Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 38191 and PSDTX906

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)
STACK1	Combustion Turbine Model ABB GT24 Normal, Hold Point 2, and Transient Operation	Natural Gas Firing	NO_x	34	--
			CO	254	--
			VOC	17.6	--
			PM	24	--
			PM_{10}	24	--
			SO_2	5	--
			NH_3	26.8	--
		Fuel Oil Firing	NO_x	75	--
			CO	310	--
			VOC	18	--
			PM	111	--
			PM_{10}	111	--
			SO_2	109	--
			NH_3	31.8	--
	ABB GT24 Startup and Shutdown Operation (5)(6)		NO_x	990	--
			CO	2,100	--
			VOC	132	--
	ABB GT24 Maintenance/CT tuning (5)(6)		CO	3,500	--
	ABB GT24 Annual Emissions Includes all modes of operation		NO_x	--	151.6
			CO	--	259.3
			VOC	--	28.7
			PM	--	121.3
			PM_{10}	--	121.3
			SO_2	--	56.3
			NH_3	--	119.2
STACK2	Combustion Turbine Model ABB GT24	Natural Gas Firing	NO_x	34	--
			CO	254	--
	Normal, Hold Point 2, and Transient Operation				

Emission Sources - Maximum Allowable Emission Rates

			VOC	17.6	--
			PM	24	--
			PM_{10}	24	--
			SO_2	5	--
			NH_3	26.8	--
		Fuel Oil Firing	NO_x	75	--
			CO	310	--
			VOC	18	--
			PM	111	--
			PM_{10}	111	--
			SO_2	109	--
			NH_3	31.8	--
	ABB GT24 Startup and Shutdown Operation (5)(6)		NO_x	990	--
			CO	2,100	--
			VOC	132	--
	ABB GT24 Maintenance/CT tuning (5)(6)		CO	3,500	--
	ABB GT24 Annual Emissions Includes all modes of operation		NO_x	--	151.6
			CO	--	259.3
			VOC	--	28.7
			PM	--	121.3
			PM_{10}	--	121.3
			SO_2	--	56.3
			NH_3	--	119.2
STACK3	Combustion Turbine Model ABB GT24 Normal, Hold Point 2, and Transient Operation	Natural Gas Firing	NO_x	34	--
			CO	254	--
			VOC	17.6	--
			PM	24	--
			PM_{10}	24	--
			SO_2	5	--
			NH_3	26.8	--
		Fuel Oil Firing	NO_x	75	--
			CO	310	--
			VOC	18	--

Emission Sources - Maximum Allowable Emission Rates

			PM	111	--
			PM_{10}	111	--
			SO_2	109	--
			NH_3	31.8	--
	ABB GT24 Startup and Shutdown Operation (5)(6)		NO_x	990	--
			CO	2,100	--
			VOC	132	--
	ABB GT24 Maintenance/CT tuning (5)(6)		CO	3,500	--
	ABB GT24 Annual Emissions Includes all modes of operation		NO_x	--	151.6
			CO	--	259.3
			VOC	--	28.7
			PM	--	121.3
			PM_{10}	--	121.3
			SO_2	--	56.3
			NH_3	--	119.2

Emission Sources - Maximum Allowable Emission Rates

STACK4	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2, and Transient Operation	NO_x	34	--
		CO	254	--
		VOC	17.6	--
		PM	24	--
		PM_{10}	24	--
		SO_2	5	--
		NH_3	26.8	--
	ABB GT24 Startup and Shutdown Operation (5)(6)	NO_x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT tuning (5)(6)	CO	3,500	--
	ABB GT24 Annual Emissions Includes all modes of operation	NO_x	--	131.4
		CO	--	197.1
		VOC	--	23.1
		PM	--	83.2
		PM_{10}	--	83.2
		SO_2	--	17.5
		NH_3	--	119.2
STACK5	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2, and Transient Operation	NO_x	34	--
		CO	254	--
		VOC	17.6	--
		PM	24	--
		PM_{10}	24	--
		SO_2	5	--
		NH_3	26.8	--
	ABB GT24 Startup and Shutdown Operation (5)(6)	NO_x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT tuning (5)(6)	CO	3,500	--
	ABB GT24 Annual Emissions Includes all modes of operation	NO_x	--	131.4
		CO	--	197.1
		VOC	--	23.1
		PM	--	83.2
		PM_{10}	--	83.2

