EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 19166, PSDTX760M8, and HAP10

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 (4)	TPY(5)
Turbines, Case I: Turbines Only - No Duct Burner Firing				
7A	88 MW (ISO) Gas Turbine GE Model PG7111 (EA)	NO_x	102.00	385.44
		CO	58.00	223.38
		VOC	0.90	3.94
		PM and PM_{10}	5.00	21.90
		SO_2	0.73	3.20
7B	88 MW (ISO) Gas Turbine GE Model PG7111 (EA)	NO_x	102.00	385.44
		CO	58.00	223.38
		VOC	0.90	3.94
		PM and PM_{10}	5.00	21.90
		SO_2	0.73	3.20
7C	88 MW (ISO) Gas Turbine GE Model PG7111 (EA)	NO_x	102.00	385.44
		CO	58.00	223.38
		VOC	0.90	3.94
		PM and PM_{10}	5.00	21.90
		SO_2	0.73	3.20
7D	88 MW (ISO) Gas Turbine GE Model PG7111 (EA)	NO_x	115.00	455.52
		CO	57.00	227.76
		VOC	0.90	3.94
		PM and PM_{10}	5.00	21.90
		SO_2	0.73	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 (4)	TPY(5)**
7E	88 MW (ISO) Gas Turbine GE Model PG7111 (EA)	NO_x	115.00	455.52
		CO	57.00	227.76
		VOC	0.90	3.94
		PM and PM_{10}	5.00	21.90
		SO_2	0.73	3.20
7G	83 MW (ISO) Gas Turbine GE Model PG7121 (EA)	NO_x	38.00	166.44
		CO	62.00	271.56
		VOC	0.55	2.41
		PM and PM_{10}	5.00	21.90
		SO_2	0.62	2.69
Turbines, Case II: Turbines with Duct Burners Firing				
7A	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, or Tail Gas	NO_x	119.02	460.00
		CO	60.13	232.71
		VOC	1.75	7.66
		PM and PM_{10}	5.71	25.01
		SO_2	0.83	3.64
7B	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, or Tail Gas	NO_x	119.02	460.00
		CO	60.13	232.71
		VOC	1.75	7.66
		PM and PM_{10}	5.71	25.01
		SO_2	0.83	3.64
7C	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, or Tail Gas	NO_x	119.02	460.00
		CO	60.13	232.71
		VOC	1.75	7.66
		PM and PM_{10}	5.71	25.01
		SO_2	0.83	3.64
7D	88 MW (ISO) Gas Turbine GE Model PG7111 (EA)	NO_x	132.02	530.07
		CO	59.13	237.09

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr (4)	TPY(5)**
	with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas or Tail Gas	VOC	1.75	7.66
		PM and PM_{10}	5.71	25.01
		SO_2	0.83	3.64
7E	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas or Tail Gas	NO_x	132.02	530.07
		CO	59.13	237.09
		VOC	1.75	7.66
		PM and PM_{10}	5.71	25.01
		SO_2	0.83	3.64
7F	Package Boiler 250 MMBtu/hr	NO_x	12.50	54.75
		CO	25.00	109.50
		VOC	0.34	1.51
		PM and PM_{10}	1.25	5.48
		SO_2	0.10	0.43
7H	No.1 Package Boiler 417 MMBtu/hr	NO_x	6.25	-
		NO_x [MSS(6)]	42	-
		NO_x (annual)	-	27.0
		CO	15.4	-
		CO (MSS)	153	-
		CO (annual)	-	67.0
		VOC	2.5	10.0
		PM/PM_{10}	3.1	13.7
		SO_2	0.7	3.0
		NH_3	3.4	9.9

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr (4)	TPY(5)**
7J	No. 2 Package Boiler 417 MMBtu/hr	NO_x	6.25	-
		NO_x (MSS)	42	-
		NO_x (annual)	-	27.0
		CO	15.4	-
		CO (MSS)	153	-
		CO (annual)	-	67.0
		VOC	2.5	10.0
		PM/PM_{10}	3.1	13.7
		SO_2	0.7	3.0
		NH_3	3.4	9.9
NH3-FUG	Aqueous Ammonia Fugitives	NH_3	0.11	0.5
CWTP1	Combined Wastewater Treatment Plant	VOC	6.25	27.3
TTW-15A	Diesel Storage Tank	VOC	0.06	0.01
TTW-15B	Diesel Storage Tank	VOC	0.06	0.01
TTW-15C	Diesel Storage Tank	VOC	0.06	0.01
TTW-15D	Diesel Storage Tank	VOC	0.06	0.01
TTW-15E	Diesel Storage Tank	VOC	0.06	0.01
UT-F02A	Diesel Storage Tank	VOC	0.06	0.01
UT-F02B	Diesel Storage Tank	VOC	0.06	0.01
UT-F02C	Diesel Storage Tank	VOC	0.06	0.01
FPM-02A	Diesel Firewater Pump	NO_x	8.36	0.11
		CO	3.19	0.04
		VOC	0.18	0.01
		PM	0.66	0.01
		SO_2	2.06	0.03
FPM-02B	Diesel Firewater Pump	NO_x	8.36	0.11

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr (4)	TPY(5)**
		CO	3.19	0.04
		VOC	0.18	0.01
		PM	0.66	0.01
		SO_2	2.06	0.03
FPM-02C	Diesel Firewater Pump	NO_x	8.36	0.11
		CO	3.19	0.04
		VOC	0.18	0.01
		PM	0.66	0.01
		SO_2	2.06	0.03
FPM-02D	Diesel Firewater Pump	NO_x	8.36	0.11
		CO	3.19	0.04
		VOC	0.18	0.01
		PM	0.66	0.01
		SO_2	2.06	0.03
FPM-02E	Diesel Firewater Pump	NO_x	8.36	0.11
		CO	3.19	0.04
		VOC	0.18	0.01
		PM	0.66	0.01
		SO_2	2.06	0.03
UP-F02A	Diesel Firewater Pump	NO_x	8.68	0.11
		CO	1.87	0.02
		VOC	0.69	0.01
		PM	0.62	0.01
		SO_2	1.42	0.02
UP-F02B	Diesel Firewater Pump	NO_x	8.68	0.11
		CO	1.87	0.02
		VOC	0.69	0.01
		PM	0.62	0.01
		SO_2	1.42	0.02
UP-F02C	Diesel Firewater Pump	NO_x	8.68	0.11
		CO	1.87	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr (4)	TPY(5)**
		VOC	0.69	0.01
		PM	0.62	0.01
		SO_2	1.42	0.02
XZ-OS01	Waste Oil Storage Tank	VOC	0.01	0.01
XZ-WS01	Oil-Water Separation System	VOC	0.11	0.25
PCDIESELFUG	PC Plant Fire Water System Fugitives	VOC	0.04	0.16
EXPDIESELFUG	Expansion Plant Fire Water System Fugitives	VOC	0.06	0.27

(1) Emission point identification - either specific equipment designation or emission point number (EPN) from a plot plan.
(2) Specific point source names.
(3) NO_x - total oxides of nitrogen
CO - carbon monoxide
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. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
SO_2 - sulfur dioxide
NH_3 - ammonia
(4) Maximum hourly emissions based on an ambient temperature of 20*F for EPN 7A through 7C and 30*F for EPN 7D through 7E.
(5) Annual emissions based on 70*F ambient temperature for EPN 7A through 7E.
(6) MSS - Maintenance, Startup, and Shutdown

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

* Emission rates are based on continuous operation (8,760 hours/year) except for the diesel firewater pumps, which are based on operating for 26 hours/year each.

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

Dated: March 3, 2010