Emission Sources - Maximum Allowable Emission Rates

Permit Number 20057

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)
DMTA OPERATION AND HMP OPERATION				
K-1798	Flare Stack	PM	< 0.01	0.01
		PM_{10}	< 0.01	0.01
		$PM_{2.5}$	< 0.01	0.01
		VOC	< 0.01	< 0.01
		NO_X	0.03	0.15
		SO_2	< 0.01	< 0.01
		CO	0.07	0.30
WB-1769	J-1765 WW Tank Scrubber	VOC	0.49	0.62
		H_2S	<0.01	<0.01
K-502-C	Tank WB-502-C Carbon Canister	VOC	< 0.01	< 0.01
WK-510A-A	Tank WB-510-A Carbon Canister	VOC	< 0.01	< 0.01
PK-1901	Cooling Tower	VOC (5)	0.59	2.58
		PM	0.09	0.41
		PM_{10}	0.07	0.30
		$PM_{2.5}$	< 0.01	< 0.01
LOADTT	Tank to Truck Loading	VOC	0.01	< 0.01
D-1868	Tanks J-1868 and J-1869 Scrubber	HCl	0.04	< 0.01
K-1970	DMTA Generator	VOC	0.41	0.01
		PM	0.44	0.01

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		PM_{10}	0.44	0.01
		$PM_{2.5}$	0.44	0.01
		CO	3.49	0.05
		SO_2	0.26	0.01
		NO_X	15.22	0.20
K-1790	Vent Stack (99.9% DRE)	PM	0.03	0.14
		PM_{10}	0.03	0.14
		$PM_{2.5}$	0.03	0.14
		VOC	0.19	0.72
		NO_X	2.37	10.40
		SO_2	0.23	1.02
		CO	0.16	0.71
		Cl_2	0.27	1.20
		HCl	0.12	0.50
		H_2S	0.01	0.06
K-1790	Vent Stack (99.5% DRE) (6)	PM	0.03	0.14
		PM_{10}	0.03	0.14
		$PM_{2.5}$	0.03	0.14
		VOC	0.97	3.62
		NO_X	2.37	10.40
		SO_2	0.23	1.02
		CO	0.16	0.71
		Cl_2	0.27	1.20
		HCl	0.12	0.50
		H_2S	0.01	0.26
S582F-1	Storage Tank Farm Fugitives	VOC	0.06	0.26

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		HCl	0.01	0.05
		Formaldehyde	0.01	0.03
		MeOH	0.01	0.03
S582F-2	Process Unit Fugitives (5)	VOC	0.91	3.98
		H_2S	0.05	0.22
		Cl_2	0.06	0.28
		H_2O_2	<0.01	0.01
		HCl	0.09	0.37
		Formaldehyde	0.02	0.07
		MeOH	0.09	0.39
S582F-3	Wastewater Fugitives (5)	VOC	< 0.01	0.01
		Formaldehyde	<0.01	< 0.01
		MeOH	<0.01	<0.01
PACKOUT OPERATIONS				
K-1891	Tank B-246-A, and B-253-A Carbon Drum	VOC	0.08	0.01
B-256	Storage Tank	VOC	4.10	0.10
B-257	Storage Tank	VOC	4.10	0.10
B-258	Storage Tank	VOC	4.10	0.10
B-259	Storage Tank	VOC	4.10	0.10
B-260	Storage Tank	VOC	0.27	0.02
K-1890	Tank J-1874, 1875, and 1879 Carbon Drum	VOC	0.01	<0.01
K-1878	Tank J-1878 Carbon Drum	VOC	0.01	<0.01
K-1892	Tank J-1880 Carbon Drum	VOC	0.04	<0.01
K-1881	Tank J-1881 Carbon Drum	VOC	0.06	<0.01
K-1882	Tank J-1882 Carbon Drum	VOC	0.06	<0.01

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J-218	Storage Tank	VOC	5.12	0.53
J-219	Storage Tank	VOC	5.12	0.26
J-220	Storage Tank	VOC	4.92	0.23
B-246-B	Storage Tank	VOC	4.10	0.03
E-1800TKF	PO Piping Fugitives (5)	VOC	0.06	0.31
E-1800LF	PO Area Loading	VOC	1.70	0.02
PLANNED MAINTENANCE, STARTUP, AND SHUTDOWN (MSS) EMISSION RATE LIMITS				
MSS-DMTA	Vacuum Truck	VOC		
	Filter Clearing (DMTA and HMP)			
	Surface Coating (Hand painting/Aerosol)			
	Filter Purging			
	Tank Clearing			
	Small and Large Equipment Purging (DMTA and HMP)			
	Maintenance, Start-Up and Shut-Down	VOC	38.88	2.43
MSS-DMTA	Small and Large Equipment Purging (DMTA)	Cl_2		
	Filter Clearing (DMTA)			
	Maintenance, Start-Up and Shut-Down	Cl_2	4.50	0.10
MSS-DMTA	Small and Large Equipment Purging (HMP)	HCl		
	Filter Clearing (HMP)			
	Maintenance, Start-Up and Shut-Down	HCl	1.87	0.04
MSS-DMTA	Small and Large Equipment Purging (DMTA)	H_2S		
	Maintenance, Start-Up and Shut-Down	H_2S	0.01	0.01

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MSS-DMTA	Surface Coating (Aerosol)	PM		
	Maintenance, Start-Up and Shut-Down	PM	0.06	0.01
MSS-WB-1769	Maintenance, Start-Up and Shut-Down	H_2S	<0.01	<0.01
MSS-PO	Sludge Management	VOC		
	Small Equipment			
	Process Vessel			
	Tanks			
	Vacuum Trucks			
	Maintenance, Start-Up, and Shut-Down for the Pack-Out Plant	VOC	57.91	0.05

(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
CO - carbon monoxide
Cl_2 - chlorine
HCl - hydrochloric acid mist
H_2S - hydrogen sulfide
MeOH - methyl alcohol
H_2O_2 - hydrogen peroxide
(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 prior to completion of thermal oxidizer upgrades.

Date: May 23, 2018