Emission Sources - Maximum Allowable Emission Rates

		SO_2	--	17.5
		NH_3	--	119.2
STACK6	Combustion Turbine Model ABB GT24 Natural Gas Firing Normal, Hold Point 2, and Transient Operation	NO_x	34	--
		CO	254	--
		VOC	17.6	--
		PM	24	--
		PM_{10}	24	--
		SO_2	5	--
		NH_3	26.8	--
	ABB GT24 Startup and Shutdown Operation (5)(6)	NO_x	990	--
		CO	2,100	--
		VOC	132	--
	ABB GT24 Maintenance/CT tuning (5)(6)	CO	3,500	--
	ABB GT24 Annual Emissions Includes all modes of operation	NO_x	--	131.4
		CO	--	197.1
		VOC	--	23.1
		PM	--	83.2
		PM_{10}	--	83.2
		SO_2	--	17.5
		NH_3	--	119.2
TANK1	2.2 Million-Gallon Diesel Tank	VOC	1.5	0.65
TANK2	2.2 Million-Gallon Diesel Tank	VOC	1.5	0.65
EMTANK1	600-Gallon Diesel Tank	VOC	0.05	<0.01
EMTANK2	600-Gallon Diesel Tank	VOC	0.05	<0.01
EMTANK3	600-Gallon Diesel Tank	VOC	0.05	<0.01
EMTANK4	600-Gallon Diesel Tank	VOC	0.05	<0.01
EMTANK5	600-Gallon Diesel Tank	VOC	0.05	<0.01
EMTANK6	600-Gallon Diesel Tank	VOC	0.05	<0.01
FUG-IG1	NH_3 Grid Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-IG2	NH_3 Grid Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-IG3	NH_3 Grid Fugitive Emissions (7)	NH_3	0.14	0.62

Emission Sources - Maximum Allowable Emission Rates

FUG-IG4	NH_3 Grid Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-IG5	NH_3 Grid Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-IG6	NH_3 Grid Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-V1	NH_3 Vaporizer Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-V2	NH_3 Vaporizer Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-V3	NH_3 Vaporizer Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-V4	NH_3 Vaporizer Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-V5	NH_3 Vaporizer Fugitive Emissions (7)	NH_3	0.14	0.62
FUG-V6	NH_3 Vaporizer Fugitive Emissions (7)	NH_3	0.14	0.62
LOR-1	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	0.003	0.01
		PM	0.003	0.01
LOR-2	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	0.003	0.01
		PM	0.003	0.01
LOR-3	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	0.003	0.01
		PM	0.003	0.01
LOR-4	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	0.003	0.01
		PM	0.003	0.01
LOR-5	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	0.003	0.01
		PM	0.003	0.01
LOR-6	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	0.003	0.01
		PM	0.003	0.01
FUG	Normal Operations Site Fugitive Emissions (7)	VOC	0.44	1.91
		NH_4OH	0.22	0.98
MSSFUG	Maintenance Activities Site Fugitive Emissions (7)	VOC	21	1.1
		PM	4.5	0.1
		PM_{10}	4.5	0.1
		$PM_{2.5}$	4.5	0.1
		NH_3	6.6	0.1

(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
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
SO_2 - sulfur dioxide

Emission Sources - Maximum Allowable Emission Rates

NH_3 - ammonia
NH_4OH - ammonium hydroxide

(4) Compliance with annual emission limits is based on a 12-month rolling period.
(5) Hourly emissions shown are the only emissions that are higher than emissions during normal operations. Normal operations emission limits apply to pollutants not shown that are emitted during CT maintenance, startup, and shutdown (MSS).
(6) For CT MSS, the number of hours that CO emissions may exceed 2,100 lb/hr is limited to no more than 75 hours per year for all turbines combined. The CO emissions shall not exceed 3,500 lb/hr during any of these 75 hours.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(8) Compliance with lube oil extractor vent emission limits is demonstrated through periodic opacity readings in accordance with Title V Operating Permit Number O-1869.

Date: October 18, 2013