

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

Permit No. 583A

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 Rates *	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	
<u>TPY</u>				
<u>HDPE Area</u>				
37	Cooling Tower (4)	VOC	1.008	4.42
39	Activator Burner	VOC	0.018	0.036
		NO _x	0.899	1.80
		SO ₂	0.004	0.008
		PM	0.006	0.01
		CO	0.225	0.45
50	Fugitives (4)	VOC	3.34	14.62
78	Dry-Flo Loading Bin	PM	0.255	0.074
79	Catalyst Fines Filter	PM	0.004	0.001
80	Catalyst Fines Filter	PM	0.004	0.001
81	Catalyst Mud Tank Filter	PM	0.0024	0.001
82	Catalyst Mud Tank Filter	PM	0.0024	0.001
83	Dry-Flo Vent Separator	PM	<0.01	<0.01
84	Dry-Flo Vent Separator	PM	<0.01	<0.01
89-94, 112-113	Storage Bin Filters	VOC	0.37	1.62
		PM	0.04	0.18

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<u>Emission Rates</u>	<u>Source</u>	<u>Air Contaminant</u>	<u>Emission</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>		
116, 117, 118	Receiver Dust Collector and Baghouse	VOC PM	0.029 0.005	0.13 0.02

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	
<u>lb/hr</u>			
<u>LDPE Area (Reaction Lines 8, 9, 10, 11, 12, and 13)</u>			
INCIN-1	Process Incinerator	VOC	0.64
		NO _x	0.59
		PM	<0.01
		CO	0.90
1	Flare	Ethylene	36.00
		Other VOC	3.94
		NO _x	3.50
		SO ₂	<0.01
		PM	<0.01
		CO	26.00
25	Tank 25	VOC	0.01
4	Cooling Tower	VOC	0.20
13CT	Cooling Tower	VOC	0.08
7	No. 2 Hot Oil Heater	VOC	0.02
		NO _x	1.12
		SO ₂	0.17
		PM	<0.01
		CO	0.28
06	Purification Fugitives (4)	Ethylene	2.76
		Other VOC	0.44
03	Reactor Fugitives (4)	Ethylene	2.00
		Other VOC	0.93
F2	Compression Fugitives (4)	Ethylene	1.64

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<u>Emission</u> <u>Rates</u>	<u>Source</u>	<u>Air Contaminant</u>	<u>Emission</u>
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	

		Other VOC	0.42
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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	
<u>lb/hr</u>			
72	Shaft Oven Vent	VOC	<0.01
		NO _x	0.05
		SO ₂	<0.01
		PM	<0.01
		CO	0.01
8	No. 1 Hot Oil Heater	VOC	0.02
		NO _x	1.12
		SO ₂	0.17
		PM	<0.01
		CO	0.28
31	OLDSTORG (6)	Ethylene	13.20
		Other VOC	36.90
8CV	Compressor 8 (7)	Ethylene	4.17
9ACV	Compressor 9 (5) (6)	Ethylene	4.17
9BCV	Compressor 9 (5) (6)	Ethylene	4.17
10ACV	Compressor 10 (5) (6)	Ethylene	4.17
10BCV	Compressor 10 (5) (6)	Ethylene	4.17
11ACV	Compressor 11 (5) (6)	Ethylene	4.17
11BCV	Compressor 11 (5) (6)	Ethylene	4.17
INCIN-3	Process Incinerator (6)	VOC	0.64
		NO _x	0.59
		PM	<0.01
		CO	0.90

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<u>lb/hr</u>			

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LDPE AREA EMISSION CAPS - BY CONTAMINANT BY YEAR - TPY

	Completed Phases - Year End		
	Phases I-IV 1999	Phase V 2001	Phases VI-VII 2003
VOC	354	353	89
NO _x	17	17	19
SO ₂	2	2	2
PM	2	2	2
CO	39	39	43

- (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
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - particulate matter
 CO - carbon monoxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Allowable emissions for Compressors 9, 10, and 11 are totals from both vents associated with each compressor.
- (6) Controlled by new INCIN-3 in 2003 - INCIN-3 allowable in effect at that time, no allowables for others.
- (7) Controlled by INCIN-1 7/99 - no allowable.

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

8,760 Hrs/year

Dated _____