

# Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 114698 and PSDTX1378

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 (4)	TPY (5)
Model Option Siemens SGT6-5000F				
1	Unit 1 - Simple Cycle Combustion Turbine (CT) Model Siemens SGT6-5000F	NO <sub>x</sub>	79.00	123.55
		NO <sub>x</sub> MSS (6)	91.08	--
		CO	32.40	170.67
		CO MSS (6)	694.90	--
		VOC	3.0	24.11
		VOC MSS (6)	109.85	--
		SO <sub>2</sub>	3.45	5.15
		PM	13.23	15.95
		PM <sub>10</sub>	13.23	15.95
		PM <sub>2.5</sub>	13.23	15.95
		H <sub>2</sub> SO <sub>4</sub> (7)	0.61	0.89
		Pb	0.01	0.02
		HAP (excluding Pb)	1.59	2.32
		Formaldehyde	0.83	1.21
2	Unit 2 - Simple Cycle Combustion Turbine (CT) Model Siemens SGT6-5000F	NO <sub>x</sub>	79.00	123.55
		NO <sub>x</sub> MSS (6)	91.08	--
		CO	32.40	170.67
		CO MSS (6)	694.90	--
		VOC	3.0	24.11
		VOC MSS (6)	109.85	--
		SO <sub>2</sub>	3.45	5.15
		PM	13.23	15.95
		PM <sub>10</sub>	13.23	15.95
		PM <sub>2.5</sub>	13.23	15.95
		H <sub>2</sub> SO <sub>4</sub> (7)	0.61	0.89
				Pb
HAP (excluding Pb)	1.59			2.32
Formaldehyde	0.83			1.21
3	Unit 3 - Simple Cycle Combustion Turbine (CT)	NO <sub>x</sub>	79.00	123.55

Emission Sources - Maximum Allowable Emission Rates

		NOx MSS (6)	91.08	--
		CO	32.40	170.67
		CO MSS (6)	694.90	--
		VOC	3.0	24.11
		VOC MSS (6)	109.85	--
		SO2	3.45	5.15
		PM	13.23	15.95
		PM10	13.23	15.95
		PM2.5	13.23	15.95
		H2SO4 (7)	0.61	0.89
		Pb	0.01	0.02
		HAP (excluding Pb)	1.59	2.32
		Formaldehyde	0.83	1.21
Model Option General Electric (GE) 7FA.05				
1	Unit 1 - Simple Cycle Combustion Turbine (CT) Model GE 7FA.05	NOx	76.00	122.09
		NOx MSS (6)	86.33	--
		CO	37.00	198.01
		CO MSS (6)	801.33	--
		VOC	3.60	29.35
		VOC MSS (6)	133.20	--
		SO2	3.10	4.66
		PM	9.90	14.82
		PM10	9.90	14.82
		PM2.5	9.90	14.82
		H2SO4 (7)	0.32	0.47
		Pb	0.01	0.02
		HAP (excluding Pb)	1.55	2.26
		Formaldehyde	0.81	1.18
2	Unit 2 - Simple Cycle Combustion Turbine (CT) Model GE 7FA.05	NOx	76.00	122.09
		NOx MSS (6)	86.33	--
		CO	37.00	198.01
		CO MSS (6)	801.33	--
		VOC	3.60	29.35
		VOC MSS (6)	133.20	--
		SO2	3.10	4.66
		PM	9.90	14.82
		PM10	9.90	14.82
		PM2.5	9.90	14.82
		H2SO4 (7)	0.32	0.47

## Emission Sources - Maximum Allowable Emission Rates

3	Unit 3 - Simple Cycle Combustion Turbine (CT) Model GE 7FA.05	Pb	0.01	0.02
		HAP (excluding Pb)	1.55	2.26
		Formaldehyde	0.81	1.18
		NOx	76.00	122.09
		NOx MSS (6)	86.33	--
		CO	37.00	198.01
		CO MSS (6)	801.33	--
		VOC	3.60	29.35
		VOC MSS (6)	133.20	--
		SO2	3.10	4.66
		PM	9.90	14.82
		PM10	9.90	14.82
		PM2.5	9.90	14.82
		H2SO4 (7)	0.32	0.47
		Pb	0.01	0.02
		HAP (excluding Pb)	1.55	2.26
		Formaldehyde	0.81	1.18

