

# 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 ABB GT24 Normal and Hold Point 2 Natural Gas Firing	NO <sub>x</sub>	34	-
		CO	254	-
		VOC	17.6	-
		PM	24	-
		PM <sub>10</sub>	24	-
		SO <sub>2</sub>	5	-
		NH <sub>3</sub>	26.8	-
	Combustion Turbine ABB GT24 Normal and Hold Point 2 Fuel Oil Firing	NO <sub>x</sub>	75	-
		CO	310	-
		VOC	18	-
		PM	111	-
		PM <sub>10</sub>	111	-
		SO <sub>2</sub>	109	-
		NH <sub>3</sub>	31.8	-
	Combustion Turbine ABB GT24 Startup, Shutdown, and Transient (5,6)	NO <sub>x</sub>	990	-
		CO	2,100	-
		VOC	132	-
	Combustion Turbine ABB GT24 Maintenance/ CGT Tuning (5,6)	CO	3,500	-
STACK1	Combustion Turbine ABB GT24 Annual Emissions All Modes of Operation	NO <sub>x</sub>	-	151.6
		CO	-	259.3

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		VOC	-	28.7
		PM	-	121.3
		PM <sub>10</sub>	-	121.3
		SO <sub>2</sub>	-	56.3
		NH <sub>3</sub>	-	119.2
STACK2	Combustion Turbine ABB GT24 Normal and Hold Point 2 Natural Gas Firing	NO <sub>x</sub>	34	-
		CO	254	-
		VOC	17.6	-
		PM	24	-
		PM <sub>10</sub>	24	-
		SO <sub>2</sub>	5	-
		NH <sub>3</sub>	26.8	-
	Combustion Turbine ABB GT24 Normal and Hold Point 2 Fuel Oil Firing	NO <sub>x</sub>	75	-
		CO	310	-
		VOC	18	-
		PM	111	-
		PM <sub>10</sub>	111	-
		SO <sub>2</sub>	109	-
		NH <sub>3</sub>	31.8	-
	Combustion Turbine ABB GT24 Startup, Shutdown, and Transient (5,6)	NO <sub>x</sub>	990	-
		CO	2,100	-
		VOC	132	-
	Combustion Turbine ABB GT24 Maintenance/ CGT Tuning (5,6)	CO	3,500	-
STACK2	Combustion Turbine ABB GT24 Annual Emissions All Modes of Operation	NO <sub>x</sub>	-	151.6
		CO	-	259.3

## Emission Sources - Maximum Allowable Emission Rates

		VOC	-	28.7
		PM	-	121.3
		PM <sub>10</sub>	-	121.3
		SO <sub>2</sub>	-	56.3
		NH <sub>3</sub>	-	119.2
STACK3	Combustion Turbine ABB GT24 Normal and Hold Point 2 Natural Gas Firing	NO <sub>x</sub>	34	-
		CO	254	-
		VOC	17.6	-
		PM	24	-
		PM <sub>10</sub>	24	-
		SO <sub>2</sub>	5	-
		NH <sub>3</sub>	26.8	-
	Combustion Turbine ABB GT24 Normal and Hold Point 2 Fuel Oil Firing	NO <sub>x</sub>	75	-
		CO	310	-
		VOC	18	-
		PM	111	-
		PM <sub>10</sub>	111	-
		SO <sub>2</sub>	109	-
		NH <sub>3</sub>	31.8	-
	Combustion Turbine ABB GT24 Startup, Shutdown, and Transient (5,6)	NO <sub>x</sub>	990	-
		CO	2,100	-
		VOC	132	-
	Combustion Turbine ABB GT24 Maintenance/ CGT Tuning (5,6)	CO	3,500	-
STACK3	Combustion Turbine ABB GT24 Annual Emissions All Modes of Operation	NO <sub>x</sub>	-	151.6
		CO	-	259.3

## Emission Sources - Maximum Allowable Emission Rates

		VOC	-	28.7
		PM	-	121.3
		PM <sub>10</sub>	-	121.3
		SO <sub>2</sub>	-	56.3
		NH <sub>3</sub>	-	119.2
STACK4	Combustion Turbine ABB GT24 Normal and Hold Point 2 Natural Gas Firing	NO <sub>x</sub>	34	-
		CO	254	-
		VOC	17.6	-
		PM	24	-
		PM <sub>10</sub>	24	-
		SO <sub>2</sub>	5	-
		NH <sub>3</sub>	26.8	-
	Combustion Turbine ABB GT24 Startup, Shutdown, and Transient (5,6)	NO <sub>x</sub>	990	-
		CO	2,100	-
		VOC	132	-
	Combustion Turbine ABB GT24 Maintenance/ CGT Tuning (5,6)	CO	3,500	-
	Combustion Turbine ABB GT24 Annual Emissions All Modes of Operation	NO <sub>x</sub>	-	131.4
		CO	-	197.1
		VOC	-	23.1
		PM	-	83.2
		PM <sub>10</sub>	-	83.2
		SO <sub>2</sub>	-	17.5
		NH <sub>3</sub>	-	119.2
STACK5	Combustion Turbine ABB GT24 Normal and Hold Point 2 Natural Gas Firing	NO <sub>x</sub>	34	-
		CO	254	-

