Emission Sources - Maximum Allowable Emission Rates

Permit Number 152787

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)
ENG1	Caterpillar G3512LE	NO_x	4.43	19.41
		CO	2.99	13.10
		SO_2	<0.01	0.02
		PM	0.08	0.37
		PM_{10}	0.08	0.37
		$PM_{2.5}$	0.08	0.37
		VOC	0.70	3.07
ENG5	Caterpillar G3516LE	NO_x	4.78	20.95
		CO	3.95	17.29
		SO_2	0.01	0.02
		PM	0.09	0.41
		PM_{10}	0.09	0.41
		$PM_{2.5}$	0.09	0.41
		VOC	0.74	3.25
ENG6	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.74	7.63

Emission Sources - Maximum Allowable Emission Rates

ENG7	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.57	6.86
ENG8	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.57	6.86
ENG9	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.57	6.86
ENG10	Caterpillar CG137-12	NO_x	0.93	4.06
		CO	2.65	11.59

Emission Sources - Maximum Allowable Emission Rates

		SO_2	<0.01	0.01
		PM	0.05	0.22
		PM_{10}	0.05	0.22
		$PM_{2.5}$	0.05	0.22
		VOC	0.93	4.06
ENG11	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.74	7.63
ENG12	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59
		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.74	7.63
ENG13	Caterpillar G3606LE	NO_x	2.15	9.43
		CO	3.23	14.14
		SO_2	0.01	0.03
		PM	0.13	0.59

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.13	0.59
		$PM_{2.5}$	0.13	0.59
		VOC	1.74	7.63
ENG15	Caterpillar CG137-12	NO_x	0.93	4.06
		CO	2.65	11.59
		SO_2	<0.01	0.01
		PM	0.05	0.22
		PM_{10}	0.05	0.22
		$PM_{2.5}$	0.05	0.22
		VOC	0.93	4.06
TURB1	5 Combined Capstone C200NG Microturbines	NO_x	0.46	1.99
		CO	1.20	5.27
		SO_2	<0.01	0.02
		PM	0.08	0.33
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.08	0.33
		VOC	0.11	0.48
TURB2	5 Combined Capstone C200NG Microturbines	NO_x	0.46	1.99
		CO	1.20	5.27
		SO_2	<0.01	0.02
		PM	0.08	0.33
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.08	0.33

Emission Sources - Maximum Allowable Emission Rates

		VOC	0.11	0.48
HT1	Amine Reboiler	NO_x	1.47	6.44
		CO	1.24	5.41
		SO_2	0.01	0.04
		PM	0.11	0.49
		PM_{10}	0.11	0.49
		$PM_{2.5}$	0.11	0.49
		VOC	0.08	0.35
HT2A	Glycol Reboiler 1 Gas Combustion	NO_x	0.07	0.32
		CO	0.06	0.27
		SO_2	<0.01	<0.01
		PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
		VOC	<0.01	0.02
HT2A	Glycol Reboiler 1 Uncombusted Still Vent	VOC	0.38	1.67
		H_2S	<0.01	<0.01
HT2B	Glycol Reboiler 2 Gas Combustion	NO_x	0.10	0.43
		CO	0.08	0.36
		SO_2	<0.01	<0.01
		PM	0.01	0.03
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.03
		VOC	0.01	0.02
HT2B	Glycol Reboiler 2 Uncombusted Still	VOC	0.38	1.67

Emission Sources - Maximum Allowable Emission Rates

		H2S	<0.01	<0.01
HT3	Condensate Stabilizer Heater 1	NO_x	0.25	1.07
		CO	0.21	0.90
		SO_2	<0.01	0.01
		PM	0.02	0.08
		PM_{10}	0.02	0.08
		$PM_{2.5}$	0.02	0.08
		VOC	0.01	0.06
HT4	Condensate Stabilizer Heater 2	NO_x	0.54	2.36
		CO	0.45	1.98
		SO_2	<0.01	0.01
		PM	0.04	0.18
		PM_{10}	0.04	0.18
		$PM_{2.5}$	0.04	0.18
		VOC	0.03	0.13
HT6	Glycol Reboiler 3 Gas Combustion	NO_x	0.15	0.64
		CO	0.12	0.54
		SO_2	<0.01	<0.01
		PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	0.01	0.05
		VOC	0.01	0.04
HT6	Glycol Reboiler 3 Uncombusted Still Vent	VOC	0.57	2.51
		H_2S	<0.01	<0.01
HT7	Condensate Stabilizer Heater 3	NO_x	0.36	1.59

