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.

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY	*
Polyethylene Facility:					
700	Rxn and Ethylene Purification	VOC		2.30	
	9.96 Fugitives (4)				
703	Catalyst Preparation Fugitives (4)	VOC		0.08	
	0.36				
704	Analyzer Vent	VOC	0.22	0.96	
705	Small Flare	VOC	26.30	115.30	
		NO_x	3.43	15.02	
		CO	29.39	128.75	
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	Additive Bin Vent Filter	PM	0.03	0.01	
717	Additive Bin Vent Filter	PM	0.03	0.03	

718	Trim Receiver Vent Filter	PM	0.72	0.09
721	Pelleter Dryer Exhaust	PM	0.78	3.41

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY
720, 722-724	Storage/Blend Bin Vent Filters and Pelleting System Dust Collector	VOC	3.43	15.01
		PM	1.01	4.43
725	Pellet Loading Vent Filter	PM	1.91	4.80
246	Large Flare	VOC	43.09	5.97
		NO_x	2.92	0.45
		CO	14.86	2.30
772	No. 3 Activator	PM	0.03	0.01
		VOC	159.87	10.02
773	No. 3 Activator Blow Tank	PM	0.02	<0.01
Ethylene Propylene Rubber Facility:				
1100	Flare (5)	VOC	38.67	36.51
		NO_x	18.59	10.68
		CO	74.02	42.51
		PM	0.01	<0.01
		SO_2	0.18	0.09
		H_2S	<0.01	<0.01
		HCl	7.91	4.30
		ammonia	0.18	<0.01
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
1106	Dust Collector Vacuum System	PM	0.05	0.20

1107	Filter Exhaust	PM	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates lb/hr	TPY	*
1108	Catalytic Oxidizer Vent	VOC	6.62	22.86	
		NO_x	0.17	0.75	
		CO	0.05	0.22	
		HCl	0.04	0.15	
1109/1110	Product Blending Dust Collectors	VOC		<0.01	<0.01
		PM	0.53	1.83	
1111	Hopper Car Unloading Guard Filter	PM		0.10	0.02
1112	Hopper Car Loading Filter	PM		0.23	1.00
1113	Catalyst Surge Tank Filter	PM		<0.01	<0.01
1116	Sample Vents	VOC	<0.01	<0.01	
1117	Additive Feeder Filter	PM	<0.01	0.02	
1120	Catalyst Deactivator Storage Tank	VOC		<0.01	<0.01
FUGS	Area Fugitives (4)	VOC	6.04	26.51	
		ammonia	0.01	0.06	
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 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
CO - carbon monoxide
PM - particulate matter
SO_2 - sulfur dioxide
H_2S - hydrogen sulfide
HCl - hydrogen chloride

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(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

(5) These hourly 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. Resultant total short-term flare emissions in lb/hr during these events will not exceed: VOC - 383.82; NO_x - 117.97; CO - 469.82; PM - 0.01; SO_2 - 0.18; H_2S - <0.01; and HCl - 7.91. Annual emissions as shown include these events.

* 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_____