Emission Sources - Maximum Allowable Emission Rates

Permit Number 8199A

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.

Table A applies until the permit holder provides the local regional office with written notification that they have commenced the CNTQ LDAR program, changed the service of their tanks, and permanently shut down the F-8 Boiler.

Table A

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
16	High-Pressure Flare	VOC	15.65	11.37
		Butenes	15.56	11.30
		CO	39.02	45.58
		NO_x	3.29	3.46
		SO_2	0.01	0.03
16B	Low-Pressure Flare	VOC	6.73	11.81
		NO_x	0.98	1.88
		CO	7.90	15.17
		SO_2	0.06	0.25
17	MEA Storage Tank D-603	VOC	0.14	0.01
18	Spent MEA Tank D-605	VOC	0.01	0.01
23	INA Tank D-23	VOC	0.50	0.14
24	2-PH Tank D-24	VOC	0.35	0.26
27	2-PH Tank D-27	VOC	0.35	0.11

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41	Process Alcohol Tank D-4110	VOC	0.37	0.03
45	Propylheptanal Tank D-664	VOC	0.15	0.01
47	Spent NaOH Tank D-668	VOC	0.01	0.01
48	Wastewater Tank D-661	VOC	0.08	0.02
50	CO_2 Stripper Vent	VOC	0.44	1.62
		CO	21.72	80.64
52	2-PH Shift Tank D-662A	VOC	0.21	0.02
53	2-PH Shift Tank D-662B	VOC	0.21	0.02
54	2-PH Shift Tank D-662C	VOC	0.21	0.02
57	INA Tank D-670	VOC	0.37	0.09
58	Loading Scrubber	VOC	29.19	2.67
61	Wastewater Tank D-4850	VOC	0.04	0.01
601	Preheater - production operations	VOC	0.08	--
		NO_x	0.38	--
		CO	1.15	--
		SO_2	0.20	--
		PM_{10}	0.10	--

Emission Sources - Maximum Allowable Emission Rates

601	Preheater - MSS operations	VOC	0.09	--
		NO_x	0.38	--
		CO	1.38	--
		SO_2	0.20	--
		PM_{10}	0.10	--
601	Preheater - production and MSS operations	VOC	--	0.33
		NO_x	--	1.66
		CO	--	5.05
		SO_2	--	0.88
		PM_{10}	--	0.46
84	F-8 Boiler	CO	14.82	33.52
		NO_x	14.72	25.82
		PM_{10}	6.12	6.36
		SO_2	11.05	11.78
		VOC	6.45	6.00
		HRVOC	0.08	0.35
146	2-PH Liquids Loading	VOC	0.54	0.01
CTWR-1	Cooling Tower (4 cells)	VOC	0.55	0.88
		Butenes	0.11	0.18
F-8	F8 Fugitives (5)	VOC	0.14	0.59
FUG-2PH	2-PH Fugitives (5)	VOC	5.42	23.73
		Butenes	1.63	7.13
FUG-NH_3	Ammonia Fugitives (5)	NH_3	0.10	0.42
FUG-PX	Plasticizer Fugitives (5)	VOC	0.48	4.45
MVLOADING	Marine Loading Losses	VOC	6.55	0.19
PXFILTER	Plasticizer Filtration Fugitives (5)	VOC	0.83	3.65

Emission Sources - Maximum Allowable Emission Rates

RRLOADING	Rail Loading Losses	VOC	9.77	0.48
TTLOADING	Truck Loading Losses	VOC	9.77	0.76

Emission Sources - Maximum Allowable Emission Rates

Table B applies after the permit holder provides the local regional office with written notification that they have commenced the CNTQ LDAR program, changed the service of their tanks, and permanently shut down F-8 boiler. This does not prevent the permit holder from starting construction on affected facilities.

Table B

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
16	FL-1 WGAS-ALC HP Flare	NO_x	6.00	5.59
		CO	53.43	58.03
		VOC	30.51	23.57
		SO_2	0.01	0.03
		HRVOC	4.85	3.53
17	D-603 MEA Storage Tank	VOC	0.14	<0.01
18	Spent MEA Tank D-605	VOC	0.01	<0.01
23	Tank D-23	VOC	1.71	--
24	Tank D-24	VOC	1.71	--
27	Tank D-27	VOC	1.71	--
D-23 D-24 and D-27	Annual emissions cap for Tanks D-23 D-24 and D-27	VOC	--	0.43
47	Tank D-668	VOC	<0.01	<0.01
48	Tank D-661	VOC	0.08	0.02
50	CO_2 Stripper Vent	CO	20.25	80.64
		VOC	0.41	1.62
52	Tank D-662A	VOC	0.24	0.02
53	Tank D-662B	VOC	0.24	0.02
54	Tank D-662C	VOC	0.24	0.02
58	Loading Scrubber	VOC	7.77	0.63
60	D-6012	VOC	0.18	<0.01

Emission Sources - Maximum Allowable Emission Rates

84	F-10 Boiler- Production operations	NO_x	1.80	9.40
		NO_x (MSS)	18.00	--
		CO	6.66	38.75
		CO (MSS)	798.27	--
		PM	0.90	3.94
		PM_{10}	0.90	3.94
		$PM_{2.5}$	0.90	3.94
		VOC	2.37	6.23
		SO_2	4.74	15.17
		NH_3	0.81	3.54
		HRVOC	0.03	0.15
146	D74 Process Alcohol Liquid Loading	VOC	<0.01	<0.01
601	F-601 Preheater - Production operations	NO_x	0.38	1.66
		CO	1.15	5.05
		CO (MSS)	1.38	--
		PM	0.10	0.46
		PM_{10}	0.10	0.46
		$PM_{2.5}$	0.10	0.46
		VOC	0.08	0.33
		VOC (MSS)	0.09	--
		SO_2	0.20	0.88
16B	Low Presure Flare	NO_x	1.02	1.75
		CO	6.06	13.13
		VOC	8.05	9.19
		SO_2	0.13	0.25
		HRVOC	<0.01	0.01
CTWR-1	CTWR-1 Cooling Tower	VOC	0.55	0.88
		HRVOC	0.11	0.18

Emission Sources - Maximum Allowable Emission Rates

FUG-F10	F-10 Fugitives (5)	VOC	0.24	1.04
		NH_3	0.06	0.26
FUG-ALC	Process Alcohol Fugitives (5)	VOC	3.28	14.35
		HRVOC	0.81	3.57
FUG-NH_3	Ammonia Fugitives (5)	NH_3	0.07	0.29
FUG-PX	Plasticizer Fugitives (5)	VOC	1.21	5.31
MVLOADING	Marine Loading Loss	VOC	1.31	0.09
PXFILTER	Plast. Filtration Fug.	VOC	1.07	4.69
RRLOADING	Rail Loading Losses	VOC	4.40	--
TTLOADING	Truck Loading Loss	VOC	2.12	--
RRLOADING & TTLOADING	Rail and Truck - annual emissions cap	VOC	--	0.55
103	Powder Unloading Line (POW-UL)	PM	0.03	0.11
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	0.01
104	Powder Batch Silo (POW-BS)	PM	0.08	0.35
		PM_{10}	0.01	0.04
		$PM_{2.5}$	<0.01	0.02
FUG-POW	Powder Handling Fugitives	PM	0.01	0.05
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
CHLOADING	D633LOAD Catalyst Heavies Loading	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

(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
HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10
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
NH_3 - Ammonia
(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: November 9, 2015