Sources - Maximum Allowable Emission Rates

Permit Number 48106 and PSDTX1012M2

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 (16)	TPY (4)
SH1	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (≤ 2,750 hrs/yr)	NO_x	8.6	11.9
		NO_x (MSS)	203.7	-
		CO	44.2	60.8
		CO (MSS)	923.0	-
		VOC	4.1	5.6
		VOC (MSS)	17.6	-
		PM	4.0	5.5
		PM_{10}	4.0	5.5
		$PM_{2.5}$	4.0	5.5
		SO_2	0.3	0.5
		NH_3	6.4	6.1
SH1	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (> 2,750 hr/yr)	NO_x	8.6	37.8
		NO_x (MSS)	203.7	-
		CO	9.5	41.4
		CO (MSS)	923.0	-
		VOC	1.2	5.3
		VOC (MSS)	17.6	-
		PM	4.0	17.5
		PM_{10}	4.0	17.5
		$PM_{2.5}$	4.0	17.5
		SO_2	0.3	1.5
		NH_3	6.4	19.6

Emission Sources - Maximum Allowable Emission Rates

SH2	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (≤ 2,750 hrs/yr)	NO_x	8.6	11.9
		NO_x (MSS)	203.7	-
		CO	44.2	60.8
		CO (MSS)	923.0	-
		VOC	4.1	5.6
		VOC (MSS)	17.6	-
		PM	4.0	5.5
		PM_{10}	4.0	5.5
		$PM_{2.5}$	4.0	5.5
		SO_2	0.3	0.5
		NH_3	6.4	6.1
SH2	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (> 2,750 hr/yr)	NO_x	8.6	37.8
		NO_x (MSS)	203.7	-
		CO	9.5	41.4
		CO (MSS)	923.0	-
		VOC	1.2	5.3
		VOC (MSS)	17.6	-
		PM	4.0	17.5
		PM_{10}	4.0	17.5
		$PM_{2.5}$	4.0	17.5
		SO_2	0.3	1.5
		NH_3	6.4	19.6
SH3	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (≤ 2,750 hrs/yr)	NO_x	8.6	11.9
		NO_x (MSS)	203.7	-
		CO	44.2	60.8
		CO (MSS)	923.0	-
		VOC	4.1	5.6
		VOC (MSS)	17.6	-

Emission Sources - Maximum Allowable Emission Rates

		PM	4.0	5.5
		PM_{10}	4.0	5.5
		$PM_{2.5}$	4.0	5.5
		SO_2	0.3	0.5
		NH_3	6.4	6.1
SH3	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (> 2,750 hr/yr)	NO_x	8.6	37.8
		NO_x (MSS)	203.7	-
		CO	9.5	41.4
		CO (MSS)	923.0	-
		VOC	1.2	5.3
		VOC (MSS)	17.6	-
		PM	4.0	17.5
		PM_{10}	4.0	17.5
		$PM_{2.5}$	4.0	17.5
		SO_2	0.3	1.5
		NH_3	6.4	19.6
SH4	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (≤ 2,750 hrs/yr)	NO_x	8.6	11.9
		NO_x (MSS)	203.7	-
		CO	44.2	60.8
		CO (MSS)	923.0	-
		VOC	4.1	5.6
		VOC (MSS)	17.6	-
		PM	4.0	5.5
		PM_{10}	4.0	5.5
		$PM_{2.5}$	4.0	5.5
		SO_2	0.3	0.5
		NH_3	6.4	6.1

