

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 83690 and PSD-TX-1113

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				
Option 1: GE 7FA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-1	Gas Turbine Unit 1 Duct Burner Unit 1 Unit 1 HRSG Stack	NO _x	19.5	177.8
		NO _x (4)	650.0	---
		SO ₂	13.6	54.4
		CO	11.9	761.4
		CO (4)	2890.0	---
		VOC	6.8	59.7
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.5
		NH ₃	36.0	145.6
		(NH ₄) ₂ SO ₄	2.5	10.1
S-2	Gas Turbine Unit 2 Duct Burner Unit 2 Unit 2 HRSG Stack	NO _x	19.5	177.8
		NO _x (4)	650.0	---
		SO ₂	13.6	54.4
		CO	11.9	761.4
		CO (4)	2890.0	---
		VOC	6.8	59.7
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.5
		NH ₃	36.0	145.6
		(NH ₄) ₂ SO ₄	2.5	10.1

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AIR CONTAMINANTS DATA				
Option 1: GE 7FA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
S-3	Gas Turbine Unit 3 Duct Burner Unit 3 Unit 3 HRSG Stack	NO _x	19.5	177.8
		NO _x (4)	650.0	---
		SO ₂	13.6	54.4
		CO	11.9	761.4
		CO (4)	2890.0	---
		VOC	6.8	59.7
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.5
		NH ₃	36.0	145.6
		(NH ₄) ₂ SO ₄	2.5	10.1
S-4	Gas Turbine Unit 4 Duct Burner Unit 4 Unit 4 HRSG Stack	NO _x	19.5	177.8
		NO _x (4)	650.0	---
		SO ₂	13.6	54.4
		CO	11.9	761.4
		CO (4)	2890.0	---
		VOC	6.8	59.7
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.5
		NH ₃	36.0	145.6
		(NH ₄) ₂ SO ₄	2.5	10.1

AIR CONTAMINANTS DATA

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Option 2: GE 7FB				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
S-1	Gas Turbine Unit 1 Duct Burner Unit 1 Unit 1 HRSG Stack	NO _x	19.7	180.2
		NO _x (4)	650.0	---
		SO ₂	13.8	56.5
		CO	12.0	762.8
		CO (4)	2890.0	---
		VOC	6.9	60.5
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.8
		NH ₃	36.4	150.7
		(NH ₄) ₂ SO ₄	2.6	10.5
S-2	Gas Turbine Unit 2 Duct Burner Unit 2 Unit 2 HRSG Stack	NO _x	19.7	180.2
		NO _x (4)	650.0	---
		SO ₂	13.8	56.5
		CO	12.0	762.8
		CO (4)	2890.0	---
		VOC	6.9	60.5
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.8
		NH ₃	36.4	150.7
		(NH ₄) ₂ SO ₄	2.6	10.5

AIR CONTAMINANTS DATA

Option 2: GE 7FB

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
S-3	Gas Turbine Unit 3 Duct Burner Unit 3 Unit 3 HRSG Stack	NO _x	19.7	180.2
		NO _x (4)	650.0	---
		SO ₂	13.8	56.5
		CO	12.0	762.8
		CO (4)	2890.0	---
		VOC	6.9	60.5
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.8
		NH ₃	36.4	150.7
		(NH ₄) ₂ SO ₄	2.6	10.5
S-4	Gas Turbine Unit 4 Duct Burner Unit 4 Unit 4 HRSG Stack	NO _x	19.7	180.2
		NO _x (4)	650.0	---
		SO ₂	13.8	56.5
		CO	12.0	762.8
		CO (4)	2890.0	---
		VOC	6.9	60.5
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	1.9	7.8
		NH ₃	36.4	150.7
		(NH ₄) ₂ SO ₄	2.6	10.5

AIR CONTAMINANTS DATA

Option 3: Siemens SGT6-5000F

Emission	Source	Air Contaminant	<u>Emission Rates *</u>
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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

			lb/hr	TPY**
S-1	Gas Turbine Unit 1 Duct Burner Unit 1 Unit 1 HRSG Stack	NO _x	21.1	125.4
		NO _x (4)	650.0	---
		SO ₂	14.7	59.4
		CO	12.8	765.3
		CO (4)	2890.0	---
		VOC	7.3	46.9
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	2.0	8.2
		NH ₃	39.0	159.2
		(NH ₄) ₂ SO ₄	2.7	11.0
S-2	Gas Turbine Unit 2 Duct Burner Unit 2 Unit 2 HRSG Stack	NO _x	21.1	125.4
		NO _x (4)	650.0	---
		SO ₂	14.7	59.4
		CO	12.8	765.3
		CO (4)	2890.0	---
		VOC	7.3	46.9
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	2.0	8.2
		NH ₃	39.0	159.2
		(NH ₄) ₂ SO ₄	2.7	11.0

