Emission Sources - Maximum Allowable Emission Rates

Permit Number 158010

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)
Configuration 1 (6)				
FUG	Fugitives (5)	VOC	1.76	7.69
		H_2S	< 0.01	< 0.01
FRT-1	68K-bbl IFR Tank (Crude)	VOC	7.02	(7)
		H_2S	< 0.01	(7)
FRT-2	68K-bbl IFR Tank (Crude)	VOC	7.02	(7)
		H_2S	< 0.01	(7)
FRT-3	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
FRT-4	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
FRT-5	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
FRT-6	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
FRT-7	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
FRT-8	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
FRT-9	189K-bbl IFR Tank (Crude)	VOC	11.93	(7)
		H_2S	< 0.01	(7)
TKCAP	Annual Tank Cap	VOC	(7)	36.90
		H_2S	(7)	< 0.01

Emission Sources - Maximum Allowable Emission Rates

SL-1	Uncaptured East Dock (Crude) Ship Loading	VOC	4.11	(8)
		H_2S	< 0.01	(8)
SL-2	Uncaptured West Dock (Crude) Ship Loading	VOC	4.11	(8)
		H_2S	< 0.01	(8)
SLCAP	Annual Loading Cap	VOC	(8)	8.26
		H_2S	(8)	< 0.01
VCU-1, VCU-2	Marine Vapor Combustor 1 and 2 Cap	VOC	19.28	18.84
		NO_X	3.96	1.96
		CO	2.97	1.47
		SO_2	0.18	0.12
		H_2S	< 0.01	< 0.01
		PM	0.83	0.08
		PM_{10}	0.83	0.08
		$PM_{2.5}$	0.83	0.08
VCU-3, VCU-4	Marine Vapor Combustor 3 and 4 Cap	VOC	19.28	18.84
		NO_X	3.96	1.96
		CO	2.97	1.47
		SO_2	0.18	0.12
		H_2S	< 0.01	< 0.01
		PM	0.83	0.08
		PM_{10}	0.83	0.08
		$PM_{2.5}$	0.83	0.08
MSS-TKLAND	MSS Tank Landings	VOC	31.11	3.40
		H_2S	0.01	< 0.01
FL-1	Temporary Maintenance Flare	VOC	28.67	0.22
		NO_X	5.02	0.06
		CO	9.77	0.08
		SO_2	0.15	< 0.01
		H_2S	< 0.01	< 0.01

Emission Sources - Maximum Allowable Emission Rates

Configuration 2 (6)				
FUG	Fugitives (5)	VOC	1.76	7.69
		H_2S	< 0.01	< 0.01
FRT-1	68K-bbl IFR Tank (Crude)	VOC	7.02	(9)
		H_2S	< 0.01	(9)
FRT-2	68K-bbl IFR Tank (Crude)	VOC	7.02	(9)
		H_2S	< 0.01	(9)
FRT-3	189K-bbl IFR Tank (C5 Blend)	VOC	2.14	(9)
FRT-4	189K-bbl IFR Tank (C5 Blend)	VOC	2.14	(9)
FRT-5	189K-bbl IFR Tank (C5 Blend)	VOC	2.14	(9)
FRT-6	189K-bbl IFR Tank (C5 Blend)	VOC	2.14	(9)
FRT-7	189K-bbl IFR Tank (C5 Blend)	VOC	2.14	(9)
FRT-8	189K-bbl IFR Tank (C5 Blend)	VOC	2.14	(9)
FRT-9	68K-bbl IFR Tank (Crude)	VOC	7.02	(9)
		H_2S	< 0.01	(9)
TKCAP	Annual Tank Cap	VOC	(9)	29.87
		H_2S	(9)	< 0.01
SL-1	Uncaptured East Dock (C5 Blend) Ship Loading	VOC	5.84	(10)
	Uncaptured East Dock (Crude) Ship Loading	VOC	4.11	(10)
		H_2S	< 0.01	(10)
SL-2	Uncaptured West Dock (C5 Blend) Ship Loading	VOC	5.84	(10)
	Uncaptured West Dock (Crude) Ship Loading	VOC	4.11	(10)
		H_2S	< 0.01	(10)
SLCAP	Annual Loading Cap	VOC	(10)	5.93

Emission Sources - Maximum Allowable Emission Rates

		H_2S	(10)	< 0.01
VCU-1, VCU-2	Marine Vapor Combustor 1 and 2 Cap	VOC	52.49	22.35
		NO_X	7.11	2.31
		CO	5.33	1.73
		SO_2	0.18	0.05
		H_2S	< 0.01	< 0.01
		PM	0.83	0.08
		PM_{10}	0.83	0.08
		$PM_{2.5}$	0.83	0.08
VCU-3, VCU-4	Marine Vapor Combustor 3 and 4 Cap	VOC	52.49	22.35
		NO_X	7.11	2.31
		CO	5.33	1.73
		SO_2	0.18	0.05
		H_2S	< 0.01	< 0.01
		PM	0.83	0.08
		PM_{10}	0.83	0.08
		$PM_{2.5}$	0.83	0.08
MSS-TKLAND	MSS Tank Landings	VOC	11.20	2.90
		H_2S	< 0.01	< 0.01
FL-1	Temporary Maintenance Flare	VOC	40.76	0.27
		NO_X	7.18	0.07
		CO	14.09	0.10
		SO_2	0.15	< 0.01
		H_2S	< 0.01	< 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

Emission Sources - Maximum Allowable Emission Rates

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.
(6) Only facilities for one configuration will be constructed and operated.
(7) Emission cap includes normal operations from storage tanks EPNs FRT-1, FRT-2, FRT-3, FRT-4, FRT-5, FRT-6, FRT-7, FRT-8, and FRT-9 for Configuration 1.
(8) Emission cap includes uncaptured loading emissions from EPN SL-1 and SL-2 for Configuration 1.
(9) Emission cap includes normal operations from storage tanks EPNs FRT-1, FRT-2, FRT-3, FRT-4, FRT-5, FRT-6, FRT-7, FRT-8, and FRT-9 for Configuration 2.
(10) Emission cap includes uncaptured loading emissions from EPN SL-1 and SL-2 for Configuration 2.

Date: February 12, 2020