

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 87225 and PSDTX1198

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**
SIEMENS TURBINE OPTION				
CTG-CC-1	Siemens SGT6-5000F Turbine Stack Combined Cycle w/ Duct Burner 468 MMBtu/hr Firing 4,000 hr/yr	CO	96.80	1059.55
		CO [Startup/Shutdown]	3184.50	--
		NO <sub>x</sub>	22.00	119.01
		NO <sub>x</sub>	148.50	--
		[Startup/Shutdown]	15.40	52.70
		PM/PM <sub>10</sub>	4.03	15.05
		SO <sub>2</sub>	13.20	105.69
		VOC	306.90	--
		VOC	0.62	2.30
		[Startup/Shutdown]	40.70	152.02
		H <sub>2</sub> SO <sub>4</sub>		
		NH <sub>3</sub>		
CTG-CC-2	Siemens SGT6-5000F Turbine Stack Combined Cycle w/ Duct Burner 468 MMBtu/hr Firing 4,000 hr/yr	CO	96.80	1059.55
		CO [Startup/Shutdown]	3184.50	--
		NO <sub>x</sub>	22.00	119.01
		NO <sub>x</sub>	148.50	--
		[Startup/Shutdown]	15.40	52.70
		PM/PM <sub>10</sub>	4.03	15.05
		SO <sub>2</sub>	13.20	105.69
		VOC	306.90	--
		VOC	0.62	2.30
		[Startup/Shutdown]	40.70	152.02
		H <sub>2</sub> SO <sub>4</sub>		
		NH <sub>3</sub>		
CTG-SC-1	Siemens SGT6-5000F By-pass Stack Simple Cycle	CO	22.00	157.47
		CO [Startup/Shutdown]	1032.24	--
		NO <sub>x</sub>	79.20	100.98
		NO <sub>x</sub>	67.32	--
		[Startup/Shutdown]	11.00	14.65
		PM/PM <sub>10</sub>	3.46	3.99

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		SO <sub>2</sub>	3.30	10.06
		VOC	52.80	--
		VOC [Startup/Shutdown]	0.53	0.61
		H <sub>2</sub> SO <sub>4</sub>		
CTG-SC-2	Siemens SGT6-5000F By-pass Stack Simple Cycle	CO	22.00	157.47
		CO [Startup/Shutdown]	1032.24	--
		NO <sub>x</sub>	79.20	100.98
		NO <sub>x</sub> [Startup/Shutdown]	67.32	--
		PM/PM <sub>10</sub>	11.00	14.65
		SO <sub>2</sub>	3.46	3.99
		VOC	3.30	10.06
		VOC [Startup/Shutdown]	52.80	--
		H <sub>2</sub> SO <sub>4</sub>	0.53	0.61
<b>GE TURBINES OPTION</b>				
CTG-CC-1	GE 7FA Turbine Stack Combined Cycle w/ Duct Burner 468 MMBtu/hr Firing 4,000 hr/yr	CO	77.88	553.88
		CO [Startup/Shutdown]	1782.00	--
		NO <sub>x</sub>	19.14	97.32
		NO <sub>x</sub> [Startup/Shutdown]	242.00	--
		PM/PM <sub>10</sub>	27.01	104.08
		SO <sub>2</sub>	3.63	13.36
		VOC	8.80	39.54
		VOC [Startup/Shutdown]	105.16	--
		H <sub>2</sub> SO <sub>4</sub>	0.56	2.05
		NH <sub>3</sub>	28.16	114.54
CTG-CC-2	GE 7FA Turbine Stack Combined Cycle w/ Duct Burner 468 MMBtu/hr Firing 4,000 hr/yr	CO	77.88	553.88
		CO [Startup/Shutdown]	1782.00	--
		NO <sub>x</sub>	19.14	97.32
		NO <sub>x</sub> [Startup/Shutdown]	242.00	--
		PM/PM <sub>10</sub>	27.01	104.08
		SO <sub>2</sub>	3.63	13.36
		VOC	8.80	39.54
		VOC [Startup/Shutdown]	105.16	--
		H <sub>2</sub> SO <sub>4</sub>	0.56	2.05
			28.16	114.54

