

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 17573

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. 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	
			lb/hr	TPY
EA-1	"X" Pneumatic Stack	VOC	23.0	11.4
		Styrene	19.2	9.5
EA-2	"Y" Pneumatic Stack	VOC	23.0	11.4
		Styrene	19.2	9.5
EA-3	"Z" Pneumatic Stack	VOC	23.0	11.4
		Styrene	19.2	9.5
E4-1	Butadiene Absorber Vent (5) 7.9	1,3-Butadiene		1.8
E4-1	Butadiene Absorber Vent (6) 0.0	1,3-Butadiene		0.0
E9-1	Bale Dryer	VOC	<0.1	0.1
		NO _x	0.2	0.6
		CO	<0.1	0.1
		PM	<0.1	0.1
E9-2	Bale Dryer	VOC	<0.1	0.1
		NO _x	0.2	0.6
		CO	<0.1	0.1
		PM	<0.1	0.1
E10-1	Baghouse	PM	1.0	4.3
E10-2	Baghouse	PM	0.4	1.8

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Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
E10-3	Baghouse	PM	0.1	0.4
E10-4	Scrubber	PM	1.2	5.3
E11-1	NH ₃ Compressor (440-hp)	VOC	0.1	0.5
		NO _x	8.6	37.7
		CO	6.0	26.2

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			lb/hr	TPY
E11-2	NH ₃ Compressor (440-hp)	VOC	0.1	0.5
		NO _x	8.6	37.7
		CO	6.0	26.2
E11-3	NH ₃ Compressor (550-hp)	VOC	0.1	0.6
		NO _x	10.7	47.2
		CO	7.5	32.7
E11-4	NH ₃ Compressor (440-hp)	VOC	0.1	0.5
		NO _x	8.6	37.7
		CO	6.0	26.2
E11-5	NH ₃ Compressor (440-hp)	VOC	0.1	0.5
		NO _x	8.6	37.7
		CO	6.0	26.2
E13-1	Styrene Tank T-101	VOC		0.2
E13-2	Styrene Tank T-102	VOC		0.2
E13-3	Pure Styrene T-103	VOC		0.2
E13-4	Pure Styrene T-104	VOC		0.2
E13-6	Sulfuric Acid Tank (7)	SO ₂	<0.1	<0.1
E-15	Butadiene Flare (8)	VOC	0.04	0.16
		NO _x	<0.01	0.01
		CO	0.01	0.05
E15-1	Regenerative Thermal Oxidizer 22.5		VOC	16.6
		NO _x	7.7	33.7
		SO ₂	2.3	10.0
		PM	0.2	0.9

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		CO	12.6	55.0
F3-1	Reactor Area Fugitives (4)	VOC	1.76	9.2
		NH ₃	9.0	39.4
F4-1	Recovery Area Fugitives (4 and 9) 10.0	VOC		2.15
F5-1	Latex Area Fugitives (4)	Styrene	0.02	0.10
F6-1	Coagulation Area Fugitives (4) 22.8	VOC		5.8
	(53 Building Exhaust Vents) 19.0	Styrene		4.8
E6-1	Coagulation Area Stack	VOC	7.4	9.9
		Styrene	6.2	8.2
F7-1	Butadiene Comp Fugitives (4) 0.1	VOC		0.02
F13-1	Tank Farm Fugitives (4)	VOC	0.1	0.35
F10-1	Carbon Black Fugitives (4)	PM	0.3	1.5
F11-1	NH ₃ Compressor (4)	NH ₃	3.86	16.9
F12-1	Wastewater Fugitives	VOC	10.7	28.1
	Building Fugitives	Styrene	8.9	23.4
E-13-5	Styrene Unloading Component 0.11	Styrene		0.03
	Fugitives (4 and 10)			
E16-1	Wastewater Vacuum Decanter	Styrene	0.28	1.23

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System (11)

F-20	Butadiene Unloading Area Fugitives (4 and 12)	1,3-Butadiene	0.41	1.37
E17-1	Electrodialysis Reversal Water 0.07 Treatment System (13)	Cl ₂		0.02

- (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 General Rule 101.1 including styrene
 NO_x - total oxides of nitrogen
 CO - carbon monoxide
 PM - particulate matter
 SO₂ - sulfur dioxide
 NH₃ - anhydrous ammonia
 Cl₂ - chlorine
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) The Butadiene Absorber Vent (EPN E4-1), which was authorized under Standard Permit No. 35702 to be routed to the Butadiene Flare (EPN E-15), shall be replaced with a refrigerated condenser also routed to the Butadiene Flare by May 1, 1998. The change from the butadiene absorber to the refrigerated condenser was previously authorized under Standard Exemption Registration No. 36031.
- (6) Maximum allowable emission rates apply after May 1, 1998.
- (7) Source previously authorized under Permit Exemption No. X-21126.
- (8) Previous authorizations under Permit Exemption No. X-22986, Standard Permit No. 35702, and Standard Exemption Registration No. 36031.
- (9) Includes fugitive emissions associated with the refrigerated condenser previously authorized under Standard Exemption Registration

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No. 36031.

(10) Source previously authorized under Standard Exemption Registration No. 34523.

(11) Source previously authorized under Permit Exemption No. X-21136.

(12) Source previously authorized under Permit Exemption No. X-22985.

(13) Source previously authorized under Permit Exemption No. X-21127.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day_____Days/week_____Weeks/year_____or Hrs/year 8,760

Dated _____