.6	---
		SO ₂	1.7	---
		PM/PM ₁₀	12.4	---
		VOC 3.5	---	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 11.1	---	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB1-B	CT/HRSG Unit 1-B, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO _x	21.4	---
		CO	68.6	---
		SO ₂	1.7	---
		PM/PM ₁₀	12.4	---
		VOC 3.5	---	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 11.1	---	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB2-A	CT/HRSG Unit 2-A, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO _x	21.4	---
		CO	68.6	---
		SO ₂	1.7	---
		PM/PM ₁₀	12.4	---
		VOC 3.5	---	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 11.1	---	---
		HCHO	0.3	---

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CTDB2-B	CT/HRSG Unit 2-B, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	Toluene	0.2	---
		NO _x	21.4	---
		CO	68.6	---
		SO ₂	1.7	---
		PM/PM ₁₀	12.4	---
		VOC 3.5	---	
		H ₂ SO ₄ 0.2	---	
		NH ₃ 11.1	---	
		HCHO	0.3	---
		Toluene	0.2	---

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

CTDB1-A	CT/HRSG Unit 1-A, 75 MW Gas Turbine	NO _x	18.5	---
		CO	55.4	---
		SO ₂ 1.5	---	
		PM/PM ₁₀	10.4	---
		VOC 1.9	---	
		H ₂ SO ₄ 0.2	---	
		NH ₃ 9.6	---	
		HCHO	0.3	---
		Toluene	0.2	---
CTDB1-B	CT/HRSG Unit 1-B, 75 MW Gas Turbine	NO _x	18.5	---
		CO	55.4	---
		SO ₂ 1.5	---	
		PM/PM ₁₀	10.4	---
		VOC 1.9	---	
		H ₂ SO ₄ 0.2	---	
		NH ₃ 9.6	---	
		HCHO	0.3	---
		Toluene	0.2	---
CTDB2-A	CT/HRSG Unit 2-A,	NO _x	18.5	---

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	75 MW Gas Turbine	CO	55.4	---
		SO ₂ 1.5	---	---
		PM/PM ₁₀	10.4	---
		VOC 1.9	---	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 9.6	---	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB2-B	CT/HRSG Unit 2-B, 75 MW Gas Turbine	NO _x	18.5	---
		CO	55.4	---
		SO ₂ 1.5	---	---
		PM/PM ₁₀	10.4	---
		VOC 1.9	---	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 9.6	---	---
		HCHO	0.3	---
		Toluene	0.2	---

SCENARIO 3: GENERAL ELECTRIC PG7121 (EA) DURING START-UP, SHUTDOWN, OR MAINTENANCE (4)

CTDB1-A	CT/HRSG Unit 1-A, 75 MW Gas Turbine	NO _x	600	---
		CO	1000	---
		VOC 60	---	---
		SO ₂ 1.7	---	---
		PM/PM ₁₀	10.5	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 10.8	---	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB1-B	CT/HRSG Unit 1-B,	NO _x	600	---

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	75 MW Gas Turbine	CO	1000	---
		VOC 60	---	---
		SO ₂ 1.7	---	---
		PM/PM ₁₀	10.5	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 10.8	---	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB2-A	CT/HRSG Unit 2-A, 75 MW Gas Turbine	NO _x	600	---
		CO	1000	---
		VOC 60	---	---
		SO ₂ 1.7	---	---
		PM/PM ₁₀	10.5	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 10.8	---	---
		HCHO	0.3	---
		Toluene	0.2	---
CTDB2-B	CT/HRSG Unit 2-B, 75 MW Gas Turbine	NO _x	600	---
		CO	1000	---
		VOC 60	---	---
		SO ₂ 1.7	---	---
		PM/PM ₁₀	10.5	---
		H ₂ SO ₄ 0.2	---	---
		NH ₃ 10.8	---	---
		HCHO	0.3	---
		Toluene	0.2	---