Emission Sources - Maximum Allowable Emission Rates

SH4	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (> 2,750 hr/yr)	NO_x	8.6	37.8
		NO_x (MSS)	203.7	-
		CO	9.5	41.4
		CO (MSS)	923.0	-
		VOC	1.2	5.3
		VOC (MSS)	17.6	-
		PM	4.0	17.5
		PM_{10}	4.0	17.5
		$PM_{2.5}$	4.0	17.5
		SO_2	0.3	1.5
		NH_3	6.4	19.6
SH5	GE 7FA + 681 MMBtu/hr DB (~ 164 MW) (5)	NO_x	46.7	191.4
		NO_x (MSS)	247.0	-
		CO	98.4	403.3
		CO (MSS)	2,200.0	-
		VOC	16.4	67.4
		VOC (MSS)	150.0	-
		PM	32.8	134.5
		PM_{10}	32.8	134.5
		$PM_{2.5}$	32.8	134.5
		SO_2	1.6	7.3
		NH_3	34.6	99.0
		NH_3 (MSS)	65.0	
SH6	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (≤ 2,750 hrs/yr)	NO_x	8.6	11.9
		NO_x (MSS)	203.7	-
		CO	44.2	60.8

Emission Sources - Maximum Allowable Emission Rates

		CO (MSS)	923.0	-
		VOC	4.1	5.6
		VOC (MSS)	17.6	-
		PM	4.0	5.5
		PM_{10}	4.0	5.5
		$PM_{2.5}$	4.0	5.5
		SO_2	0.3	0.5
		NH_3	6.4	6.1
SH6	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (> 2,750 hr/yr)	NO_x	8.6	37.8
		NO_x (MSS)	203.7	-
		CO	9.5	41.4
		CO (MSS)	923.0	-
		VOC	1.2	5.3
		VOC (MSS)	17.6	-
		PM	4.0	17.5
		PM_{10}	4.0	17.5
		$PM_{2.5}$	4.0	17.5
		SO_2	0.3	1.5
		NH_3	6.4	19.6
SH7	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (≤ 2,750 hrs/yr)	NO_x	8.6	11.9
		NO_x (MSS)	203.7	-
		CO	44.2	60.8
		CO (MSS)	923.0	-
		VOC	4.1	5.6
		VOC (MSS)	17.6	-

Emission Sources - Maximum Allowable Emission Rates

		PM	4.0	5.5
		PM_{10}	4.0	5.5
		$PM_{2.5}$	4.0	5.5
		SO_2	0.3	0.5
		NH_3	6.4	6.1
SH7	GE LM 6000 – Simple Cycle (5) (~ 50 MW) (> 2,750 hr/yr)	NO_x	8.6	37.8
		NO_x (MSS)	203.7	-
		CO	9.5	41.4
		CO (MSS)	923.0	-
		VOC	1.2	5.3
		VOC (MSS)	17.6	-
		PM	4.0	17.5
		PM_{10}	4.0	17.5
		$PM_{2.5}$	4.0	17.5
		SO_2	0.3	1.5
		NH_3	6.4	19.6
HTR-01	Inlet Air Heaters	NO_x	0.49	0.25
		CO	0.41	0.21
		VOC	0.03	0.01
		PM	0.04	0.02
		PM_{10}	0.04	0.02
		SO_2	<0.01	<0.01
HTR-02	Inlet Air Heaters	NO_x	0.49	0.25
		CO	0.41	0.21
		VOC	0.03	0.01

Emission Sources - Maximum Allowable Emission Rates

		PM	0.04	0.02
		PM_{10}	0.04	0.02
		SO_2	<0.01	<0.01
HTR-03	Inlet Air Heaters	NO_x	0.49	0.25
		CO	0.41	0.21
		VOC	0.03	0.01
		PM	0.04	0.02
		PM_{10}	0.04	0.02
		SO_2	<0.01	<0.01
SC CTWR-1	Simple Cycle Cooling Tower 1	VOC	2.20	0.05
		PM	0.21	0.42
		PM_{10}	0.14	0.29
		$PM_{2.5}$	<0.01	<0.01
		H_2SO_4	<0.01	<0.01
		HOCl	0.02	<0.01
SC CTWR-2	Simple Cycle Cooling Tower 2	VOC	2.20	0.05
		PM	0.21	0.42
		PM_{10}	0.14	0.29
		$PM_{2.5}$	<0.01	<0.01
		H_2SO_4	<0.01	<0.01
		HOCl	0.02	<0.01
SC CTWR-3	Simple Cycle Cooling Tower 3	VOC	2.20	0.05
		PM	0.21	0.42
		PM_{10}	0.14	0.29
		$PM_{2.5}$	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

