

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 4140A

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
33	Storage Silo Filter	Polyethylene	0.009	0.02
34	Storage Silo Filter	Polyethylene	0.01	0.04
95-103	Storage Silo Filters	Polyethylene	0.0142	0.001
121	System 15 Transfer	Polyethylene	0.0142	0.001
114	Fluff Blender	Polyethylene	0.075	0.0145
108-111	D and E Feed	Polyethylene	0.014	0.0135
		VOC	0.50	2.10
122	System 16 Transfer	Polyethylene	0.06	0.12
201	Activator Vent	X-PM	<1.3x10 <sup>-3</sup>	<5.7x10 <sup>-3</sup>
		VOC	0.50	0.27
		NO <sub>x</sub>	0.001	0.002
		CO	0.002	0.004
203	Activator Stack	NO <sub>x</sub>	0.85	<1.30
		CO	0.20	<0.30
		VOC	0.05	0.078
		SO <sub>2</sub>	0.02	0.04
		X-PM	0.024	0.037
204	Catalyst X Vent Filter	X-PM	<1.3x10 <sup>-3</sup>	5.75x10 <sup>-5</sup>
207	Purge Col. Receiver Vent	Polyethylene	1.0x10 <sup>-3</sup>	3.0x10 <sup>-3</sup>
		VOC	0.04	0.175

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			lb/hr	TPY
208	Vib. Screen Receiver Vent	Polyethylene VOC	1.0x10 <sup>-3</sup> 0.04	3.0x10 <sup>-3</sup> 0.175
210	Cooling Tower	PM VOC	0.14 0.50	0.60 0.01
209	Vib. Screen Oversize Vent	VOC	0.007	0.03
219	F10 F/R	Polyethylene VOC	0.001 0.007	0.004 0.03
220	Extruder Feed Silo Vent	Polyethylene VOC	0.001 0.70	0.004 3.03
229	System 11 Transfer	Polyethylene	0.005	0.02
230	System 37 Transfer	Polyethylene	0.006	0.024
231	System 8 Transfer	Polyethylene	0.006	0.024
232	System 9 Transfer	Polyethylene	0.008	0.032
233	System 20 Transfer	Polyethylene	0.004	0.001
23	Butene Storage (6)	Butene	-.---	-.---
26	Isopentane (5)	Isopentane	-.---	-.---
38	Cooling Tower (4)	PM <sub>10</sub> VOC	0.35 0.41	1.40 1.64
48	Fugitives (4)	VOC	2.217	9.50
234	F394A	Polyethylene	3.0x10 <sup>-6</sup>	1.2x10 <sup>-5</sup>
235	F394B (7)	Polyethylene	3.0x10 <sup>-6</sup>	-.---

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
236	F3024A (7)	Polyethylene	$3.0 \times 10^{-6}$	-.---
237	F3024B (7)	Polyethylene	$3.0 \times 10^{-6}$	-.---
239	System 19 Transfer	Polyethylene	0.0077	0.015
240	F3048	Additives (BHT)	$2.0 \times 10^{-4}$	$8.0 \times 10^{-4}$
241	System 5 Transfer	Polyethylene	$8.0 \times 10^{-4}$	0.0034
242	System 31 Transfer	Polyethylene	$4.0 \times 10^{-4}$	0.0017
32	Catalyst Preparation	Catalyst PM	0.009	$9.0 \times 10^{-4}$
49	Silica Dehydrator	Silica PM	0.009	$9.0 \times 10^{-4}$
71	Silica Blow	Silica PM	0.009	$9.0 \times 10^{-4}$
73	Silica Storage	Silica PM	0.009	$9.0 \times 10^{-4}$
74	Silica Blow	Silica PM	0.009	$9.0 \times 10^{-4}$
75	Catalyst Storage	Silica PM	0.009	$9.0 \times 10^{-4}$

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.

PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

CO - carbon monoxide

X-PM - catalyst (confidential)

SO<sub>2</sub> - sulfur dioxide

BHT - butylated hydroxy toluene

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- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) This tank is vented to the flare, but has a fire relief valve that will vent to the atmosphere in the event of a fire.
- (6) Vent from this tank is to the flare during normal operation. Vent is to the atmosphere during emergency over pressure.
- (7) Emissions from EPNs 234, 235, 236, and 237 are listed under 234 since only one source is emitting at any given time. The transfer system feeding the silos that have these EPNs feed only one silo at a time such that the total emission from them is the same.

\* 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 February 18, 2005