

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 1567

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

<u>Emission Rates *</u>	Source	Air Contaminant	<u>Emission</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
A-226	Silica Preheater	PM	0.01	0.02
A-227	No. 1 Activator	PM	0.01	0.01
		VOC	72.00	9.92
A-228	No. 1 Activator Blow Tank	PM		0.04
	0.01			
A-229	Filter, Bins 1 through 5	PM		0.14
	0.04			
A-230	G-5 Blender Blow Tank	PM	0.12	0.02
A-231	Filter, Bins 11 through 15	PM		0.09
	0.01			
A-232	Filter, Bins 16 through 20	PM		0.13
	0.02			
A-233	G5 Catalyst Feed Vent	PM	0.01	<0.01
A-245	Y-System Baghouse Vent	PM	0.10	0.19
246	Large Flare	VOC	126.73	68.66
		NO _x	1.90 (5)	7.43
		CO	9.69 (5)	37.84
A-248	G5 Gas Compressor	VOC	0.20	0.88
	Seal Oil Vent			

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A-249	Analyzer Vents	VOC	0.32	1.36
A-401, A-402, A-404, A-615	X-1, X-2, X-5, and X-6 Transfer Systems	PM	0.29	0.69 (7)
A-403	X-3 Transfer System	PM	0.10	0.19
A-409	Blending Bins Baghouse	PM	7.20	2.70
A-540	Master Batch System Vent		PM	0.02
		<0.01		
1005	G-5 Product Purge Bin Rotary Feeder Vent	PM	0.04	0.18
A-1029	Resin Seed Bed Vent (8)		PM	--
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SILOS

A-234	Silo 101 Baghouse
A-235	Silo 102 Baghouse
A-236	Silo 103 Baghouse
A-237	Silo 104 Baghouse
A-238	Silo 105 Baghouse
A-239	Silo 106 Baghouse
A-240	Silo 107 Baghouse
A-241	Silo 201 Baghouse
A-242	Silo 202 Baghouse
A-243	Silo 203 Baghouse
A-244	Silo 204 Baghouse
A-399	Silo 205 Baghouse
A-400	Silo 206 Baghouse
A-387	Silo 401 Baghouse
A-388	Silo 402 Baghouse
A-389	Silo 403 Baghouse
A-390	Silo 404 Baghouse
A-391	Silo 405 Baghouse
A-392	Silo 406 Baghouse

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hrTPY</u>
A-393	Silo 301 Baghouse		
A-394	Silo 302 Baghouse		
A-395	Silo 303 Baghouse		
A-396	Silo 304 Baghouse		
A-397	Silo 305 Baghouse		
A-398	Silo 306 Baghouse		
(7)	Total Silos	PM	0.15 (6)0.69
		VOC	6.61 (6)11.37
(7)			

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hrTPY</u>	

BLENDING BINS

A-405	North Blending Bin			
A-406	South Blending Bin			
(7)	Total EPNs A-405 and A-406	PM	0.90 (6)	0.49
Feed Streams	Fugitives (4) (ethylene, butene, hexene, and isopentane)	VOC	7.69	33.66
Reactor Area	Fugitives (4)	VOC	5.87	25.71

CATALYST EXPANSION/ISOPENTANE RECOVERY

1125	No. 4 Activator Vent Filter 0.02	PM	<0.01	
1126	No. 4 Activator Blow Tank 0.01 Vent Filter	PM	<0.01	
1127	G2 Blender Blow Tank Vent Filter	PM	<0.01	0.01
1128	G4 Blender Blow Tank Vent Filter	PM	<0.01	0.01
1129	Catalyst Expansion Area Fugitives (4)	VOC	1.05	4.59
705	Small Flare	VOC	17.41	5.03

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Point No. (1)	Name (2)	Name (3)	lb/hrTPY	
		NO _x	8.15	3.01
		CO	12.46	4.60
530	THF Tank Vent	VOC	22.06	0.53
535	Bin 7117 Vent Filter	PM	<0.01	0.01
535L	Bin 7117 Cylinder Loading Filter	PM	<0.01	0.01
1044 (9)	South Ethylene Sieve Vent	VOC	<6.00	
1045 (9)	West Ethylene Sieve Vent	VOC	<6.00	
	Total EPNs 1044 and 1045	VOC	1.35	
1046 (9)	Isopentane Sieves Combined 0.94 Vent	VOC	<6.00	
1047 (9)	Butene Sieves Combined VOC Vent		<6.00	2.56
1048 (9)	Hexene Sieves Combined VOC Vent		<6.00	0.84
<u>UCAT-J FACILITY</u>				
705	Small Flare	VOC	0.82	0.37
		NO _x	0.39	0.17
		CO	0.59	0.27
1150	Silica Charge Pot Filter <0.01	PM	<0.01	

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1151	Magnesium Chloride Charge Pot Filter	PM	<0.01	<0.01
1152A	Product Cylinder Vent	VOC	<0.01	<0.01
1152B	Product Cylinder Vent	VOC	<0.01	<0.01
1154	Mineral Oil Tank Vent	VOC	<0.01	<0.01
1155	Fugitives (4)	Inorganic VOC	<0.01 0.52	0.02 2.24
1156A	Fugitives (4)-Silica Truck No. 1	PM	<0.01	<0.01
1156B	Fugitives (4)-Silica Truck No. 2	PM	<0.01	<0.01

(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

VOC - volatile organic compounds as defined in General Rule 101.1

NO_x - total oxides of nitrogen

CO - carbon monoxide

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

(5) Average annual pounds-per-hour emission for large flare.

(6) Maximum hourly emission rate from any one emission point listed within a group.

(7) Maximum total annual emission rate for the group of listed emission points.

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Point No. (1)	Name (2)	Name (3)	lb/hrTPY

(8) This EPN is associated with reactor start-up only.

(9) These activities and associated emissions were first authorized by Standard Exemption Registration No. 30100 on September 1, 1995, and are now authorized by Permit No. 1567.

* 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 _____