EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 41008 and PSDTX936

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	Source	Air Contaminant	Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY **	
Turbine Firing Only (Maximum Hourly Limits)					
GT-HRSG 1	Combustion Turbine No.	NO_x (4)	60.0	-	
	1	(1)			
	(Model GE PG7241 [FA])	CO (4)	29.0	-	
		PM ₁₀ (4)	18.3	-	
		VOC (4)	2.8	-	
		SO ₂ (4)	2.4	-	
		H_2SO_4	0.27	-	
GT-HRSG 2	Combustion Turbine No. 2	NO _x (4)	60.0	-	
	Model GE PG7241 [FA])	CO (4)	29.0	-	
	,	PM ₁₀ (4)	18.3	-	
		VOC (4)	2.8	-	
		SO ₂ (4)	2.4	-	
		H ₂ SO ₄	0.27	-	
GT-HRSG 3	Combustion Turbine No. 3	NO _x (4)	60.0	-	
	(Model GE PG7241 [FA])	CO (4)	29.0	-	
	[· ^] <i>)</i>	PM ₁₀ (4)	18.3	_	
		VOC (4)	2.8	_	
		SO ₂ (4)	2.4	_	
		H ₂ SO ₄	0.27	_	
		112004	0.21		
GT-HRSG 4	Combustion Turbine No. 4	NO _x (4)	60.0	-	
	(Model GE PG7241 [FA])	CO (4)	29.0	-	
	[· 一] <i>]</i>	PM ₁₀ (4)	18.3	_	
		VOC (4)	2.8	_	
		SO ₂ (4)	2.4	<u>-</u>	
		33 2 (¬)	_ .¬		

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		H ₂ SO ₄	0.27	-	
Turbine/Duct Burner Firing (Maximum Hourly and Annual					
Limits) GT-HRSG 1	Combustion Turbine No.	NO _x (4)	82.0	281.5	
	(Model GE PG7241 [FA])	CO (4)	51.0	158.9	
	Combined with HRSG Firing	PM ₁₀ (4) VOC (4) SO ₂ (4) H ₂ SO ₄	21.0 5.6 2.7 0.3	85.6 17.0 10.1 1.2	
GT-HRSG 2	Combustion Turbine No. 2	NO _x (4)	82.0	281.5	
	(Model GE PG7241 [FA])	CO (4)	51.0	158.9	
	Combined with HRSG Firing	PM ₁₀ (4) VOC (4) SO ₂ (4) H ₂ SO ₄	21.0 5.6 2.7 0.3	85.6 17.0 10.1 1.2	
GT-HRSG 3	Combustion Turbine No. 3	NO _x (4)	82.0	281.5	
	(Model GE PG7241 [FA])	CO (4)	51.0	158.9	
	Combined with HRSG Firing	PM ₁₀ (4) VOC (4) SO ₂ (4) H ₂ SO ₄	21.0 5.6 2.7 0.3	85.6 17.0 10.1 1.2	
GT-HRSG 4	Combustion Turbine No. 4	NO _x (4)	82.0	281.5	
	(Model GE PG7241 [FA])	CO (4)	51.0	158.9	
	Combined with HRSG Firing	PM ₁₀ (4) VOC (4) SO ₂ (4) H ₂ SO ₄	21.0 5.6 2.7 0.3	85.6 17.0 10.1 1.2	
CT-1	Cooling Tower No. 1 (Cell fan exhausts - Plus fugitives)	PM (4) HOCI HCI H ₂ SO ₄	18.70 0.04 0.03 0.01	81.70 0.17 0.12 0.01	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		VOC (4)	0.02	0.07
CT-2	Cooling Tower No. 2 (Cell fan exhausts - Plus fugitives)	PM (4) HOCI HCI H ₂ SO ₄ VOC (4)	18.70 0.04 0.03 0.01 0.02	81.70 0.17 0.12 0.01 0.07
Ancillary Sources (Hourly and Annual Limits)				
F-1	Natural Gas, Condensate, Lube Oil, and Seal Oil Piping for Units 1 thru 4	VOC (4) (5) H ₂ S (5)	2.710.01	0.01
LUBETNKCT1	Unit 1 Combustion	VOC (4) (5)	0.09	0.40
	Turbine Lube Oil Reservoir Vent	PM (4) (5)	0.09	0.40
LUBETNKCT2	Unit 2 Combustion	VOC (4) (5)	0.09	0.40
	Turbine Lube Oil Reservoir Vent	PM (4) (5)	0.09	0.40
LUBETNKCT3	Unit 3 Combustion Turbine	VOC (4) (5)	0.09	0.40
	Lube Oil Reservoir Vent	PM (4) (5)	0.09	0.40
LUBETNKCT4	Unit 4 Combustion Turbine	VOC (4) (5)	0.09	0.40
	Lube Oil Reservoir Vent	PM (4) (5)	0.09	0.40
LUBETNKST1	Steam Turbine No. 1 Lube	VOC (4) (5)	0.09	0.40
	Oil Reservoir Vent	PM (4) (5)	0.09	0.40
LUBETNKST2	Steam Turbine No. 2 Lube	VOC (4) (5)	0.09	0.40
	Oil Reservoir Vent	PM (4) (5)	0.09	0.40
LUBETNKEG2	Emergency Generator Engine No. 2 Lube Oil Reservoir Vent	VOC (4) (5) PM (4) (5)	0.13 0.13	0.56 0.11
EG-1	Emergency Electrical Generator No. 1 Stack 640-hp Diesel Fired Engine (6)	NO_x CO PM_{10} VOC	15.36 3.52 0.48 0.48	3.84 0.88 0.13 0.24

