EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 1467 and PSDTX1090

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
S4-1	Westinghouse 69 MW Turbine Model W501-B6 with 124 MMBtu/hr Duct Burner	NO_x	188	674
		CO	840	1,665
		SO_2	17	12
		VOC	12	44
		PM/PM_{10}	2	6
S4-2	Westinghouse 69 MW Turbine Model W501-B6 with 124 MMBtu/hr Duct Burner	NO_x	188	674
		CO	840	1,665
		SO_2	17	12
		VOC	12	44
		PM/PM_{10}	2	6
UNIT 6 SIMPLE CYCLE				
SC-S6A	GE Frame 7EA Natural Gas Fired 70 MW Turbine, Typical High Load Operation (7) (Without Duct Burner)	NO_x	174	-
		CO	233	-
		VOC	8	-
		PM/PM_{10}	9	-
		SO_2	14	-
		H_2SO_4	2	-
SC-S6A	GE Frame 7EA Natural Gas Fired 70 MW Turbine Without Duct Burner - Startup, Shutdown, and Low Load Operation (8) (Limited to 2,500 hours per year)	NO_x	180	-
		CO	386	-
		VOC	5	-
		PM/PM_{10}	9	-
		SO_2	14	-
		H_2SO_4	2	-

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
SC-S6A	Annual Emissions from EPN SC-S6A	NO_x	-	283 (5)
		CO	-	363
		VOC	-	8
		PM/PM_{10}	-	29
		SO_2	-	13
		H_2SO_4	-	2
SC-S6B	GE Frame 7EA Natural Gas Fired 70 MW Turbine, Typical High Load Operation (7) (Without Duct Burner)	NO_x	174	-
		CO	233	-
		VOC	8	-
		PM/PM_{10}	9	-
		SO_2	14	-
		H_2SO_4	2	-
SC-S6B	GE Frame 7EA Natural Gas Fired 70 MW Turbine Without Duct Burner - Startup, Shutdown, and Low Load Operation (8) (Limited to 2,500 hours per year)	NO_x	180	-
		CO	386	-
		VOC	5	-
		PM/PM_{10}	9	-
		SO_2	14	-
		H_2SO_4	2	-
SC-S6B	Annual Emissions from EPN SC-S6B	NO_x	-	283 (5)
		CO	-	363
		VOC	-	8
		PM/PM_{10}	-	29
		SO_2	-	13
		H_2SO_4	-	2

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
UNIT 6 COMBINED CYCLE				
CC-S6A	GE Frame 7EA Natural Gas Fired 70 MW Turbine, Typical High Load Operation (7) (With 285 MMBtu/yr Duct Burner)	NO_x	42	-
		CO	326	-
		VOC	18	-
		PM/PM_{10}	15	-
		SO_2	20	-
		H_2SO_4	3.8	-
		NH_3	20	-
CC-S6A	GE Frame 7EA Natural Gas Fired 70 MW Turbine Startup, Shutdown, and Low Loads (8) (With 285 MMBtu/hr Duct Burner)	NO_x	180	-
		CO	518	-
		VOC	18	-
		PM/PM_{10}	15	-
		SO_2	20	-
		H_2SO_4	3.8	-
CC-S6A	Annual Emissions from EPN CC-S6A	NO_x	-	165 (6)
		CO	-	456
		VOC	-	25
		PM/PM_{10}	-	38
		SO_2	-	16
		H_2SO_4	-	3.1
		NH_3	-	50
CC-S6B	GE Frame 7EA Natural Gas Fired 70 MW Turbine, Typical High Load Operations (7) (With 285 MMBtu/hr Duct Burner)	NO_x	42	-
		CO	326	-
		VOC	18	-
		PM/PM_{10}	15	-
		SO_2	20	-
		H_2SO_4	3.8	-
		NH_3	20	-

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
CC-S6B	GE Frame 7EA Natural Gas Fired 70 MW Turbine Start-up, Shutdown, and Low Loads (8) (With 285 MMBtu/hr Duct Burner)	NO_x	180	-
		CO	518	-
		VOC	18	-
		PM/PM_{10}	15	-
		SO_2	20	-
		H_2SO_4	3.8	-
CC-S6B	Annual Emissions from EPN CC-S6B	NO_x	-	165 (6)
		CO	-	456
		VOC	-	25
		PM/PM_{10}	-	38
		SO_2	-	16
		H_2SO_4	-	3.1
		NH_3	-	50
FIRE	Firewater Pump Engine	NO_x	9.3	0.9
		CO	2.0	0.2
		VOC	0.8	<0.1
		PM/PM_{10}	0.7	<0.1
		SO_2	0.1	<0.1
		H_2SO_4	<0.1	<0.1
OTD-1	Diesel Storage Tank 1	VOC	<0.1	<0.1
OTD-2	Diesel Storage Tank 2	VOC	<0.1	<0.1
OTD-3	Diesel Storage Tank 3	VOC	<0.1	<0.1
LO-1	Gas Turbine GT-6A Lube Oil Vent	VOC	<0.1	0.2
		PM/PM_{10}	<0.1	0.2
LO-2	Gas Turbine GT-6B Lube Oil Vent	VOC	<0.1	0.2
		PM/PM_{10}	<0.1	0.2
LO-3	Steam Turbine Lube Oil Vent	VOC	<0.1	0.2
		PM/PM_{10}	<0.1	0.2
FUG-6	Unit 6 Piping Fugitives (9)	VOC	0.3	1.5

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		H_2S	<0.1	0.1
		NH_3	0.5	2.2
		Cl_2	<0.1	0.4
OTA-1	Ammonia Storage Tank 1	NH_3	<0.1	0.4
CT-1467-4	Cooling Tower 4	PM	5.94	26.04
		PM_{10}	0.38	1.67
		$PM_{2.5}$	0.01	0.03
		HOCl (4)	<0.1	<0.1
CT-1467-6	Cooling Tower 6	PM	1.49	6.51
		PM_{10}	0.10	0.42
		$PM_{2.5}$	0.002	0.01
		HOCl (4)	<0.1	<0.1
FUG-4	Unit 4 Fugitives (9)	VOC	0.5	2.2
		Cl_2	0.08	0.35

(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_x - total oxides of nitrogen
CO - carbon monoxide
H_2SO_4 - sulfuric acid
H_2S - hydrogen sulfide
NH_3 - anhydrous ammonia
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - particulate matter suspended in the atmosphere, including PM_{10}
PM_{10} - particulate matter equal to or less than 10 microns in diameter
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
Cl_2 - chlorine
HOCl - hypochlorous acid
(4) Inorganic compounds calculated as HOCl.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(5) For Unit 6, the annual NO_x emissions for Simple Cycle Operations assumes up to 2,500 hours of startup, shutdown, and low load operation per turbine.
(6) For Unit 6, the annual NO_x emissions after HRSG installation is determined assuming a limitation of 2,500 hours of simple cycle operation and up to 2,500 hours of startup, shutdown, and low load operation per turbine.
(7) High Load Operation is defined in Special Condition No. 6(A)(1).
(8) Low Load Operation is defined in Special Condition No. 6(A)(2).
(9) 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 24 Days/week 7 Weeks/year 52 or Hrs/year 8,760

Dated August 20, 2010