Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 107764 and PSDTX1340

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)
Phase I EPNs				
B-01001	Reformer	NOx	15.52	59.42
		NOx (6)	62.08	-
		NH_3	5.71	21.57
		CO	93.84	177.40
		VOC	8.37	10.16
		SO_2	1.52	5.74
		PM	11.56	43.72
		PM_{10}	11.56	43.72
		$PM_{2.5}$	8.67	32.79
		$PM_{2.5}$ (7)	11.56	-
B-14001	Auxiliary Boiler	NOx	9.50	31.01
		NOx (6)	38.00	-
		NH_3	3.64	11.71
		CO	59.96	96.44
		VOC	5.12	14.00
		SO_2	0.53	1.71
		PM	7.08	22.77
		PM_{10}	7.08	22.77
		$PM_{2.5}$	5.31	17.08
B-01001/B-14001A	Reformer/Auxiliary	NOx	-	67.72

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	Boiler			
S-10001	MeOH Flare	NOx	0.35	1.53
		CO	2.20	9.62
		VOC	0.34	1.50
		MeOH	0.01	0.01
		SO_2	0.01	0.05
S-10001 MSS	MeOH Flare MSS	NOx	425.11	7.30
		CO	3644.98	61.79
		VOC	242.44	1.36
		MeOH	242.44	0.84
		SO_2	12.55	0.22
TK-03007	MeOH Slop Tank	VOC	8.47	0.12
		MeOH	8.47	0.12
D-04001	MeOH Water Scrubber 1	VOC	7.24	1.65
		MeOH	7.24	1.65
FUG-MeOH	MeOH Fugitives (5)	VOC	3.07	13.45
		MeOH	3.07	13.45
		NH_3	0.01	0.01
T-06001	MeOH Cooling Tower	VOC	7.54	3.30
		MeOH	7.54	3.30
		PM	37.70	82.57
		PM_{10}	0.58	1.28
		$PM_{2.5}$	0.01	0.03
TEMP-MSS	Controlled Tank MSS Emissions	NOx	3.55	0.01
		CO	7.09	0.01
		VOC	52.75	0.07

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		MeOH	52.75	0.07
		SO_2	0.02	0.01
		PM	0.19	0.01
		PM_{10}	0.19	0.01
		$PM_{2.5}$	0.19	0.01
FUG-MSS	Atmosphere MSS Emissions	VOC	167.93	0.50
		MeOH	102.03	0.20
Phase II EPNs				
H-REGEN	Regeneration Heater	NOx	1.60	3.92
		CO	2.82	3.45
		VOC	0.24	0.59
		SO_2	0.02	0.06
		PM	0.33	0.81
		PM_{10}	0.33	0.81
		$PM_{2.5}$	0.33	0.81
H-RXH	Reactor Heaters	NOx	4.37	16.31
		CO	7.69	14.32
		VOC	0.66	2.44
		SO_2	0.07	0.25
		PM	0.91	3.38
		PM_{10}	0.91	3.38
		$PM_{2.5}$	0.91	3.38
H-HGT	Heavy Gasoline Heater Treater	NOx	0.27	1.08
		CO	0.48	0.95
		VOC	0.04	0.16
		SO_2	0.01	0.02

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		PM	0.06	0.22
		PM_{10}	0.06	0.22
		$PM_{2.5}$	0.06	0.22
D-04002	MeOH Water Scrubber 2	VOC	1.31	1.38
		MeOH	1.31	1.38
VCU-1	MtG Loading VCU	NOx	1.06	0.88
		CO	0.89	0.74
		VOC	5.33	4.47
		SO_2	0.01	0.01
		PM	0.08	0.07
		PM_{10}	0.08	0.07
		$PM_{2.5}$	0.08	0.07
D-04002/VCU-1	Loading Cap	VOC	-	4.47
TK-OS1	Off-Spec Gasoline Storage Tank	VOC	1.94	3.19
TK-St1A	Gasoline Run-down Storage Tank 1	VOC	1.96	2.73
TK-ST1B	Gasoline Run-down Storage Tank 1	VOC	1.96	2.73
TK-SLOP1	MeOH Water Slop Storage Tank	VOC	8.47	0.12
		MeOH	8.47	0.12
TK-SLOP2	Gasoline Slop Storage Tank	VOC	55.70	1.08
FUG-MTG	MtG Fugitives (5)	VOC	2.77	12.13
		NH_3	0.01	0.01
V-CATREGEN	Catalyst Regeneration Vent	CO	84.16	70.73
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01

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OWS-WWTP	Wastewater Treatment Plant Oil Water Separator	VOC	0.31	0.73
		MeOH	0.01	0.01
FUG-WWTP	Wastewater Treatment Plant Fugitives	VOC	15.26	22.71
		MeOH	4.25	1.74

(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) NH_3 - ammonia
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
MeOH - methanol
(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) The emission limit applies only during startup as defined in Special Condition 9.
(7) This emission limit applies only during cold start-up of the methanol unit for a maximum of 96 hours per year.

Date: August 14, 2017