		H_2SO_4	<0.01	<0.01
		HOCl	0.02	<0.01
SC CTWR-4	Simple Cycle Cooling Tower 4	VOC	1.85	0.04
		PM	0.03	0.06
		PM_{10}	0.02	0.04
		$PM_{2.5}$	<0.01	<0.01
		H_2SO_4	<0.01	<0.01
		HOCl	<0.01	<0.01
CLTWR-1	Combined Cycle Cooling Tower 1	VOC	0.88	1.54
		PM	2.74	12.0
		PM_{10}	0.84	3.69
		$PM_{2.5}$	0.01	0.02
		H_2SO_4	<0.01	<0.01
		HOCl	0.53	0.15
SC PB FUG	Simple Cycle Power Block Fugitives (7)	VOC	0.01	0.06
		H_2S	<0.01	<0.01
SC MS FUG	Simple Cycle Natural Gas Meter Skid (7)	VOC	0.05	0.21
		H_2S	<0.01	<0.01
CC PB FUG	Combined Cycle Power Block Fugitives (7)	VOC	0.02	0.07
		H_2S	<0.01	<0.01
CC MS FUG	Combined Cycle Natural Gas Meter Skid (7)	VOC	0.05	0.22
		H_2S	<0.01	<0.01
SC AMFUG	Simple Cycle Ammonia Fugitives (7)	NH_3	0.25	1.11
CC AMFUG	Combined Cycle Ammonia Fugitives (7)	NH_3	0.11	0.47
TANK 5-4	Oil/Water Separator	VOC	0.05	0.01

Emission Sources - Maximum Allowable Emission Rates

EDG	Emergency Diesel Generator	NO_x	7.3	3.2
		CO	1.4	0.6
		VOC	0.37	0.14
		PM	0.2	0.1
		PM_{10}	0.2	0.1
		SO_2	<0.01	<0.01
SC-VNTS	Simple Cycle Oil Vents (6)	PM_{10}	0.14	0.62
		VOC	0.28	1.24
CC-VNTS	Combined Cycle Oil Vents (6)	PM_{10}	0.02	0.09
		$PM_{2.5}$	0.02	0.09
		VOC	0.04	0.18
WTTNKS	Water Treatment Chemical Storage Tanks (6)	VOC	0.41	1.34
		H_2SO_4	<0.01	<0.01
		NH_3	0.10	0.46
OILRES	Circulating Water Pump/Gas (6) Compressor Lube Oil Reservoir	VOC	<0.01	<0.01
WASHTNKS	Underground Wash Water Tanks (6)	VOC	0.04	0.01
MSSFUG	Non-ILE Maintenance Activities Attachment B (7)	VOC	90.04	3.00
		PM_{10}	1.12	0.18
		$PM_{2.5}$	0.17	0.03
		H_2S	0.02	<0.01
		Exempt Solvent	0.01	0.04
ILEMSS	ILE Maintenance Activities Attachment A (7)	NO_x	0.32	0.70
		CO	0.18	0.40
		VOC	0.13	0.14
		PM_{10}	0.03	0.05

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.03	0.05
		NH_3	0.20	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) 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
HOCl - hypochlorous acid
H_2S - hydrogen sulfide
H_2SO_4 - sulfuric acid
MSS - maintenance, startup, and shutdown

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) For each pollutant whose emissions are measured during planned MSS activities using a CEMS, only the MSS lb/hr limits apply during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.
(6) See Attachment C in the Special Conditions for the emission points included in each grouping.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: February 15, 2019