Emission Sources - Maximum Allowable Emission Rates

Permit Number 56473

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)
116S-B101	Steam Boiler 101 Natural Gas	CO	12.38	54.21
		NO_x	7.80	34.16
		PM_{10}	0.97	4.24
		SO_2	0.08	0.33
		VOC	0.70	3.07
		VOC (13)	2.83	4.07
	Natural Gas/Liquid Fuel Mix	CO	12.38	54.21
		NO_x	20.80	40.01
		PM_{10}	2.87	5.90
		SO_2	5.21	4.81
		VOC	0.59	2.97
		VOC(14)	2.72	3.97
116S-B102	Steam Boiler 102 Natural Gas	CO	12.38	54.21
		NO_x	7.80	34.16
		PM_{10}	0.97	4.24
		SO_2	0.08	0.33
		VOC	0.70	3.07
		VOC(13)	2.83	4.07
	Natural Gas/Liquid Fuel Mix	CO	12.38	54.21
		NO_x	20.80	40.01
		PM_{10}	2.87	5.90
		SO_2	5.21	4.81
		VOC	0.59	2.97
		VOC(14)	2.72	3.97

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116S-B103	Steam Boiler 103 Natural Gas	CO	12.38	54.21
		NO_x	7.80	34.16
		PM_{10}	0.97	4.24
		SO_2	0.08	0.33
		VOC	0.70	3.07
		VOC(13)	2.83	4.07
	Natural Gas/Liquid Fuel Mix	CO	12.38	54.21
		NO_x	7.80	34.16
		PM_{10}	2.87	5.90
		SO_2	5.76	5.28
		VOC	0.59	2.97
		VOC(14)	2.72	3.97
116S-B104	Steam Boiler 104 Natural Gas	CO	12.38	54.21
		NO_x	7.80	34.16
		PM_{10}	0.97	4.24
		SO_2	0.08	0.33
		VOC	0.70	3.07
		VOC(13)	2.83	4.07
	Natural Gas/Liquid Fuel Mix	CO	12.38	54.21
		NO_x	20.8	40.01
		PM_{10}	2.87	5.9
		SO_2	5.21	4.81
		VOC	0.59	2.97
		VOC(14)	2.72	3.97
116S-B105	Steam Boiler 105 Natural Gas	CO	12.38	54.21
		NO_x	7.80	34.16
		PM_{10}	0.97	4.24
		SO_2	0.08	0.33
		VOC	0.70	3.07
		VOC(13)	2.83	4.07
	Natural Gas/Liquid Fuel Mix	CO	12.38	54.21
		NOx	7.80	34.16
		PM_{10}	2.87	5.90
		SO_2	5.21	4.81

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		VOC	0.59	2.97
		VOC(14)	2.72	3.97
116S-B106	Steam Boiler 106 Natural Gas	CO	19.53	85.52
		NOx	15.84	69.38
		PM_{10}	2.01	8.79
		SO_2	0.16	0.69
		VOC	1.45	6.36
		VOC(13)	3.58	7.36
116CT-MAIN	Cooling Tower (6)	VOC	1.78	7.80
130WF	Isoprene Wastewater (6)	Acetone	0.64	2.58
		VOC	3.30	7.36
	Maintenance Emissions (336 hours per rolling 12 months)	VOC (7)	8.13	0.63
116F	830 Refrigeration Process Fugitives (5)	VOC	1.45	6.33
116F-BH	830 Boiler House Process Fugitives (5)	VOC	0.67	2.93
Planned Maintenance, Startup, and Shutdown (MSS) Emissions				
130FL-Q501	Utilities Flare (8) MSS Activities	VOC (9)	61.23	21.34
		CO (9)	20.35	7.08
		NO_x (9)	4.03	1.40
280FL-Q504	Budene Flare (10) MSS Activities	VOC (9)	37.01	10.29
		CO (9)	15.13	3.95
		NO_x (9)	2.76	0.77
850FL-Q504	850 Flare (11) Startup Operations	VOC	53.99	7.77
		CO	21.35	3.07
		NOx	2.96	0.43
850FL-Q504	850 Flare (11) MSS Activities other than Startup	VOC (12)	53.99	13.92
		CO (12)	21.35	4.81
		NOx (12)	2.96	0.77
PLT-MSS	Uncontrolled Emissions from All Other Planned MSS Activities	VOC	53.09	4.59
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
116S-B101	Steam Boiler 101 MSS activities	CO	24.76	(9)
116S-B102	Steam Boiler 102 MSS activities	CO	24.76	(9)
116S-B103	Steam Boiler 103 MSS activities	CO	24.76	(9)

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116S-B104	Steam Boiler 104 MSS activities	CO	24.76	(9)
116S-B105	Steam Boiler 105 MSS activities	CO	24.76	(9)

(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) CO - carbon monoxide
HCl - hydrochloric acid
NO_x - total oxides of nitrogen
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
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
(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) Emissions from this permitted facility are emitted from this EPN.
(7) Emissions are only from process wastewater stream 1D-303.
(8) The Utilities Flare is authorized under Standard Permit Number 84420 which will be incorporated into the New Source Review (NSR) Permit Number 22110.
(9) Annual MSS emissions are already included in the total caps of normal operations.
(10) The Budene Flare is authorized under Standard Permit Numbers 75848 and 70810 which will be incorporated into the NSR Permit Number 9481.
(11) The 850 Flare is authorized under Permit Number 38755.
(12) Annual non-startup MSS emissions are already included in the total caps of normal operations.
(13) VOC emission when Regeneration Gas is added to Natural Gas.
(14) VOC emission when Regeneration Gas is added to Natural Gas/Liquid Fuel Mix.

Date: February 19, 2014