Emission Sources - Maximum Allowable Emission Rates

Permit Number 5414

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)
FE-1	Fire Pump Engine No.1 (7), 334-hp	NOx	10.35	0.45
		CO	2.23	0.10
		VOC	0.82	0.04
		SO2	0.68	0.03
		PM10	0.73	0.03
FE-2	Fire Pump Engine No. 2 (7), 334-hp	NOx	10.35	0.45
		CO	2.23	0.10
		VOC	0.82	0.04
		SO2	0.68	0.03
		PM10	0.73	0.03
FE-3	Fire Pump Engine No.3 (7), 334-hp	NOx	10.35	0.45
		CO	2.23	0.10
		VOC	0.82	0.04
		SO2	0.68	0.03
		PM10	0.73	0.03
FE-4	Fire Pump Engine No.4 (7), 468-hp	NOx	14.51	0.63
		CO	3.13	0.14
		VOC	1.16	0.05
		SO2	0.96	0.04
		PM10	1.03	0.05

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FL-1	Flare Stack (Normal operation and pilot fuel)	NOx	30.45	10.04
		CO	60.80	20.05
		VOC (8)	200.00	50.74
		Ethylene	100.00	15.00
		Propylene	100.00	15.00
		Butenes	126.50	9.49
		1,3 Butadiene	110.23	8.27
		SO2	0.01	0.01
H-02	Smalling Heater Stack	NOx	3.90	17.08
		CO	3.28	14.35
		VOC	0.21	0.94
		SO2	0.02	0.01
		PM10	0.30	1.30
H-07	Propane Regen Heater Stack	NOx	0.50	2.19
		CO	0.42	1.84
		VOC	0.03	0.12
		SO2	0.04	0.17
		PM10	0.01	0.01
H-08	Boiler Stack	NOx	1.47	6.44
		CO	1.23	5.41
		VOC	0.08	0.35
		SO2	0.11	0.49
		PM10	0.01	0.04
H-09	Butane Regen Heater Stack	NOx	0.35	1.53
		CO	0.29	1.29
		VOC	0.02	0.08
		SO2	0.03	0.12
		PM10	0.01	0.01
LR-1MP	Barge Slip Tubes and Rotary Gauges	VOC	396.76	30.79
LR-1T	Truck Loading and Unloading Connections	VOC	0.65	0.29

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FUG-1	Pmtd.Comp.Process Fug (5)	VOC	54.42	238.34
GAS-FUG	Blending Fugitives	VOC	0.71	3.13
The following emission rates apply as long as H-03 and H-04 do not each exceed 4,730 hr/yr operation				
H-03	A Glycol Heater Stack	NOx	6.19	14.64
		CO	2.28	5.38
		VOC	0.18	0.41
		SO2	0.04	0.09
		PM10	0.89	2.11
H-04	B Glycol Heater Stack	NOx	6.19	14.64
		CO	2.28	5.38
		VOC	0.18	0.41
		SO2	0.04	0.09
		PM10	0.89	2.11
The following emission rates apply once H-03 and/or H-04 exceed 4,730 hr/yr operation				
H-03	A Glycol Heater Stack (6)	NOx	1.63	4.98
		CO	5.46	16.73
		VOC	0.36	1.10
		SO2	0.04	0.12
		PM10	0.49	1.51
H-04	B Glycol Heater Stack (6)	NOx	1.63	4.98
		CO	5.46	16.73
		VOC	0.36	1.10
		SO2	0.04	0.12
		PM10	0.49	1.51
Maintenance, Start-up and Shutdown				
MSSEQIP	Equipment MSS to atmosphere	VOC	1.79	0.11
MSSTANK	Tank MSS to atmosphere	VOC	0.01	0.01
FL-1	MSS	NOx	24.33	0.40
		CO	48.58	0.80
		VOC	170.94	2.80

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		SO2	0.03	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
(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.
(6)Emission rates for H-03 and H-04 are based on and the facilities are limited by the following maximum operating schedule: 6,130 hours per year.
(7) 87 hours per year of operation.
(8) VOC emissions include emission rates for highly reactive volatile organic carbon (HRVOC) species of ethylene, propylene, butenes and 1,3 butadiene.

Date: March 25, 2014