

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 No. (1)	Source Name (2)	Air Contaminant Name (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	-

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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	-
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	-

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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

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		HRVOC	-	(6)
		VOC (7)	-	12.11
Flare FS-801 Emissions				
B70F801	Propylene Dichloride Processing Unit Nos.1 and 2 Flare FS-801, Routine	CO	35.03	-
		NO _x	6.88	-
		SO ₂	1.21	-
		HRVOC	4.77	-
		VOC (7)	5.05	-
B70F801	FS-801 Flare, MSS	CO	120.00	-
		NO _x	11.61	-
		SO ₂	1.21	-
		HRVOC	145.78	-
		VOC (7)	14.06	-
B70F801	FS-801 Flare, Routine + MSS	CO	-	62.21
		NO _x	-	12.21
		SO ₂	-	0.14
		HRVOC	-	1.94
		VOC (7)	-	4.85
Fugitive Emissions:				
B19FU1	Epichlorohydrin 1 Process Fugitives (5)	VOC	3.81	-
		HRVOC	0.01	-
		Cl ₂	0.11	-
B19FU5	EPI 1 Dichlorohydrin Process Fugitives (5)	VOC	3.66	-
		HRVOC	0.01	-
		Refrigerant	0.24	-
B19FU6	NW Tank Farm, Allyl Chloride Tank, Epichlorohydrin Tank and Crude Trichloropropane Tank Fugitives (5)	VOC	2.55	-

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B19FU7	Butylene Oxide Process Area Fugitives (5)	VOC	3.26	-
		Cl ₂	0.02	-
B19FU9	B-1900 Loading Rack Fugitives (5)	VOC	0.03	-
B21FU1	B-2100 Epichlorohydrin Fugitives and HOCl Fugitives (5)	Cl ₂	0.14	-
B23FU2	Soil Fumigants, Allyl Chloride, and Epichlorohydrin Process Area Fugitives (5)	VOC	3.63	-
		HRVOC	2.50	-
		Refrigerant	0.33	-
B23FU8	B-2300 Loading Rack Fugitives, Butylene Oxide Fugitives, Soil Fumigants Loading Rack Fugitives (5)	VOC	1.90	-
B68FU1	Allyl Chloride Process Fugitives, Propylene Dichloride Nos. 1 & 2 Process Fugitives and Allyl PDC Process Fugitives (5)	Cl ₂	0.60	-
		HCl	2.50	-
		Refrigerant	0.24	-
		HRVOC	2.50	-
		Acetone	0.01	-
		VOC (7)	14.91	-
B70FU1	B-7000 Thermal Treatment Unit and Flare Process Fugitives (5)	VOC (7)	3.63	-
		HRVOC	0.14	-
B21CT960	Cooling Tower (5)	PM	3.14	-
		PM ₁₀	3.14	-
		HRVOC	0.11	-
B19CT490	Cooling Tower (5)	PM	0.13	-
		PM ₁₀	0.13	-

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B19FU1, B19FU5, B19FU6, B19FU7, B19FU9, B21FU1, B23FU2, B23FU8, B68FU1, B70FU1, B21CT960 and B19CT490	Fugitive Emissions Source Group Cap (5)	VOC (7)	-	60.74
		HRVOC	-	7.79
		Cl ₂	-	3.80
		HCl	-	10.09
		Refrigerant	-	3.20
		Acetone	-	2.01
		PM	-	5.26
		PM ₁₀	-	5.26
Loading Rack Emissions				
B19LR9	B-1900 Loading Rack, Uncotrolled	VOC	0.14	-
B23LR8	Soil Fumigants Loading Rack	VOC	1.81	-
B68LR1	B-6800 Loading Rack	VOC (7)	5.99	-
		HRVOC	0.93	-
B19LR9, B23LR8 and B68LR1	Loading Rack Emissions Source Group Cap	VOC (7)	-	1.91
		HRVOC	-	0.02
Other Process Emissions				
B23SV220	HCL Process Tank V-123 & V-220B Scrubber Vent Stack	HCl	0.01	0.01
Epoxy Intermediates Routine Emissions Compliance Cap		VOC (7)	19.73	62.74
		HRVOC	2.55	(6)
		NOx	26.87	63.75
		CO	99.04	182.47
		SO2	3.68	0.19
		Cl2	3.35	14.51
		HCl	2.59	10.79
		Pb	0.04	0.04
		Hg	0.04	0.04
		Refrigerant	0.79	3.20

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		Acetone	2.20	5.25
		PM	8.54	30.46
		PM10	8.54	30.46
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	-
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 (excludes FS-801 Flare MSS emissions)		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	-	8.58

(1) Emission point identification - either specific equipment designation or emission point number from plot

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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
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
CO - carbon monoxide
Cl₂ - 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.
- (7) VOC does not include HRVOC emissions.

Date: May 9, 2017