Emission Sources - Maximum Allowable Emission Rates

Permit Number 114911 and PSDTX1380

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)
Option 1 - Siemens				
STK-101	Unit 1 (5) CTG+HRSG/DB	NO_x	18.5	-
		NO_x (MSS)	197.4	-
		CO	11.7	-
		CO (MSS)	2,994.6	-
		VOC	6.5	-
		VOC (MSS)	343.4	-
		SO_2	7.1	-
		PM	15.5	-
		PM_{10}	15.5	-
		$PM_{2.5}$	15.5	-
		H_2SO_4	0.8	-
		NH_3	24.0	-
		NH_3 (MSS)	34.0	-
STK-102	Unit 2 (5) CTG +HRSG/DB	NO_x	18.5	-
		NO_x (MSS)	197.4	-
		CO	11.7	-
		CO (MSS)	2,994.6	-
		VOC	6.5	-
		VOC (MSS)	343.4	-
		SO_2	7.1	-
		PM	15.5	-

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	15.5	-
		$PM_{2.5}$	15.5	-
		H_2SO_4	0.8	-
		NH_3	24.0	-
		NH_3 (MSS)	34.0	-
STK-101 & STK-102	Unit 1 and 2 Annual Emissions (6) Normal/MSS Operations	NO_x	-	207.4
		CO	-	831.6
		VOC	-	140.7
		SO_2	-	11.7
		PM	-	99.4
		PM_{10}	-	99.4
		$PM_{2.5}$	-	99.4
		H_2SO_4	-	1.4
		NH_3	-	199.7
Option 2 - GE				
STK-101	Unit 1 (5) CTG +HRSG/DB	NO_x	18.7	-
		NO_x (MSS)	197.4	-
		CO	11.4	-
		CO (MSS)	2,994.6	-
		VOC	6.5	-
		VOC (MSS)	343.4	-
		SO_2	7.2	-
		PM	16.0	-
		PM_{10}	16.0	-
		$PM_{2.5}$	16.0	-
		H_2SO_4	0.8	-
		NH_3	24.2	-
		NH_3 (MSS)	34.0	-
STK-102	Unit 2 (5)	NO_x	18.7	-

Emission Sources - Maximum Allowable Emission Rates

		NO_x (MSS)	197.4	-
		CO	11.4	-
		CO (MSS)	2,994.6	-
		VOC	6.5	-
		VOC (MSS)	343.4	-
		SO_2	7.2	-
		PM	16.0	-
		PM_{10}	16.0	-
		$PM_{2.5}$	16.0	-
		H_2SO_4	0.8	-
		NH_3	24.2	-
		NH_3 (MSS)	34.0	-
STK-101 & STK-102	Unit 1 and 2 Annual Emissions (6) Normal/MSS Operations	NO_x	-	192.8
		CO	-	822.5
		VOC	-	137.3
		SO_2	-	11.0
		PM	-	109.5
		PM_{10}	-	109.5
		$PM_{2.5}$	-	109.5
		H_2SO_4	-	1.3
		NH_3	-	185.0
LOVSTK-101	Unit 101 CTG Lube Oil Vent	PM	<0.01	0.01
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	0.01
LOVSTK-102	Unit 102 CTG Lube Oil Vent	PM	<0.01	0.01
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	0.01
LOVSTK-103	ST Lube Oil Vent	PM	0.01	0.05
		PM_{10}	0.01	0.05

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.01	0.05
ABLSTK-100	Auxiliary Boiler (5,6)	NO_x	3.4	1.3
		NO_x (MSS)	9.5	
		CO	3.5	2.5
		CO (MSS)	35.1	
		VOC	0.5	0.1
		SO_2	0.1	0.01
		PM	0.7	0.18
		PM_{10}	0.7	0.18
		$PM_{2.5}$	0.7	0.18
EGENSTK-100	Emergency Generator	NO_x	20.3	1.0
		CO	1.0	0.05
		VOC	2.9	0.1
		SO_2	2.7	0.1
		PM	0.1	0.01
		PM_{10}	0.1	0.01
		$PM_{2.5}$	0.1	0.01
FWPSTK-100	Firewater Pump	NO_x	10.7	0.5
		CO	3.6	0.2
		VOC	10.7	0.5
		SO_2	1.3	0.1
		PM	0.5	0.03
		PM_{10}	0.5	0.03
		$PM_{2.5}$	0.5	0.03
CTW-100	Cooling Tower 1	PM_{10}	0.8	2.3
		$PM_{2.5}$	<0.01	0.01
CTW-200	Cooling Tower 2	PM_{10}	0.05	0.2
		$PM_{2.5}$	<0.01	<0.01
OWS-100	Oil Water Separator	VOC	1.0	0.2

Emission Sources - Maximum Allowable Emission Rates

DEG-100	Degreaser	VOC	0.3	1.1
TKSTK-101	Diesel Tank (Emergency Generator)	VOC	0.03	<0.01
TKSTK-102	Diesel Tank (Firewater Pump)	VOC	0.01	<0.01
TKSTK-103	Gasoline Tank	VOC	2.9	0.01
NGFUG-100	Fugitives Natural Gas Service (7)	VOC	0.1	0.4
NH_3FUG-100	Fugitives Ammonia Service (7)	NH_3	0.01	0.04
DSFUG-100	Fugitives Diesel Service (7)	VOC	0.05	0.2
MSSFUG	Planned Maintenance Activities (7)	VOC	1.31	<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_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
H_sSO_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) Planned MSS lb/hr emissions for all pollutants are authorized even if not specifically identified as MSS. During any clock hour that includes one or more minutes of planned MSS, that pollutant's maximum hourly emission rate shall apply during that clock hour.
(6) Annual emission rates include MSS emissions.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: October 2, 2015