Emission Sources - Maximum Allowable Emission Rates

Permit Number 20289

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)
002	Process Heater	CO	2.41	8.97
		NO_x	4.82	17.94
		PM_{10}	0.82	3.07
		SO_2	1.92	0.90
		VOC	0.17	0.62
003	Process Heater	CO	2.41	8.97
		NO_x	4.82	17.94
		PM_{10}	0.82	3.07
		SO_2	1.92	0.90
		VOC	0.17	0.62
004	Process Heater	CO	3.10	11.53
		NO_x	6.19	23.06
		PM_{10}	1.06	3.95
		SO_2	2.56	1.19
		VOC	0.22	0.80
020	Main Fractionator Area Fugitives (5)	VOC	1.13	4.93
020B	Butamer Unit Fugitives (5)	VOC	6.56	28.75
021	Cooling Tower (5)	VOC	0.13	0.55

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101	Oleflex Heater	CO	11.77	46.88
		NO_x	17.66	70.33
		PM_{10}	1.43	5.68
		SO_2	0.17	0.75
		VOC	0.40	1.75
102	Steam Boiler	CO	8.76	26.17
		NO_x	23.36	69.77
		PM_{10}	1.41	4.23
		SO_2	4.88	2.42
		VOC	0.40	1.18
103	Steam Boiler	CO	8.76	26.17
		NO_x	23.36	69.77
		PM_{10}	1.41	4.23
		SO_2	4.88	2.42
		VOC	0.40	1.18

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104A (8)	Flare 104A	CO	27.88	9.70
		NO_x	13.97	4.86
		SO_2	1.20	0.36
		VOC	60.01	31.38
		H2S/TRS	0.01	0.01
	MSS	CO	286.01	8.26
		NO_X	143.44	4.15
		SO_2	<0.01	<0.01
		VOC	532.30	14.32
104B	Flare 104B	CO	3.02	13.22
		NO_x	1.51	6.62
		PM_{10}	0.01	0.02
		SO_2	0.01	0.01
		VOC	0.57	2.50
105	Thermal Oxidizing Flare (6)	CO	30.57	22.90
		NO_x	11.14	10.09
		SO_2	17.29	12.17
		VOC	48.53	16.22
		MTBE	32.73	11.82
		MEOH	1.60	0.65

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MVCS 1	Marine Vapor Control System 1 (6)	CO	4.46	----
		NO_X	11.16	----
		SO_2	50.52	----
		VOC (7)	6.55	----
		PM	0.42	----
		PM_{10}	0.42	----
		$PM_{2.5}$	0.42	----
		H_2S/TRS	0.03	----
		MTBE (7)	6.55	----
		MEOH (7)	0.32	----
MVCS 2	Marine Vapor Control System 2 (6)	CO	4.46	----
		NO_X	11.16	----
		SO_2	50.52	----
		VOC (7)	6.55	----
		PM	0.42	----
		$PM_{2.5}$	0.42	----
		$PM_{2.5}$	0.42	----
		H_2S/TRS	0.03	----
		MTBE (7)	6.55	----
		MEOH (7)	0.32	----
MVCS 1 & 2	Marine Vapor Control System 1 & 2 Annual Cap (6)	CO	----	8.40
		NO_X	----	21.01
		SO_2	----	35.32
		VOC (7)	----	3.71

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		PM	----	0.78
		PM_{10}	----	0.78
		$PM_{2.5}$	----	0.78
		H_2S/TRS	----	0.02
		MTBE (7)	----	2.36
		MEOH (7)	----	0.13
106	Storage Tank	VOC	1.37	3.41
107	Storage Tank	VOC	3.31	5.19
108	Storage Tank	VOC	3.31	5.19
107 & 108	Storage Tanks Annual Cap	VOC	---	5.56
109	Storage Tank	MTBE	1.25	1.87
111	Storage Tank	VOC	0.06	0.09
112	CCR Vent Gas Scrubber	CO	0.09	0.39
		Cl_2	0.04	0.16
		HCl	0.54	2.35
		NO_x	0.04	0.18
		SO_2	1.13	4.94
113	Cooling Tower (5)	VOC	1.05	4.60
114	CPI Separator	VOC	1.50	0.58
115	Oleflex Unit Area Fugitives (5)	VOC	2.01	8.77
116	MTBE Unit Area Fugitives (5)	VOC	2.81	12.36
117	OSBL Tank Area Fugitives (5)	VOC	0.43	1.93
118	OSBL Boiler Area Fugitives (5)	VOC	0.26	1.14
119	Wastewater Treatment Area	VOC	0.43	1.58

Emission Sources - Maximum Allowable Emission Rates

	Fugitives (5)			
120	PSA Unit Fugitives (5)	VOC	0.24	1.05
023	Barge Loading Fugitives (5)	VOC	0.30	1.33
TRLoadFug	Truck Rail Load Fugitives	VOC	0.66	0.49
121	Diesel Fired Generator	CO	0.90	0.09
		NO_x	4.15	0.43
		PM_{10}	0.30	0.03
		SO_2	0.28	0.03
		VOC	0.33	0.03
122	CCR Chlorine Fugitives (5)	Cl_2	0.01	0.06
123	Fire Water Engine	CO	0.43	0.05
		NO_x	2.01	0.21
		PM_{10}	0.14	0.02
		SO_2	0.13	0.01
		VOC	0.19	0.02
124	Diesel Storage Tank	VOC	0.06	0.01

Emission Sources - Maximum Allowable Emission Rates

NGST-FLARE (8)	Natural Gasoline Storage Flare	CO	3.18	7.97
		NO_X	1.60	4.00
		SO_2	0.02	0.04
		VOC	0.90	2.05
	MSS	CO	1.96	0.03
		NO_X	0.98	0.02
		SO_2	0.01	<0.01
		VOC	3.64	0.05
MSS-FLARE (8)	Temporary Flare	CO	16.99	0.10
		NO_X	8.52	0.05
		SO_2	<0.01	<0.01
		VOC	31.60	0.17
104A, NGST-FLARE, MSS-FLARE (8)	MSS flare CAP	CO	286.14	9.66
		NO_X	143.44	4.84
		SO_2	0.01	<0.01
		VOC	532.32	16.76
MSS-ATM	MSS	VOC	117.50	0.32

(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
Cl_2 - chlorine
HCl - hydrogen chloride
H_2S/TRS - hydrogen sulfide/total reduced sulfur
MEOH - methanol
MTBE - methyl-tert-butyl-ether
(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) All non- isobutylene marine loading emissions shall be controlled by either the TOF or the MVCSs. Once the MVCSs are fully operational the TOF will be removed from service.
(7) MEOH and MTBE emissions are included in the VOC emission rates.
(8) Total MSS emissions from 104A, MGST, and MSS-FLAREFW may not exceed the hourly and annual flare MSS CAP.

Date: March 13, 2014