

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 41953 and PSDTX951

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, sources, and related activities. 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	
			lbs/hour	TPY (4)
Turbine Only (Hourly Limits)				
U1	GE-7FA Turbine	NO <sub>x</sub>	62.2	-
		CO	31.7	-
		VOC	3.1	-
		PM <sub>10</sub>	14.2	-
		SO <sub>2</sub>	28.4	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
U2	GE-7FA Turbine	NO <sub>x</sub>	62.2	-
		CO	31.7	-
		VOC	3.1	-
		PM <sub>10</sub>	14.2	-
		SO <sub>2</sub>	28.4	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
U3	GE-7FA Turbine	NO <sub>x</sub>	62.2	-
		CO	31.7	-
		VOC	3.1	-
		PM <sub>10</sub>	14.2	-
		SO <sub>2</sub>	28.4	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
U4	GE-7FA Turbine	NO <sub>x</sub>	62.2	-

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		CO	31.7	-
		VOC	3.1	-
		PM <sub>10</sub>	14.2	-
		SO <sub>2</sub>	28.4	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
U5	GE-7FA Turbine	NO <sub>x</sub>	62.2	-
		CO	31.7	-
		VOC	3.1	-
		PM <sub>10</sub>	14.2	-
		SO <sub>2</sub>	28.4	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
U6	GE-7FA Turbine	NO <sub>x</sub>	62.2	-
		CO	31.7	-
		VOC	3.1	-
		PM <sub>10</sub>	14.2	-
		SO <sub>2</sub>	28.4	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
Turbine and Duct Burner (Hourly Limits)				
U1	GE-7FA Turbine	NO <sub>x</sub>	106.25	-
		CO	75.75	-
		VOC	11.85	-
		PM <sub>10</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U2	GE-7FA Turbine	NO <sub>x</sub>	106.25	-

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		CO	75.75	-
		VOC	11.85	-
		PM <sub>10</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U3	GE-7FA Turbine	NO <sub>x</sub>	106.25	-
		CO	75.75	-
		VOC	11.85	-
		PM <sub>10</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U4	GE-7FA Turbine	NO <sub>x</sub>	106.25	-
		CO	75.75	-
		VOC	11.85	-
		PM <sub>10</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U5	GE-7FA Turbine	NO <sub>x</sub>	106.25	-
		CO	75.75	-
		VOC	11.85	-
		PM <sub>10</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U6	GE-7FA Turbine	NO <sub>x</sub>	106.25	-
		CO	75.75	-

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		VOC	11.85	-
		PM <sub>10</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
Combined Turbine and Duct Burner (Annual Limits)				
U1 through U6 Combined Emissions	GE-7FA Turbines with 550 MMBtu/hr Duct Burners	NO <sub>x</sub>	-	1927.1
		CO	-	1152.1
		VOC	-	152.7
		PM <sub>10</sub>	-	392.6
		SO <sub>2</sub>	-	285.5
		H <sub>2</sub> SO <sub>4</sub>	-	27.8
FUG	Piping Fugitives (5)	VOC	1.25	5.49
EMGEN	Emergency Diesel Generator (6)	NO <sub>x</sub>	30.49	1.83
		CO	6.99	0.42
		VOC	0.90	0.05
		PM <sub>10</sub>	0.89	0.05
		SO <sub>2</sub>	5.14	0.31
WTRPMP	Firewater Pump Engine (6)	NO <sub>x</sub>	3.16	0.19
		CO	0.17	0.02
		VOC	0.10	0.01
		PM <sub>10</sub>	0.06	0.01
		SO <sub>2</sub>	0.36	0.03
CT-1	Cooling Tower (7)	PM <sub>10</sub>	27.54 (8)	18.93
CT-2	Cooling Tower (7)	PM <sub>10</sub>	27.54 (8)	18.93
LUBE1	Lube Oil Demisters (9)	PM <sub>10</sub>	0.04	0.17

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Maintenance, Startup and Shutdown (MSS)				
U1	GE-7FA Turbine MSS Emission Rate	NO <sub>x</sub>	188.54	-
		CO	2209.90	-
		VOC	183.49	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U2	GE-7FA Turbine MSS Emission Rate	NO <sub>x</sub>	188.54	-
		CO	2209.90	-
		VOC	183.49	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U3	GE-7FA Turbine MSS Emission Rate	NO <sub>x</sub>	188.54	-
		CO	2209.90	-
		VOC	183.49	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U4	GE-7FA Turbine MSS Emission Rate	NO <sub>x</sub>	188.54	-
		CO	2209.90	-
		VOC	183.49	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-

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U5	GE-7FA Turbine MSS Emission Rate	NO <sub>x</sub>	188.54	-
		CO	2209.90	-
		VOC	183.49	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U6	GE-7FA Turbine MSS Emission Rate	NO <sub>x</sub>	188.54	-
		CO	2209.90	-
		VOC	183.49	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	22.06	-
		SO <sub>2</sub>	36.17	-
		H <sub>2</sub> SO <sub>4</sub>	4.56	-
U1, U2, U3, U4, U5, U6	GE-7FA Turbine/HRSG MSS Emission Rates	NO <sub>x</sub>	-	1927.1 (10)
		CO	-	1152.1 (10)
		VOC	-	152.7 (10)
		PM <sub>10</sub> /PM <sub>2.5</sub>	-	392.6 (10)
		SO <sub>2</sub>	-	285.5 (10)
		H <sub>2</sub> SO <sub>4</sub>	-	27.8 (10)
MSSFUG	Planned Maintenance Activities (ILE and non ILE)	VOC	18.39	0.13
		NO <sub>x</sub>	<0.01	<0.01
		CO	<0.01	<0.01

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

(2) Specific point source name. For fugitive sources, use 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  
SO<sub>2</sub> - sulfur dioxide  
PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented

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PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented

PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

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

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Fugitive emissions are an estimate based on component count and applicable fugitive emission factors.
- (6) Emissions are based on normal operation of 100 operating hours per year.
- (7) Cooling tower PM<sub>10</sub> emissions are an estimate only based on manufacturer's test data.
- (8) The maximum 24-hour average hourly PM<sub>10</sub> emission rate is 4.32 lb/hr for each cooling tower.
- (9) Turbine oil mist vent emissions are an estimate only based on estimates from mist vent eliminator manufacturer data.
- (10) The tpy emission limit specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities.

Date: October 19, 2012