Emission Sources - Maximum Allowable Emission Rates

Permit Number 104098

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 (1)	Source Name (2)	Air Contaminant (3)	Emission Rates	
			lbs/hour	TPY (4)
Combustion Device Emissions				
B19S2	F-210 Thermal Treatment Unit	CO	9.59	-
		NO_x	4.40	-
		SO_2	0.04	-
		Pb	0.01	-
		Hg	0.01	-
		Cl_2	1.14	-
		HCl	0.75	-
		Acetone	0.01	-
		PM	4.07	-
		PM_{10}	4.07	-
		HRVOC	0.01	-
		VOC (7)	1.76	-
B23S826	Heater Vent Stack	CO	0.78	-
		NO_x	0.92	-
		SO_2	0.13	-
		Pb	0.01	-
		Hg	0.01	-
		PM	0.07	-
		PM_{10}	0.07	-
		VOC	0.05	-

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B23F865	FS-865 Flare, ALCL2 Process	CO	30.93	-
		NO_x	5.95	-
		SO_2	1.33	-
		Cl_2	0.01	-
		HCl	0.04	-
		HRVOC	0.93	-
		VOC (7)	1.33	-
B68S3	F-3 Heater Vent Stack	CO	0.71	-
		NO_x	0.84	-
		SO_2	0.12	-
		Pb	0.01	-
		Hg	0.01	-
		PM	0.06	-
		PM_{10}	0.06	-
		VOC	0.05	-

Emission Sources - Maximum Allowable Emission Rates

B70S2	FTB-603 Thermal Treatment Unit Scrubber Vent Stack	CO	6.44	-
		NO_x	4.00	-
		SO_2	0.12	-
		Pb	0.01	-
		Hg	0.01	-
		Cl_2	1.78	-
		HCl	0.87	-
		PM	0.91	-
		PM_{10}	0.91	-
		HRVOC	0.01	-
		VOC (7)	0.86	-
B70F1	Flare Stack 101	CO	30.15	-
		NO_x	5.86	-
		SO_2	1.33	-
		Cl_2	0.02	-
		HCl	0.60	-
		HRVOC	0.93	-
		VOC (7)	0.43	-
B19S2, B23S826, B23F865, B68S3, B70S2 and B70F1	**Combustion Emissions Source Group Cap, Routine**	CO	-	122.43
		NO_x	-	41.97
		SO_2	-	0.15
		Pb	-	0.04
		Hg	-	0.04
		Cl_2	-	12.83
		HCl	-	7.11
		Acetone	-	0.03
		PM	-	21.84
		PM_{10}	-	21.84
		HRVOC	-	(6)

Emission Sources - Maximum Allowable Emission Rates

		VOC (7)	-	12.11
Fugitive Emissions:				
B19FU1	Epichlorohydrin 1 Process Fugitives (5)	VOC	3.76	-
		HRVOC	0.01	-
		Cl_2	0.11	-
B19FU5	EPI 1 Dichlorohydrin Process Fugitives (5)	VOC	3.58	-
		HRVOC	0.01	-
		Refrigerant	0.24	-
B19FU6	NW Tank Farm, Allyl Chloride Tank, Epichlorohydrin Tank and Crude Trichloropropane Tank Fugitives (5)	VOC	2.48	-
B19FU7	Epoxy Intermediates Process Area Fugitives (5)	VOC	0.39	-
B19FU9	B-1900 Loading Rack Fugitives (5)	VOC	0.03	-
B21FU1	B-2100 Epichlorohydrin Fugitives and HOCl Fugitives (5)	Cl_2	0.14	-
B23FU2	Allyl Chloride, and Epichlorohydrin Process Area Fugitives (5)	VOC	1.57	-
		HRVOC	2.50	-
		Refrigerant	0.33	-
B23FU8	B-2300 Loading Rack Fugitives (5)	VOC	0.59	-
B68FU1	Allyl Chloride and Allyl PDC Process Fugitives (5)	VOC (7)	9.31	-
		HRVOC	1.60	-
		Cl_2	0.60	-
		HCl	1.00	-
		Refrigerant	0.24	-
		Acetone	0.01	-

Emission Sources - Maximum Allowable Emission Rates

B70FU1	B-7000 Thermal Treatment Unit and Flare Process Fugitives (5)	VOC (7)	2.85	-
		HRVOC	0.11	-
B21CT960	Cooling Tower (5)	PM	3.14	-
		PM_{10}	3.14	-
		HRVOC	0.11	-
B19FU1, B19FU5, B19FU6, B19FU7, B19FU9, B21FU1, B23FU2, B23FU8, B68FU1, B70FU1 and B21CT960	**Fugitive Emissions Source Group Cap (5)**	VOC (7)	-	39.90
		HRVOC	-	6.60
		Cl_2	-	3.70
		HCl	-	4.04
		Refrigerant	-	3.20
		Acetone	-	2.01
		PM	-	4.95
		PM_{10}	-	4.95
Loading Rack Emissions				
B19LR9	B-1900 Loading Rack, Uncontrolled	VOC	0.14	-
B23LR8	Epoxy Intermediates Loading Rack	VOC	0.75	-
B68LR1	B-6800 Loading Rack	VOC (7)	4.14	-
		HRVOC	0.93	-
B19LR9, B23LR8 and B68LR1	**Loading Rack Emissions Source Group Cap**	VOC (7)	-	1.44
		HRVOC	-	0.02
Other Process Emissions				
B23SV220	HCL Process Tank V-123 & V-220B Scrubber Vent Stack	HCl	0.01	0.01
B34FU01	SOHO Fugitive Area (5)	VOC	0.18	0.79
		Perchloroethylene	0.05	0.24
		1,1,1, - Trichloroethane	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Compliance Cap		HRVOC	2.26	(6)
		NOx	26.87	63.75
		CO	99.04	182.47
		SO2	3.68	0.19
		Cl2	3.33	14.42
		HCl	1.78	7.00
		Pb	0.04	0.04
		Hg	0.04	0.04
		Refrigerant	0.79	3.20
		Acetone	2.20	5.25
		PM	8.41	30.11
		PM10	8.41	30.11
MSS Emissions				
B23MSS1	B-2300 Maintenance, Startup and Shutdown	VOC	14.06	-
		SO_2	3.28	-
		HCl	29.82	-
		NO_x	92.14	-
		CO	635.73	-
		Acetone	1.05	-
		HRVOC	145.78	-

Emission Sources - Maximum Allowable Emission Rates

B68MSS1	B-6800 Maintenance, Startup and Shutdown	VOC	14.06	-
		SO_2	3.28	-
		HCl	29.82	-
		NO_x	92.14	-
		CO	635.73	-
		Acetone	1.05	-
		HRVOC	145.78	-
MSS Emissions Source Group Cap		VOC	14.06	2.97
		SO_2	3.28	0.04
		HCl	29.82	0.37
		NO_x	92.14	20.92
		CO	635.73	107.03
		Acetone	1.05	0.69
		HRVOC	145.78	(6)
Routine and MSS Cumulative Cap (6)		HRVOC	-	10.85

(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 $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
Cl_2 - chlorine
HCl - hydrogen chloride
Pb - lead
Hg - mercury
Refrigerant - Refrigerant R-11, Refrigerant R-22, Refrigerant R-123

(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) Annual HRVOC Routine and MSS emissions are limited by the Routine and MSS Cumulative Cap emission rate.

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(7) VOC does not include HRVOC emissions.

Date September 11, 2017