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		NH <sub>3</sub>		
--	--	-----------------	--	--

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CTG-SC-1	GE 7FA By-pass Stack Simple Cycle	CO	34.10	84.48
		CO [Startup/Shutdown]	345.58	--
		NO <sub>x</sub>	68.20	96.96
		NO <sub>x</sub>	117.22	--
		[Startup/Shutdown]	18.00	22.50
		PM/PM <sub>10</sub>	2.94	3.50
		SO <sub>2</sub>	3.30	7.09
		VOC	24.40	--
		VOC	0.45	0.54
		[Startup/Shutdown]		
CTG-SC-2	GE 7FA By-pass Stack Simple Cycle	CO	34.10	84.48
		CO [Startup/Shutdown]	345.58	--
		NO <sub>x</sub>	68.20	96.96
		NO <sub>x</sub>	117.22	--
		[Startup/Shutdown]	18.00	22.50
		PM/PM <sub>10</sub>	2.94	3.50
		SO <sub>2</sub>	3.30	7.09
		VOC	24.40	--
		VOC	0.45	0.54
		[Startup/Shutdown]		
COMMON PLANT EQUIPMENTS				
CTWR	Plant Cooling Tower	PM/PM <sub>10</sub>	4.68	20.50
IAC-1	Inlet Air Chiller Cooling Tower	PM/PM <sub>10</sub>	0.27	1.18
IAC-2	Inlet Air Chiller Cooling Tower	PM/PM <sub>10</sub>	0.27	1.18
AUX-1	Auxiliary Boiler	CO	1.96	8.58

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		NO <sub>x</sub>	0.53	2.32
		PM/PM <sub>10</sub>	0.53	2.32
		SO <sub>2</sub>	0.03	0.13
		VOC	0.32	1.40

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
ENG-1	Diesel-fired Firewater Engine	CO	1.67	0.42
		NO <sub>x</sub>	7.75	1.94
		PM/PM <sub>10</sub>	0.55	0.14
		SO <sub>2</sub>	0.51	0.13
		VOC	0.63	0.16
ENG-2	Diesel-fired Emergency Engine	CO	1.88	0.47
		NO <sub>x</sub>	35.24	8.81
		PM/PM <sub>10</sub>	0.17	0.04
		SO <sub>2</sub>	0.12	0.03
		VOC	1.88	0.47
TK-1	Lube Oil Tank	VOC	1.88	0.01
TK-2	Waste Oil Tank	VOC	0.24	<0.01
TK-ENG1	ENG-1 Fuel Tank	VOC	0.04	<0.01
TK-ENG2	ENG-2 Fuel Tank	VOC	0.24	<0.01
OWSEP	API Separator	VOC	<0.01	0.01
WO-LOAD	Waste Oil Loadout	VOC	0.09	<0.01
FUG-1	Site Fugitives (4)	VOC	0.41	1.78
HTR-1	Line Heater 1	CO	0.99	4.34
		NO <sub>x</sub>	1.18	5.17

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		PM/PM <sub>10</sub> SO <sub>2</sub> VOC	0.09 0.01 0.06	0.39 0.04 0.26
HTR-2	Line Heater 2	CO NO <sub>x</sub> PM/PM <sub>10</sub> SO <sub>2</sub> VOC	0.99 1.18 0.09 0.01 0.06	4.34 5.17 0.39 0.04 0.26
LOR-1	Lube Oil Reservoir Vapor Extractor Vent	VOC PM	<0.01 <0.01	0.01 0.01
LOR-2	Lube Oil Reservoir Vapor Extractor Vent	VOC PM	<0.01 <0.01	0.01 0.01
LOR-3	Lube Oil Reservoir Vapor Extractor Vent	VOC PM	<0.01 <0.01	0.01 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<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter  
 CO - carbon monoxide  
 H<sub>2</sub>SO<sub>4</sub> - sulfuric acid  
 NH<sub>3</sub> - ammonia
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

\_\_\_ Hrs/day \_\_\_ Days/week \_\_\_ Weeks/year or 8,760 Hrs/year

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated February 3, 2010