AIR CONTAMINANTS DATA

Option 3: Siemens SGT6-5000F

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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

S-3	Gas Turbine Unit 3 Duct Burner Unit 3 Unit 3 HRSG Stack	NO _x	21.1	125.4
		NO _x (4)	650.0	---
		SO ₂	14.7	59.4
		CO	12.8	765.3
		CO (4)	2890.0	---
		VOC	7.3	46.9
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	2.0	8.2
		NH ₃	39.0	159.2
		(NH ₄) ₂ SO ₄	2.7	11.0
S-4	Gas Turbine Unit 4 Duct Burner Unit 4 Unit 4 HRSG Stack	NO _x	21.1	125.4
		NO _x (4)	650.0	---
		SO ₂	14.7	59.4
		CO	12.8	765.3
		CO (4)	2890.0	---
		VOC	7.3	46.9
		VOC (4)	183.0	---
		PM/PM ₁₀	20.8	91.1
		H ₂ SO ₄	2.0	8.2
		NH ₃	39.0	159.2
		(NH ₄) ₂ SO ₄	2.7	11.0

AIR CONTAMINANTS DATA

Common Equipment

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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AUXBLR-1	Auxiliary Boiler No. 1	NO _x SO ₂ CO VOC PM/PM ₁₀	1.4 0.2 2.4 0.2 0.3	2.1 0.34 3.6 0.33 0.45
AUXBLR-2	Auxiliary Boiler No. 2	NO _x SO ₂ CO VOC PM/PM ₁₀	1.4 0.2 2.4 0.2 0.3	2.1 0.34 3.6 0.33 0.45
AUXBLR-3	Auxiliary Boiler No. 3	NO _x SO ₂ CO VOC PM/PM ₁₀	1.4 0.2 2.4 0.2 0.3	2.1 0.34 3.6 0.33 0.45
AUXBLR-4	Auxiliary Boiler #4	NO _x SO ₂ CO VOC PM/PM ₁₀	1.4 0.2 2.4 0.2 0.3	2.1 0.34 3.6 0.33 0.45
NG-FUG (5)	Piping Fugitives	VOC	0.4	1.7
NH ₃ -FUG-1 (5)	Unit 1 NH ₃ Fugitives	NH ₃	0.1	0.3
NH ₃ -FUG-2 (5)	Unit 2 NH ₃ Fugitives	NH ₃	0.1	0.3
NH ₃ -FUG-3 (5)	Unit 3 NH ₃ Fugitives	NH ₃	0.1	0.3
NH ₃ -FUG-4 (5)	Unit 4 NH ₃ Fugitives	NH ₃	0.1	0.3
CT-1	Cooling Tower 1	PM PM ₁₀	1.0 0.3	4.4 1.1

AIR CONTAMINANTS DATA

Common Equipment

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CT-2	Cooling Tower 2	PM	1.0	4.4

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		PM ₁₀		
CT-3	Cooling Tower 2	PM PM ₁₀	1.0 0.3	4.4 1.1
CT-4	Cooling Tower 4	PM PM ₁₀	1.0 0.3	4.4 1.1
EMGEN-1	Em. Generator 1 Stack	NO _x SO ₂ CO VOC PM/PM ₁₀	18.0 <0.01 4.1 0.5 0.5	4.5 <0.01 1.0 0.12 0.13
EMGEN-2	Em. Generator 2 Stack	NO _x SO ₂ CO VOC PM/PM ₁₀	18.0 <0.01 4.1 0.5 0.5	4.5 <0.01 1.0 0.12 0.13
FWPUMP-1	Firewater Pump 1 Stack	NO _x SO ₂ CO VOC PM/PM ₁₀	9.3 <0.01 2.0 0.7 0.7	2.3 <0.01 0.5 0.17 0.17
T-DSL-1	Diesel Fuel Tank 1	VOC	0.1	<0.01
T-DSL-2	Diesel Fuel Tank 2	VOC	0.1	<0.01
T-DSL-3	Diesel Fuel Tank 3	VOC	<0.1	<0.01

- (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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide

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- PM₁₀ - particulate matter, suspended in the atmosphere,
equal to or less than 10 microns in diameter
- CO - carbon monoxide
- H₂SO₄ - sulfuric acid
- NH₃ - ammonia
- (NH₄)₂SO₄ - ammonium sulfate
- (4) Emission limits during start-up, shutdown events and reduced load
events. Start-up, shutdown, and reduced load emissions are
included in annual ton per year emissions.
- (5) Fugitive emissions are an estimate only, and compliance is
demonstrated by meeting the requirements of the applicable special
conditions and permit application representations.

* 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 October 24, 2008