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (4)	TPY (5)
Model Option General Electric (GE) 7FA.04				
1	Unit 1 - Simple Cycle Combustion Turbine (CT) Model GE 7FA.04	NO <sub>x</sub>	69.00	111.51
		NO <sub>x</sub> MSS (6)	82.00	--
		CO	33.00	125.38
		CO MSS (6)	434.00	--
		VOC	3.60	11.83
		VOC MSS (6)	37.20	--
		SO <sub>2</sub>	2.88	4.33
		PM	9.90	14.82
		PM <sub>10</sub>	9.90	14.82
		PM <sub>2.5</sub>	9.90	14.82
		H <sub>2</sub> SO <sub>4</sub> (7)	0.30	0.44
		Pb	0.01	0.01
		HAP (excluding Pb)	1.43	2.09
		Formaldehyde	0.75	1.09
2	Unit 2 - Simple Cycle Combustion Turbine (CT) Model GE 7FA.04	NO <sub>x</sub>	69.00	111.51
		NO <sub>x</sub> MSS (6)	82.00	--
		CO	33.00	125.38
		CO MSS (6)	434.00	--
		VOC	3.60	11.83
		VOC MSS (6)	37.20	--
		SO <sub>2</sub>	2.88	4.33
		PM	9.90	14.82
		PM <sub>10</sub>	9.90	14.82
		PM <sub>2.5</sub>	9.90	14.82
		H <sub>2</sub> SO <sub>4</sub> (7)	0.30	0.44
		Pb	0.01	0.01
		HAP (excluding Pb)	1.43	2.09
		Formaldehyde	0.75	1.09

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (4)	TPY (5)
3	Unit 3 - Simple Cycle Combustion Turbine (CT) Model GE 7FA.04	NO <sub>x</sub>	69.00	111.51
		NO <sub>x</sub> MSS (6)	82.00	--
		CO	33.00	125.38
		CO MSS (6)	434.00	--
		VOC	3.60	11.83
		VOC MSS (6)	37.20	--
		SO <sub>2</sub>	2.88	4.33
		PM	9.90	14.82
		PM <sub>10</sub>	9.90	14.82
		PM <sub>2.5</sub>	9.90	14.82
		H <sub>2</sub> SO <sub>4</sub> (7)	0.30	0.44
		Pb	0.01	0.01
		HAP (excluding Pb)	1.43	2.09
		Formaldehyde	0.75	1.09
EMGEN	Emergency Generator Engine	NO <sub>x</sub>	30.91	1.55
		CO	16.91	0.85
		VOC	2.07	0.10
		SO <sub>2</sub>	0.03	0.01
		PM	0.97	0.05
		PM <sub>10</sub>	0.97	0.05
		PM <sub>2.5</sub>	0.97	0.05
		H <sub>2</sub> SO <sub>4</sub> (7)	0.01	0.01
		HAP (excluding Pb)	0.03	0.01
		Formaldehyde	0.01	0.01
FWPUMP	Fire Water Pump Engine	NO <sub>x</sub>	3.78	0.19
		CO	3.84	0.19
		VOC	1.45	0.07
		SO <sub>2</sub>	0.01	0.01
		PM	0.19	0.01
		PM <sub>10</sub>	0.19	0.01
		PM <sub>2.5</sub>	0.19	0.01
		H <sub>2</sub> SO <sub>4</sub> (7)	0.01	0.01
		HAP (excluding Pb)	0.02	0.01
		Formaldehyde	0.01	0.01
MSSFUG	Maintenance Activities (8)	NO <sub>x</sub>	0.01	0.01
		CO	0.01	0.01
		VOC	0.30	0.01
		PM	0.20	0.04
		PM <sub>10</sub>	0.20	0.04
		PM <sub>2.5</sub>	0.20	0.04
		HAP (excluding Pb)	0.30	0.01
FUG	Fugitives(8)	VOC	0.01	0.06
		HAP (excluding Pb)	0.01	0.06

## Emission Sources - Maximum Allowable Emission Rates

DEGTK	Diesel Emergency Generator Tank	VOC	0.02	0.01
DFWPTK	Diesel Fire Water Pump Tank	VOC	0.02	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>  
PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>  
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  
Pb - lead  
HAP - hazardous air pollutant
- (4) Compliance with the pound-per-hour CT emission limits for NO<sub>x</sub> and CO is based on a three-hour rolling average for normal operation, and a block one-hour average for maintenance, startup and shutdown (MSS) operation.
- (5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual limits include normal and planned MSS emissions.
- (6) Emission limits applicable during planned MSS activities. Hourly emissions of NO<sub>x</sub>, CO, and VOC are the only emissions that are higher than emissions during normal operations. During CT MSS, normal operations emission limits apply to all pollutants not shown with separate MSS limits. The MSS hourly emission limits apply to any clock hour during which the CT has any operation in MSS mode.
- (7) PM/PM<sub>10</sub>/PM<sub>2.5</sub> includes H<sub>2</sub>SO<sub>4</sub>.
- (8) Fugitive emission rates are estimates and are enforceable through compliance with the applicable special conditions and permit application representations.

Date: September 22, 2014