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

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CTDB1-A	CT/HRSG Unit 1-A, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO _x	---	77.1
		CO	---	245.0
		SO ₂	---	6.2
		PM/PM ₁₀	---	50.5
		VOC ---	11.7	
		H ₂ SO ₄ ---	0.7	
		NH ₃ ---	39.9	
		HCHO	---	1.2
		Toluene	---	0.6
CTDB1-B	CT/HRSG Unit 1-B, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO _x	---	77.1
		CO	---	245.0
		SO ₂	---	6.2
		PM/PM ₁₀	---	50.5
		VOC ---	11.7	
		H ₂ SO ₄ ---	0.7	
		NH ₃ ---	39.9	
		HCHO	---	1.2
		Toluene	---	0.6
CTDB2-A	CT/HRSG Unit 2-A, 75 MW Gas Turbine 165 MMBtu/hr Duct Burner	NO _x	---	77.1
		CO	---	245.0
		SO ₂	---	6.2
		PM/PM ₁₀	---	50.5
		VOC ---	11.7	
		H ₂ SO ₄ ---	0.7	
		NH ₃ ---	39.9	
		HCHO	---	1.2
		Toluene	---	0.6
CTDB2-B	CT/HRSG Unit 2-B, 75 MW Gas Turbine	NO _x	---	77.1
		CO	---	245.0

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	165 MMBtu/hr Duct Burner	SO ₂	---	6.2
		PM/PM ₁₀	---	50.5
		VOC ---	11.7	
		H ₂ SO ₄ ---	0.7	
		NH ₃ ---	39.9	
		HCHO	---	1.2
		Toluene	---	0.6
AUX1	Auxiliary Boiler Unit 1 17 MMBtu/hr	NO _x	0.7	1.9
		CO	1.1	2.9
		SO ₂ 0.02	0.07	
		PM/PM ₁₀	0.2	0.5
		VOC 0.3	0.8	
AUX2	Auxiliary Boiler Unit 2 17 MMBtu/hr	NO _x	0.7	1.9
		CO	1.1	2.9
		SO ₂ 0.02	0.07	
		PM/PM ₁₀	0.2	0.5
		VOC 0.3	0.8	
EG1	Emergency Generator Unit 1	NO _x	27.3	1.7
		CO 7.3	0.5	
		SO ₂ 0.5	0.03	
		PM 0.6	0.04	
		PM ₁₀ 0.5	0.03	
		VOC 0.8	0.05	
EG2	Emergency Generator Unit 2	NO _x	27.3	1.7
		CO 7.3	0.5	
		SO ₂ 0.5	0.03	
		PM 0.6	0.04	
		PM ₁₀ 0.5	0.03	
		VOC 0.8	0.05	
FWP1	Fire Water Pump Unit 1	NO _x	11.3	0.7
		CO 2.5	0.2	

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		SO ₂	0.2	0.01	
		PM/PM ₁₀		0.8	0.05
		VOC	0.9	0.05	
FWP2	Fire Water Pump Unit 2		NO _x	11.3	0.7
		CO	2.5	0.2	
		SO ₂	0.2	0.01	
		PM/PM ₁₀		0.8	0.05
		VOC	0.9	0.05	
CD1	Cooling Tower Cell 1		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD2	Cooling Tower Cell 2		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD3	Cooling Tower Cell 3		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD4	Cooling Tower Cell 4		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD5	Cooling Tower Cell 5		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD6	Cooling Tower Cell 6		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD7	Cooling Tower Cell 7		PM	0.6	2.3
		PM ₁₀	0.3	1.2	
CD8	Cooling Tower Cell 8		PM	0.6	2.3
		PM ₁₀	0.3	1.2	

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.

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(2) Specific point source names. For fugitive sources, use an 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

SO₂ - sulfur dioxide

PM₁₀ - particulate matter equal to or less than 10 microns in diameter.

H₂SO₄ - sulfuric acid

NH₃ - ammonia

HCHO - formaldehyde

* 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 February 15, 2006