

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 83642 and PSDTX1115

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	NO _x	19.5	177.8
	Duct Burner Unit 1	NO _x (4)	650.0	---
	Unit 1 HRSG Stack	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	NO _x	19.5	177.8
	Duct Burner Unit 2	NO _x (4)	650.0	---
	Unit 2 HRSG Stack	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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Option 2: GE 7FB

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	19.7	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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Option 2: GE 7FB

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	19.7	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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Option 3: Siemens SGT6-5000F

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	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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Option 3: Siemens SGT6-5000F

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	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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Common Equipment

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
AUXBLR-1	Auxiliary Boiler No. 1	NO _x	1.4	2.1
		SO ₂	0.23	0.34
		CO	2.4	3.6
		VOC	0.22	0.33
		PM/PM ₁₀	0.3	0.45
AUXBLR-2	Auxiliary Boiler No. 2	NO _x	1.4	2.1
		SO ₂	0.23	0.34
		CO	2.4	3.6
		VOC	0.22	0.33
		PM/PM ₁₀	0.3	0.45
AUXBLR-3	Auxiliary Boiler No. 3	NO _x	1.4	2.1
		SO ₂	0.23	0.34
		CO	2.4	3.6
		VOC	0.22	0.33
		PM/PM ₁₀	0.3	0.45
AUXBLR-4	Auxiliary Boiler No. 4	NO _x	1.4	2.1
		SO ₂	0.23	0.34
		CO	2.4	3.6
		VOC	0.22	0.33
		PM/PM ₁₀	0.3	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

AIR CONTAMINANTS DATA

Common Equipment

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
NH ₃ -FUG-4 (5)	Unit 4 NH ₃ Fugitives	NH ₃	0.1	0.3
CT-1	Cooling Tower 1	PM	1.0	4.4
		PM ₁₀	0.3	1.1
CT-2	Cooling Tower 2	PM	1.0	4.4
		PM ₁₀	0.3	1.1
CT-3	Cooling Tower 2	PM	1.0	4.4
		PM ₁₀	0.3	1.1
CT-4	Cooling Tower 4	PM	1.0	4.4
		PM ₁₀	0.3	1.1
EMGEN-1	Em. Generator 1 Stack	NO _x	18.0	4.5
		SO ₂	<0.01	<0.01
		CO	4.1	1.0
		VOC	0.5	0.12
		PM/PM ₁₀	0.5	0.13
EMGEN-2	Em. Generator 2 Stack	NO _x	18.0	4.5
		SO ₂	<0.01	<0.01
		CO	4.1	1.0
		VOC	0.5	0.12
		PM/PM ₁₀	0.5	0.13
FWPUMP-1	Firewater Pump 1 Stack	NO _x	9.3	2.3
		SO ₂	<0.01	<0.01
		CO	2.0	0.5
		VOC	0.7	0.17
		PM/PM ₁₀	0.7	0.17
T-DSL-1	Diesel Fuel Tank 1	VOC	<0.1	<0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Common Equipment

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
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
 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 June 17, 2009