Emission Sources - Maximum Allowable Emission Rates

Permit Number 87153 and PSDTX877

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)
101	GE-7FA Turbine	NO_x (5)	63.0	-
		CO	139.0	-
		VOC	5.0	-
		PM_{10}	17.0	-
		SO_2	15.7	-
	GE-7FA Turbine + DB	NO_x (5)	103.2	-
		CO	138.6	-
		VOC	13.4	-
		PM_{10}	22.0	-
		SO_2	19.7	-
	GE-7FA Turbine MSS	NO_x	370.0	-
		CO	820.0	-
		VOC	8.5	-
101	GE-7FA Turbine Annual Emissions	NO_x	-	400.0
		CO	-	504.0
		VOC	-	50.0
		PM_{10}	-	92.5
		SO_2	-	6.6
101-OV	Turbine Oil Mist (6)	VOC	0.23	1.00
102	GE-7FA Turbine	NO_x (5)	63.0	-
		CO	139.0	-
		VOC	5.0	-
		PM_{10}	17.0	-
		SO_2	15.7	-

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	GE-7FA Turbine + DB	NO_x (5)	103.2	-
		CO	138.6	-
		VOC	13.4	-
		PM_{10}	22.0	-
		SO_2	19.7	-
	GE-7FA Turbine MSS	NO_x	370.0	-
		CO	820.0	-
		VOC	8.5	-
102	GE-7FA Turbine Annual Emissions	NO_x	-	400.0
		CO	-	504.0
		VOC	-	50.0
		PM_{10}	-	92.5
		SO_2	-	6.6
102-OV	Turbine Oil Mist (6)	VOC	0.23	1.00
103	Auxiliary Package Boiler (7)	NO_x	21.9	11.2
		CO	29.7	15.2
		VOC	1.7	2.7
		PM_{10}	2.0	2.5
		SO_2	3.4	0.2
104	Auxiliary Package Boiler (7)	NO_x	21.9	11.2
		CO	29.7	15.2
		VOC	1.7	2.7
		PM_{10}	2.0	2.5
		SO_2	3.4	0.2
105	Diesel Generator (8)	NO_x	14.1	0.7
		CO	4.8	0.2
		VOC	0.3	0.02
		PM_{10}	0.4	0.02
		SO_2	2.3	0.12

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105-T	Fuel Oil Storage Tank	VOC	<0.01	<0.01
106	Firewater Pump (8)	NO_x	11.6	0.58
		CO	2.3	0.12
		VOC	0.3	0.02
		PM_{10}	0.2	0.01
		SO_2	0.1	<0.01
106-T	Fuel Oil Storage Tank	VOC	<0.01	<0.01
107	Cooling Tower (9)	PM_{10}	3.2	14.0
108	Condensate Cooling Tower (9)	PM_{10}	<0.01	<0.01
		VOC	1.00	1.00
FUG	Fugitive Emissions (10)	VOC	0.03	0.13
STEAMVENT	Steam Vent	PM	0.25	0.03
		PM_{10}	0.25	0.03
		$PM_{2.5}$	0.25	0.03
		NH_3	3.08	4.97

(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
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
NH_3 - ammonia
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period. Annual emission rates include MSS emissions.
(5) The NO_x emission rate for the CTG and CTG with duct burners is based upon a three hour averaging period.
(6) Turbine oil mist emissions are an estimate based upon estimates from the mist vent eliminator manufacturer data.
(7) Annual emissions rates for the auxiliary boiler are based upon continuous operation at 10% load. Any emission over the allowable emission rates listed shall be offset by an equal or greater reduction in the annual emission from one or both of the turbines and duct burners.
(8) Emissions are based upon normal operation of 100 hours per year.
(9) Cooling tower PM_{10} emissions are an estimate based on manufacturers test data.
(10 Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: December 27, 2016