

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 41941 and PSDTX948

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	
			lbs/hour	TPY (4)
Turbine Only (Hourly Limits)				
STACK1	GE-7FA Turbine 1A	NO <sub>x</sub>	64.0	-
		CO	32.0	-
		VOC	3.0	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	13.2	-
		SO <sub>2</sub>	27.17	-
		H <sub>2</sub> SO <sub>4</sub>	3.33	-
STACK2	GE-7FA Turbine 1B	NO <sub>x</sub>	64.0	-
		CO	32.0	-
		VOC	3.0	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	13.2	-
		SO <sub>2</sub>	27.17	-
		H <sub>2</sub> SO <sub>4</sub>	3.33	-
Turbine Only (Maintenance, Startup, and Shutdown)				
STACK1	GE-7FA Turbine 1A	NO <sub>x</sub>	275.0	-
		CO	2890.0	-
		VOC	183.0	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	18.0	-
		SO <sub>2</sub>	15.4	-
		H <sub>2</sub> SO <sub>4</sub>	1.89	-
STACK2	GE-7FA Turbine 1B	NO <sub>x</sub>	275.0	-
		CO	2890.0	-
		VOC	183.0	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	18.0	-
		SO <sub>2</sub>	15.4	-
		H <sub>2</sub> SO <sub>4</sub>	1.89	-

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Turbine and Duct Burner (Hourly Limits)				
STACK1	GE-7FA Turbine 1A with 300 MM Btu/hr Duct Burner	NO <sub>x</sub>	88.0	-
		CO	62.0	-
		VOC	4.7	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	16.2	-
		SO <sub>2</sub>	31.5	-
		H <sub>2</sub> SO <sub>4</sub>	3.85	-
STACK2	GE-7FA Turbine 1B with 300 MM Btu/hr Duct Burner	NO <sub>x</sub>	88.0	-
		CO	62.0	-
		VOC	4.7	-
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	16.2	-
		SO <sub>2</sub>	31.5	-
		H <sub>2</sub> SO <sub>4</sub>	3.85	-
Turbine and Duct Burner (Annual Limits)				
STACK1 and STACK2	GE-7FA Turbine 1A with 300 MM Btu/hr Duct Burner and GE-7FA Turbine 1B with 300 MM Btu/hr Duct Burner	NO <sub>x</sub>	-	604.08
		CO	-	416.5
		VOC	-	39.26
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	-	129.69
		SO <sub>2</sub>	-	36.42
		H <sub>2</sub> SO <sub>4</sub>	-	4.46
CTG1A-OV	Turbine 1A Oil Mist Vent (5)	VOC	0.03	0.13
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.03	0.13
CTG1B-OV	Turbine 1B Oil Mist Vent (5)	VOC	0.03	0.13
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.03	0.13
TOSHIBA	Steam Turbine Oil Mist Vent	VOC	0.03	0.13
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.03	0.13
FWP-1	Firewater Pump Engine (6)	NO <sub>x</sub>	1.74	0.1
		CO	0.16	0.01
		VOC	0.1	0.01
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.05	<0.01
		SO <sub>2</sub>	0.12	0.01
		H <sub>2</sub> SO <sub>4</sub>	0.02	<0.01
TANK-1	Diesel Storage Tank	VOC	0.02	<0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

FUG-1	Natural Gas, Condensate, and Oil Fugitives (7)	VOC	0.76	3.33
		H <sub>2</sub> S	<0.01	<0.01
CTOWER-1	Cooling Tower 1	PM/PM <sub>10</sub> /PM <sub>2.5</sub>	2.45	10.72
		HOCl	0.06	0.28
		HCl	0.04	0.19
		H <sub>2</sub> SO <sub>4</sub>	<0.01	<0.01
		VOC	0.02	0.07
LOADING	Natural Gas Condensate Truck Loading	VOC	10.86	<0.01
		H <sub>2</sub> S	0.1	<0.01
SCAVTK1	Hydrogen Scavenging Tank Vent for Unit 1A	VOC	0.03	0.13
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.03	0.13
SCAVTK2	Hydrogen Scavenging Tank Vent for Unit 1B	VOC	0.03	0.13
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.03	0.13
CONDTK-1	Condensate Storage Tank No. 1	VOC	0.12	0.30
		H <sub>2</sub> S	<0.01	<0.01

- (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<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide  
 H<sub>2</sub>S - hydrogen sulfide  
 HCl - hydrochloric acid  
 HOCl - hypochlorous acid  
 H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Turbine oil mist vent emissions are an estimate only based on estimates from mist vent eliminatory manufacturer data.
- (6) Emissions are based on normal operation of 120 operating hours per year.
- (7) Fugitive emissions are an estimate based on component count and applicable fugitive emission factors.

Date: November 6, 2020