Emission Sources - Maximum Allowable Emission Rates

		CO	1.24	5.41
		SO_2	0.01	0.04
		PM	0.11	0.49
		PM_{10}	0.11	0.49
		$PM_{2.5}$	0.11	0.49
		VOC	0.08	0.35
HT8	Condensate Stabilizer Heater 4	NO_x	0.68	2.98
		CO	2.31	10.10
		SO_2	0.02	0.07
		PM	0.21	0.91
		PM_{10}	0.21	0.91
		$PM_{2.5}$	0.21	0.91
		VOC	0.15	0.66
FL1	Flare 1 Maximum Normal Emissions	NO_x	0.65	2.87
		CO	5.62	24.59
		SO_2	55.22	241.86
		VOC	2.34	10.26
		H_2S	0.59	2.57
TB1	16 Fixed Roof Condensate Tanks Fuel Gas Blanket and mVRU	VOC	8.65	3.33
		H_2S	<0.01	<0.01
IFRTK1TK	IFR Tank 1	VOC	0.53	-
		H_2S	<0.01	-
IFRTK2TK	IFR Tank 2	VOC	0.53	-
		H_2S	<0.01	-
IFRTK3TK	IFR Tank 3	VOC	0.53	-

Emission Sources - Maximum Allowable Emission Rates

		H_2S	<0.01	-
GRP-IFR/Annual Group-Combined IFRTK1TK-IFRTK3TK Tanks		VOC	-	6.09
		H_2S	-	<0.01
TK1	Produced/Slop Water Tank1 Fuel Gas Blanket mVRU	VOC	0.09	0.04
		H_2S	<0.01	<0.01
TK2	Produced/Slop Water Tank2 Fuel Gas Blanket mVRU	VOC	0.09	0.04
		H2S	<0.01	<0.01
TK3	Lube Oil Tank	VOC	0.01	0.01
TK4	AntiFreeze Tank	VOC	<0.01	<0.01
TK5	Amine Tank	VOC	<0.01	<0.01
TK6	Glycol Tank	VOC	<0.01	<0.01
TK7	Methanol Tank	VOC	0.20	0.20
TK8	Diesel Tank	VOC	0.01	0.01
TK9	Used Oil Tank	VOC	0.01	0.01
LD1	Produced Water Truck Loading	VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
LD1	Produced Water Truck Loading Fugitive Emissions	VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
LD2	Slop Oil & Water Truck Loading	VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
LD2	Slop Oil & Water Truck Loading Fugitive Emissions	VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
LD3	Condensate Truck Loading Lean Oil Unit Controlled Emissions	VOC	18.24	27.99
		H_2S	<0.01	<0.01
FUG1 (5)	Facilities Fugitive Emissions	VOC	6.25	27.37
		H_2S	<0.01	<0.01
Scheduled Maintenance Startup and Shutdown (MSS)				
FL2	Waste Streams Emission Cap	NO_x	104.9	14.55
		CO	209.41	29.06

Emission Sources - Maximum Allowable Emission Rates

		SO_2	5.76	0.86
		VOC	370.17	54.45
		H_2S	0.07	0.04
MSSVENT1	Inlet Gas Compressors MSS Vents to Atmosphere	VOC	22.80	1.71
		H_2S	0.01	<0.01
MSSVENT2	Off-Gas Compressor MSS Vents	VOC	78.34	15.04
		H_2S	0.01	<0.01
MSSVENT3	Non-Compressor Plant Equipment MSS Vents to Atmosphere	VOC	620.18	3.10
		H_2S	0.08	<0.01
MSSVENT4	Pig Receivers MSS Vents to Atmosphere	VOC	13.83	7.19
		H_2S	<0.01	<0.01
MSSVENT5	Internal Floating Roof Tanks MSS Vents to Atmosphere	VOC	52.32	1.51
		H_2S	0.01	<0.01
MSSVENT6	Y-Grade Hose Disconnections	VOC	0.36	0.13

(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
H_2S - hydrogen sulfide
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: September 23, 2019