

Emission Sources - Maximum Allowable Emission Rates

Permit Number 135021 and PSDTX1468 and GHGPSDTX144

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 (5)	
			lb/hour	TPY (4)
CTG-1	Unit 1 Turbine Model Option 1: Siemens SCC6-8000H	NO _x (6)	27.00	132.70
		NO _x (Peak Firing) (6), (7)		
		CO (6)	16.40	341.00
		VOC	14.10	97.20
		SO ₂	5.80	23.30
		PM	21.50	80.90
		PM ₁₀	21.50	80.90
		PM _{2.5}	21.50	80.90
		H ₂ SO ₄	2.60	10.50
		NH ₃	25.60	100.50
		NO _x (MSS) (6)	200.20	--
		CO (MSS) (6)	1,956.90	--
		VOC (MSS)	341.00	--
		SO ₂ (MSS)	4.70	--
		PM ₁₀ (MSS)	31.70	--
		PM _{2.5} (MSS)	31.70	--
CTG-1	Unit 1 Turbine Model Option 2: GE 7HA.02	NO _x (6)	29.50	150.90
		NO _x (Peak Firing) (6), (7)		
		CO (6)	17.90	173.00
		VOC	10.20	60.40
		SO ₂	6.20	25.10
		PM	17.80	70.70
		PM ₁₀	17.80	70.70
		PM _{2.5}	17.80	70.70

Emission Sources - Maximum Allowable Emission Rates

		H ₂ SO ₄	2.80	11.30
		NH ₃	25.90	102.10
		NO _x (MSS) (6)	611.60	--
		CO (MSS) (6)	6,264.50	--
		VOC (MSS)	551.10	--
		PM ₁₀ (MSS)	36.50	--
		PM _{2.5} (MSS)	36.50	--
CTG-1	Unit 1 Turbine Model Option 3: Mitsubishi M501 JAC CT	NO _x (6)	31.20	130.50
		NO _x (Peak Firing) (6), (7)		
		CO (6)	28.60	354.10
		VOC	5.50	153.00
		SO ₂	5.80	22.50
		PM	20.50	78.20
		PM ₁₀	20.50	78.20
		PM _{2.5}	20.50	78.20
		H ₂ SO ₄	2.60	10.10
		NH ₃	28.90	111.5
		NO _x (MSS) (6)	138.40	--
		CO (MSS) (6)	3,833.10	--
		VOC (MSS)	1,703.80	--
		SO ₂ (MSS)	5.30	--
		PM ₁₀ (MSS)	14.70	--
		PM _{2.5} (MSS)	14.70	--
CTW-1	Cooling Tower 1 Bechtel CF9742-6-32.8-12B	PM	0.39	1.71
		PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-2	Cooling Tower 2 Bechtel CF9742-6-32.8-12B	PM	0.39	1.71
		PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-3	Cooling Tower 3	PM	0.39	1.71

Emission Sources - Maximum Allowable Emission Rates

		PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-4	Cooling Tower 4	PM	0.39	1.71
	Bechtel CF9742-6-32.8-12B	PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-5	Cooling Tower 5	PM	0.39	1.71
	Bechtel CF9742-6-32.8-12B	PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-6	Cooling Tower 6	PM	0.39	1.71
	Bechtel CF9742-6-32.8-12B	PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-7	Cooling Tower 7	PM	0.39	1.71
	Bechtel CF9742-6-32.8-12B	PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
CTW-8	Cooling Tower 8	PM	0.39	1.71
	Bechtel CF9742-6-32.8-12B	PM ₁₀	0.39	1.71
		PM _{2.5}	0.39	1.71
AUX-1	Auxiliary Boiler	NO _x	0.66	2.90
		CO	2.16	9.50
		VOC	0.18	0.79
		SO ₂	0.08	0.37
		PM	0.30	1.31
		PM ₁₀	0.30	1.31
		PM _{2.5}	0.30	1.31
FGH-1	Fuel-Fired Gas Heater	NO _x	0.17	0.70
		CO	0.28	1.20
		VOC	0.07	0.33
		SO ₂	0.02	0.08
		PM	0.03	0.12
		PM ₁₀	0.03	0.12

Emission Sources - Maximum Allowable Emission Rates

		PM _{2.5}	0.03	0.12
FWP-1	Firewater Pump	NO _x	1.41	0.35
		CO	1.75	0.44
		VOC	0.61	0.15
		SO ₂	<0.01	<0.01
		PM	0.10	0.03
		PM ₁₀	0.10	0.03
		PM _{2.5}	0.10	0.03
EG-1	Emergency Generator	NO _x	11.04	2.76
		CO	8.57	2.14
		VOC	4.73	1.18
		SO ₂	0.04	<0.01
		PM	0.49	0.12
		PM ₁₀	0.49	0.12
		PM _{2.5}	0.49	0.12
TANK	Diesel Tank	VOC	0.28	<0.01
NG-1	Natural Gas Piping Fugitives (9)	VOC	0.04	0.16

- (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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
- PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- NH₃ - ammonia
- H₂SO₄ - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Planned maintenance, startup, and shutdown (MSS) emissions for all pollutants are authorized even if not specifically identified as MSS.
- (6) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, the MSS lb/hr limits apply only during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the lb/hr limits for normal operations, peak firing operations, and transitional load operations apply, as applicable, subject to the qualifying requirements in Special Condition Nos. 5 and 6.
- (7) This hourly emission rate is authorized only during periods of peak firing operation of the GE model turbine, when turbine operation is above base load, subject to the qualifying requirements in Special Condition No. 5.

Emission Sources - Maximum Allowable Emission Rates

- (8) This hourly emission rate is authorized only during periods of transitional load operation of the Siemens model turbine, other than periods of planned MSS, when the turbine ramp rate is greater than 5 MW/minute, subject to the qualifying requirements in Special Condition No. 6.
- (9) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: _____ Xxx xx, 2017