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		SO_2 H_2SO_4	0.52 0.079	0.13 0.02
EG-2	Emergency Electrical Generator No. 2 Stack 2885-hp Diesel Fired Engine (6)	NO_x CO PM_{10} VOC SO_2 H_2SO_4	63.2 5.00 0.82 2.40 2.14 0.33	27.68 2.19 0.47 1.61 0.94 0.14
FP-1	Firewater Pump 368-hp Diesel-fired Engine (6)	NO_x CO PM_{10} VOC SO_2 H_2SO_4	11.41 2.46 0.83 0.93 0.30 0.05	0.11 0.025 0.01 0.08 0.01 0.01
CONDENTK1	Natural Gas Condensate Storage Tank No. 1 in Metering Yard	VOC (4) H ₂ S	0.12 0.01	0.50 0.01
LD-CONDTK1	Natural Gas Condensate Truck Loading from Storage Tank No. 1	VOC (4) H₂S	18.10 0.01	0.01 0.01
SCAVK1	Hydrogen Scavenging Tank for Unit No. 1	VOC (4) PM (4)	0.01 0.01	0.01 0.01
SCAVK2	Hydrogen Scavenging Tank for Unit No. 2	VOC (4) PM (4)	0.01 0.01	0.01 0.01
SCAVK3	Hydrogen Scavenging Tank for Unit No. 3	VOC (4) PM (4)	0.01 0.01	0.01 0.01
SCAVK4	Hydrogen Scavenging Tank for Unit No. 4	VOC (4) PM (4)	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_x - total oxides of nitrogen

SO₂ - sulfur dioxide

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

PM - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}

 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

CO - carbon monoxide H₂S - hydrogen sulfide H₂SO₄ - sulfuric acid

HCl - hydrogen chloride HOCl - hypochlorous acid

- (4) These emissions are authorized under Federal PSD and state permitting regulations.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (6) Emission sources operating per the criteria of a permit by rule are listed for clarification and information only and are not authorized by this permit.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
 - 24 Hrs/day 7 Days/wk 52 Wks/year or 8,760 Hrs/year
- ** Compliance with annual emission limits is based on a rolling 12-month period.

Dated May 24, 2010