EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 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 (Note 1)	Storage Silo Filter	Polyethylene	0.009	0.02
34	Storage Silo Filter	Polyethylene	0.01	0.04
95-103 (Note 2)	Storage Silo Filters	Polyethylene	0.0142	0.001
121 (Note 2)	System 15 Transfer	Polyethylene	0.0142	0.001
114 (Note 3)	Fluff Blender	Polyethylene	0.075	0.0145
108-111 (Note 4)	D and E Feed	Polyethylene	0.014	0.0135
		VOC	0.50	2.10
122	System 16 Transfer	Polyethylene	0.06	0.12
201 (New)	Activator Vent $<5.7x10^{-3}$	X-PM	$<1.3x10^{-3}$	
		VOC	0.50	0.27
		NO_X	0.001	0.002
		CO	0.002	0.004
203 (New)	Activator Stack	NO_X	0.85	<1.30
		CO	0.20	<0.30
		VOC	0.05	0.078
		SO_2	0.02	0.04
		X-PM	0.024	0.037

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
204 (New)	Catalyst X Vent Filter	X-PM	<1.3x10^{-3}	5.75x10^{-5}
207 (New)	Purge Col. Receiver Vent	Polyethylene	1.0x10^{-3}	3.0x10^{-3}
		VOC	0.04	0.175
208 (New)	Vib. Screen Receiver Vent	Polyethylene		1.0x10^{-3} 3.0x10^{-3}
		VOC	0.04	0.175
210 (New)	Cooling Tower	PM	0.14	0.60
		VOC	0.50	0.01
209 (New)	Vib. Screen Oversize Vent	VOC		0.007 0.03
219 (New)	F10 F/R	Polyethylene	0.001	0.004
		VOC	0.007	0.03
220 (New)	Extruder Feed Silo Vent	Polyethylene	0.001	0.004
		VOC	0.70	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 (Notes 6 and 12)		Butene Storage	Butene	-.--- -.---
26 (Note 7)	Isopentane	Isopentane	-.---	-.---
38	Cooling Tower (4)	PM_{10}	0.35	1.40

		VOC	0.41	1.64
47 (Note 8)	GP Flare	VOC	9.50	7.12
		NO_x	2.25	2.75
		CO	12.20	14.00
		SO_2	0.375	0.14
48 (Note 9)	Fugitives (4)	VOC	2.217	9.50
234	F394A	Polyethylene	$3.0x10^{-6}$	$1.2x10^{-5}$
235 (Note 13)	F394B	Polyethylene	$3.0x10^{-6}$	-.---

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
236 (Note 13)	F3024A	Polyethylene	$3.0x10^{-6}$	-.---
237 (Note 13)	F3024B	Polyethylene	$3.0x10^{-6}$	-.---
239	System 19 Transfer	Polyethylene	0.0077	0.015
240	F3048	Additives (BHT)	$2.0x10^{-4}$	$8.0x10^{-4}$

241 (Note 11)	System 5 Transfer	Polyethylene	8.0×10^{-4}	0.0034
242	System 31 Transfer	Polyethylene	4.0×10^{-4}	0.0017
32	Catalyst Preparation	Catalyst PM	0.009	9.0×10^{-4}
49	Silica Dehydrator	Silica PM	0.009	9.0×10^{-4}
71	Silica Blow	Silica PM	0.009	9.0×10^{-4}
73	Silica Storage	Silica PM	0.009	9.0×10^{-4}
74	Silica Blow	Silica PM	0.009	9.0×10^{-4}
75	Catalyst Storage	Silica PM	0.009	9.0×10^{-4}

(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) PM - particulate matter, suspended in the atmosphere, including PM_{10}.
PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
VOC - volatile organic compounds as defined in General Rule 101.1
NO_X - total oxides of nitrogen
CO - carbon monoxide
X-PM - catalyst (confidential)
SO_2 - sulfur dioxide
BHT - butylated hydroxy toluene
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

* 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

(Note 1) - Emissions from Emission Point No. (EPN) 33 are half pellets and half fluff.
(Note 2) - Emissions occur for only 200 hrs/yr.
(Note 3) - Emissions occur for only 4,000 hrs/yr.
(Note 4) - D and E emissions - volatile organic compound concentration will be the same as EPN 220, and the hourly rate is proportional to the feed rates.
(Note 5) - EPNs 225, 226, 243/244, 115, 119, 120, and 76/77 have been eliminated.
(Note 6) - EPN 23 (Butene Storage) is being inerted and removed from service.
(Note 7) - 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.
(Note 8) - The flare nitrogen oxide and carbon monoxide emissions are increased due to the significant increase in natural gas flow to maintain a minimum Btu content.
(Note 9) - See fugitive emission details.
(Note 10) - Pellet storage silos have no normal emissions.
(Note 11) - System 5 has been upgraded to accommodate higher pellet transfer rates.
(Note 12) - Vent from this tank is to the flare during normal operation. Vent is to the atmosphere during emergency over pressure.
(Note 13) - 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.

Dated_____