

Emission Sources - Maximum Allowable Emission Rates

Permit Number 114991

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)
Production Emissions				
B93H510	Furnace F-5510 Routine Operations	CO	6.00	--
		NO _x	2.49	--
		VOC (6)	0.45	--
		Ethylene	0.01	--
		SO ₂	1.02	--
		PM	0.54	--
		PM ₁₀	0.54	--
		PM _{2.5}	0.54	--
		Ethane	0.70	--
B93H510ALT	Furnace F-5510 Receiving Recycle Stream (Alternate Operating Scenario)	CO	5.49	--
		NO _x	2.49	--
		VOC (6)	5.27	--
		Ethylene	4.82	--
		SO ₂	0.93	--
		PM	0.38	--
		PM ₁₀	0.38	--
		PM _{2.5}	0.38	--
		Ethane	0.78	--

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B93H510	Furnace F-5510 Annual Emission Rate Caps	CO	--	26.28
		NO _x	--	10.90
		VOC (6)	--	5.95
		Ethylene	--	3.75
		SO ₂	--	0.18
		PM	--	2.38
		PM ₁₀	--	2.38
		PM _{2.5}	--	2.38
		Ethane	--	3.20
B93F1	Flare FS-5081 Routine Operations	CO	43.62	--
		NO _x	5.09	--
		VOC (7)	8.78	--
		Propylene	0.23	--
		Ethylene	0.43	--
		SO ₂	2.27	---
		Ethane	0.41	--
B93F1ALT	Flare FS-5081 Receiving Recycle Stream (Alternate Operating Scenario)	CO	49.81	--
		NO _x	8.19	--
		VOC (7)	18.69	--
		Ethylene	10.07	--
		Propylene	0.23	--
		SO ₂	2.50	--
		Ethane	1.00	--

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B93F1	Flare FS-5081 Annual Emission Rate Caps	CO	--	49.40
		NO _x	--	5.95
		VOC (7)	--	9.85
		Ethylene	--	2.65
		Propylene	--	1.01
		SO ₂	--	0.09
		Ethane	--	1.84
B93FU1 (5)	Process Area Fugitive Emissions	VOC (7)	0.65	2.83
		Ethylene	0.31	1.34
		Propylene	0.07	0.31
B93FU2 (5)	Common Area Fugitive Emissions	VOC (7)	0.76	3.32
		Ethylene	0.26	1.16
		Propylene	0.11	0.47
		HCl	0.01	0.05
B93CT1	Cooling Tower	VOC	1.88	6.81
		PM	0.68	1.11
		PM ₁₀	0.29	0.78
		PM _{2.5}	0.13	0.22
B93LR1	Loading Rack	VOC	0.12	0.01
B83BH921 & B83BH923	Product Transfer Bag Filters	VOC	0.60	0.87
		PM	0.02	0.02
		PM ₁₀	0.02	0.02
		PM _{2.5}	0.02	0.02
B83CY921 & B83CY923	Elutriator Cyclones	VOC	0.01	0.01
		PM	0.56	1.63

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		PM ₁₀	0.56	1.63
		PM _{2.5}	0.56	1.63
B83BH925, B83BH212, B83BH222, B83BH232 & B83BH242	Product Loading Hopper Bag Filters and Loadout Sweep Air Bag Filters	VOC	1.19	1.45
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
B93VSDA	Spin Dryer	VOC	6.08	16.83
Maintenance, Startup and Shutdown Emissions				
B93F1	Flare FS-5081 MSS	CO	33.34	1.46
		NO _x	3.89	0.17
		VOC (7)	62.00	0.62
		Ethylene	20.00	0.31
		Propylene	20.00	0.24
		SO ₂	0.39	0.01
B93MEFU1 and B93MEFU2	Equipment Opening for MSS	VOC (7)	104.08	0.16
		Ethylene	50.00	0.07
		Propylene	50.00	0.06
		HCl	0.14	0.01
B93MEAFU1 and B93MEAFU2	Attachment A MSS	VOC (7)	1.41	0.09
		Ethylene	0.01	0.01
		Propylene	0.01	0.01
		Acetone	0.40	0.02
		PM	0.15	0.01
B93LR1	Loading Rack Utilization for MSS	VOC	0.56	0.01

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- (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
- 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
- PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- HCl - hydrogen chloride
- (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) VOC emission rates include the ethylene emission rates that follow.
- (7) VOC emission rates include the ethylene and propylene emission rates that follow.

Date: August 12, 2014