EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 18773

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**
Polyethylene Facility:				
700	Rxn and Ethylene Purification Fugitives (4)	VOC	5.82	25.46
703	Catalyst Preparation Fugitives (4)	VOC	0.03	0.13
704	Analyzer Vent	VOC	0.22	0.96
705	Small Flare	CO	37.12	60.38
		NO_X	11.99	19.51
		VOC	34.73	53.82
707	Cycle Gas Compressor Seal/Lube Oil Vent	VOC	0.11	0.48
708	Catalyst Transfer Tank Vent Filter	PM	0.27	<0.01
709	Catalyst Transfer Tank Vent Filter	PM	0.27	<0.01
712	Catalyst Vent Filter	PM	0.09	<0.01
715	Pneumatic Conveyor Vent Filter	PM	0.03	0.04
716-717	Additive Bin Vent Filters	PM	0.06	0.04
718	Trim Receiver Vent Filter	PM	0.03	0.03
720	Pelleting System Dust Collector	PM	<0.01	0.02

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
721	Pelleter Dryer Exhaust	PM	0.95	3.11
720, 722-724	Storage/Blend Bin Vent Filters and Pelleting System Dust Collector 18.08	PM	0.10	0.31
		VOC		6.18
725	Pellet Loading Vent Filter	PM	0.10	0.31
246	Large Flare	CO	16.95	3.17
		NO_X	3.33	0.62
		VOC	32.71	8.45
772	No. 3 Activator	PM	0.03	0.01
		VOC	159.87	10.03
773	No. 3 Activator Blow Tank	PM	0.02	<0.01
Ethylene Propylene Rubber Facility:				
1100	Flare (5)	CO	46.82	90.96
		HCl	3.42	4.94
		H_2S	<0.01	<0.01
		NH_3	0.76	0.01
		NO_X	5.78	10.61
		SO_2	1.38	0.13
		VOC (6)	51.03	59.83
	Flare Natural Gas Combustion (9)	CO	86.18	74.69
		NO_X	10.05	8.71
		SO_2	0.50	0.43
		VOC	3.00	2.60
1101	Seal Pot	VOC	0.17	<0.01
1102	Dust Collection Exhaust	PM	0.39	0.56
1105	Guard Filter	PM	0.07	0.27

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
1107	Filter Exhaust	PM	<0.01	<0.01
1108	Catalytic Oxidizer Vent	CO	1.55	6.09
		HCl	7.32	17.52
		NO_X	4.23	16.61
		PM	0.03	0.11
		SO_2	0.09	0.32
		VOC (7)	7.72	21.65
1109/1110	Product Blending Dust Collectors	PM	0.76	3.35
		VOC	<0.01	<0.01
1111	Hopper Car Unloading Guard Filter	PM	0.10	0.02
1112	Hopper Car Loading Filter	PM	0.29	1.26
1113	Catalyst Surge Tank Filter	PM	<0.01	<0.01
1115	Analyzer Vents	VOC	0.04	0.17
1116	Sample Vents	VOC	<0.01	<0.01
1117	Additive Feeder Filter	PM	0.01	0.03
1120	Catalyst Deactivator Storage Tank	VOC	<0.01	<0.01
1121	Portable Baghouse	CO	1.42	6.24
		NO_X	1.84	8.07
		PM	0.07	0.02
		VOC	0.27	1.17
1122	Bagging Bldg. Bag Filter	PM	0.17	0.04
		VOC	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
1123	Purged Product Container 1	PM	<0.01	<0.01
1124	Purged Product Container 2	PM	<0.01	<0.01
FUGS	Area Fugitives (4)	NH_3	0.01	0.04
		VOC (8)	6.27	27.49
Olefins II Facility				
SD89	Fugitives - Product Ethylene (4)	VOC	16.31	71.41

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source name. For fugitive sources use area name or fugitive source name.
(3) CO - carbon monoxide
HCl - hydrogen chloride
H_2S - hydrogen sulfide
NH_3 - ammonia
NO_X - total oxides of nitrogen
PM - particulate matter, suspended in the atmosphere, including PM_{10}
PM_{10} - particulate matter 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.
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in 30 Texas Administrative Code Section 101.1
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) These hourly flare emissions represent worst-case scenarios from normal expected operations. A sequence of events involving reactor shutdown, purging, and restart is expected to occur 12 times per year with duration of 1.8 hours per occurrence, affecting VOC, NO_X, and CO emissions. Resultant total short-term flare emissions in lb/hr during these events will not exceed: VOC - 319.9; NO_X - 44.5; and CO - 380.8. Annual emissions as shown include these events.
(6) Can contain up to 1.10 tons per year(TPY) methanol and 0.09 TPY triethylamine.
(7) Can contain up to 11.56 TPY methanol.
(8) Can contain up to 3.46 TPY methanol and 0.05 TPY triethylamine.
(9) Flare emissions from natural gas consumption during process start ups and while the unit is shutdown.

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

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**

Hrs/day 24 Days/week 7 Weeks/year 52

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated October 8, 2001