## Emission Sources - Maximum Allowable Emission Rates

		VOC	17.6	-
		PM	24	-
		PM <sub>10</sub>	24	-
		SO <sub>2</sub>	5	-
		NH <sub>3</sub>	26.8	-
	Combustion Turbine ABB GT24 Startup, Shutdown, and Transient (5,6)	NO <sub>x</sub>	990	-
		CO	2,100	-
		VOC	132	-
	Combustion Turbine ABB GT24 Maintenance/ CGT Tuning (5,6)	CO	3,500	-
	Combustion Turbine ABB GT24 Annual Emissions All Modes of Operation	NO <sub>x</sub>	-	131.4
		CO	-	197.1
		VOC	-	23.1
		PM	-	83.2
		PM <sub>10</sub>	-	83.2
		SO <sub>2</sub>	-	17.5
		NH <sub>3</sub>	-	119.2
STACK6	Combustion Turbine ABB GT24 Normal and Hold Point 2 Natural Gas Firing	NO <sub>x</sub>	34	-
		CO	254	-
		VOC	17.6	-
		PM	24	-
		PM <sub>10</sub>	24	-
		SO <sub>2</sub>	5	-
		NH <sub>3</sub>	26.8	-
	Combustion Turbine ABB GT24 Startup, Shutdown, and Transient (5,6)	NO <sub>x</sub>	990	-
		CO	2,100	-

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		VOC	132	-
	Combustion Turbine ABB GT24 Maintenance/ CGT Tuning (5,6)	CO	3,500	-
	Combustion Turbine ABB GT24 Annual Emissions All Modes of Operation	NO <sub>x</sub>	-	131.4
		CO	-	197.1
		VOC	-	23.1
		PM	-	83.2
		PM <sub>10</sub>	-	83.2
		SO <sub>2</sub>	-	17.5
		NH <sub>3</sub>	-	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 Tanks	VOC	0.05	<0.01
EMTANK2	600 Gallon Diesel Tanks	VOC	0.05	<0.01
EMTANK3	600 Gallon Diesel Tanks	VOC	0.05	<0.01
EMTANK4	600 Gallon Diesel Tanks	VOC	0.05	<0.01
EMTANK5	600 Gallon Diesel Tanks	VOC	0.05	<0.01
EMTANK6	600 Gallon Diesel Tanks	VOC	0.05	<0.01
FUG-IG1	NH <sub>3</sub> Grid Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-IG2	NH <sub>3</sub> Grid Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-IG3	NH <sub>3</sub> Grid Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-IG4	NH <sub>3</sub> Grid Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-IG5	NH <sub>3</sub> Grid Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-IG6	NH <sub>3</sub> Grid Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-V1	NH <sub>3</sub> Vaporizer Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-V2	NH <sub>3</sub> Vaporizer Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62

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FUG-V3	NH <sub>3</sub> Vaporizer Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-V4	NH <sub>3</sub> Vaporizer Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-V5	NH <sub>3</sub> Vaporizer Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
FUG-V6	NH <sub>3</sub> Vaporizer Fugitive Emissions (7)	NH <sub>3</sub>	0.14	0.62
LOR-1	Lube Oil Reservoir Vapor Extractor Vent (8)	VOC	<0.01	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 Emission (7)	VOC	0.44	1.91
		NH <sub>4</sub> OH	0.22	0.98
MSSFUG	Maintenance Activities Site Fugitive Emissions (7)	VOC	21	1.1
		PM	4.5	0.1
		PM <sub>10</sub>	4.5	0.1
		PM <sub>2.5</sub>	4.5	0.1
		NH <sub>3</sub>	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<sub>x</sub> - total oxides of nitrogen

Emission Sources - Maximum Allowable Emission Rates

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 <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
SO <sub>2</sub>	- sulfur dioxide
NH <sub>3</sub>	- ammonia
NH <sub>4</sub> OH	- ammonium hydroxide

- (4) Compliance with annual emission limits (tons per year) 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 transient operation and CT maintenance, startup, and shutdown (MSS).
- (6) For CT MSS and transient operations, 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: July 15, 2014