Emission Sources - Maximum Allowable Emission Rates

Permit Number 4056

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)
51MH5AST	Heater MH-5A	PM	0.56	2.20
		PM_{10}	0.56	2.20
		$PM_{2.5}$	0.56	2.20
		VOC	0.55	1.97
		NO_x	13.72	53.95
		SO_2	1.92	7.23
		CO	6.18	24.28
51MJ151	Start-up Eductor MJ-151	PM	0.05	0.02
		PM_{10}	0.05	0.02
		$PM_{2.5}$	0.05	0.02
		VOC	0.03	0.01
		NO_x	0.60	0.27
		SO_2	0.09	0.04
		CO	0.50	0.23
51MJ152	Start-up Eductor MJ-152	PM	0.05	0.02
		PM_{10}	0.05	0.02
		$PM_{2.5}$	0.05	0.02
		VOC	0.03	0.01
		NO_x	0.60	0.27
		SO_2	0.09	0.04
		CO	0.50	0.23

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51MJ153	Start-up Eductor MJ-153	PM	0.05	0.02
		PM_{10}	0.05	0.02
		$PM_{2.5}$	0.05	0.02
		VOC	0.03	0.01
		NO_x	0.60	0.27
		SO_2	0.09	0.04
		CO	0.50	0.23
51COFUG	Fugitives (5)	VOC	10.05	44.00
		SO_2	2.78	12.19
		CO	21.90	95.91
		Ammonia	<0.01	0.01
51ANAL	Analyzer Vents	VOC	<0.01	<0.01
		CO	0.51	2.25
51MN157ST	Flare MN-157	VOC	35.33	7.96
		NO_x	72.91	18.44
		SO_2	25.46	5.01
		CO	2045.91	402.19
		H_2S	0.26	0.04
51COLDBOX	Cold Box	Helium	31.7	135.0
MSS-PROP	MSS Propylene Refrigeration System	Propylene (VOC)	2.95	0.01
MSS-CO	MSS Product CO Compression System	CO	0.01	0.01
MSS-H2	MSS Hydrogen Compression System	VOC	0.09	0.01
MSS-CH4	MSS Methane Compression System	VOC	0.02	0.01
		H_2S	0.01	0.01
MSS-SCO2	MSS Supplemental CO2 Compression System	VOC	0.05	0.01
		CO	0.23	0.01
		H_2S	0.01	0.01

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MSS-RCO2	MSS Recycle CO2 Compression System	VOC	0.04	0.01
		CO	3.60	0.01
		H_2S	0.01	0.01
MSS-COLDBOX	MSS Cold Box System	VOC	0.10	0.01
		CO	50.04	0.05
MSS-NG	MSS Natural Gas Coalescer System	VOC	10.10	0.05
		H_2S	0.01	0.01
MSS-FG	MSS Feed Gas Coalescer System	VOC	0.34	0.04
		CO	1.79	0.20
MSS-WM	MSS Waste Methanol System	VOC	0.08	0.01
MSS-SO2	MSS SO2 System	SO_2	0.11	0.01
MSS-SWS	MSS Sooty Water System	Ammonia	0.07	0.01
		Hydrogen Cyanide	0.01	0.01
MSS-Syngas	MSS Syngas System	VOC	0.01	0.01
		CO	5.55	0.01
MSS-Rectisol	MSS Rectisol System	VOC	1.45	0.01
		CO	32.63	0.05
		H_2S	0.01	0.01
MSS-Nonprocess-FUG	MSS Nonprocess Fugitive Emissions	VOC	4.20	0.09
		PM	5.73	0.05
		PM_{10}	0.66	0.01
		$PM_{2.5}$	0.49	0.01
		SO_2	0.15	0.01
		Ammonia	0.44	0.16
		Chlorine	0.01	0.01
		H_2S	0.01	0.01

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MSS-Eductors	MSS Eductors MJ-151, MJ-152, MJ-153	VOC	0.08	0.03
		CO	1.26	0.41
		NO_x	1.50	0.49
		SO_2	0.21	0.07
		PM	0.11	0.04
		PM_{10}	0.11	0.04
		$PM_{2.5}$	0.11	0.04
PSAUnit	PSA Unit	CO	0.07	0.32
		VOC	0.02	0.07
COLDBOX2	Cold Box Unit 2	CO	0.13	0.58
		Helium	1.26	5.54

(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: December 29, 2015