

EMISSION SOURCES - EMISSION CAPS AND RATES

Permit No. 4437A and PSD-TX-808

This table lists the maximum allowable emission caps or 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)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>

CO, NO_x Sources:

Flare System **:

216	Flare	CO, NO _x
308	Flare	CO, NO _x
408	Flare	CO, NO _x

Polyethylene Catalyst Activation Facility:

83	Activator No. 2 Main Burner	CO, NO _x		
86	Activator No. 3 Main Burner	CO, NO _x		
146	Activator No. 4 Main Burner	CO, NO _x		
170	Activator No. 5 Main Burner	CO, NO _x		
1000	Activator No. 1 Main Burner	CO, NO _x		
1001	Activator No. 1 HEPA Filter	CO		
1003	Activator No. 5 HEPA Filter	CO		
	Emission Cap	CO	165.9	482.5
	Emission Cap	NO_x	22.2	68.7

PM₁₀ Sources:

Polyethylene Catalyst Activation Facility:

83	Activator No. 2 Main Burner	PM ₁₀
86	Activator No. 3 Main Burner	PM ₁₀
146	Activator No. 4 Main Burner	PM ₁₀
170	Activator No. 5 Main Burner	PM ₁₀
1000	Activator No. 1 Main Burner	PM ₁₀
1001	Activator No. 1 HEPA Filter	PM ₁₀

EMISSION SOURCES -EMISSION CAPS AND RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
1002	Act. Nos. 2,3,4 HEPA Filter		PM ₁₀	
1003	Activator No. 5 HEPA Filter		PM ₁₀	
1004	Quench Station Vent (5)	PM ₁₀		
1005	Raw Catalyst Charging Bldg	PM ₁₀		
1006	Drum Unloading Enclosure	PM ₁₀		
1007	Catalyst Fugitives (4)	PM ₁₀		

Polyethylene Plant:

206	PE6 Powder Additive Tank	PM ₁₀
208	PE6 Pellet Blend Tanks	PM ₁₀
209	PE6 Off-Spec Tank	PM ₁₀
210	PE6 Pellet Silos	PM ₁₀
212	PE6 Pellet Blender	PM ₁₀
213	PE6 Supply Silos	PM ₁₀
214	PE6 Loading Bin	PM ₁₀
217	PE6 Extruder Feed/Blender	PM ₁₀
218	PE6 Fluff Loadout	PM ₁₀
219	PE6 Pellet Loadout	PM ₁₀
252	PE6 Powder Additive Tank	PM ₁₀
254	PE6 Pellet Blend Tanks	PM ₁₀
255	PE6 Off-Spec Tank	PM ₁₀
257	PE6 Pellet Silos	PM ₁₀
258	PE6 Pellet Blender	PM ₁₀
261	PE6 Extruder Feed/Blender	PM ₁₀
302	PE7 Powder Additive Tank	PM ₁₀
304	PE7 Pellet Blend Tanks	PM ₁₀
305	PE7 Pellet Loadout	PM ₁₀
311	PE7 Fluff Loadout	PM ₁₀
312	PE7 Pellet Loading	PM ₁₀
313	PE7 Extruder Feed/Blender	PM ₁₀
352	PE7 Powder Additive Tank	PM ₁₀
354	PE7 Pellet Blend Tanks	PM ₁₀
355	PE7 Extruder Feed/Blender	PM ₁₀
402	PE8 Powder Additive Tank	PM ₁₀
404	PE8 Pellet Blend Tanks	PM ₁₀
405	PE8 Pellet Loadout	PM ₁₀

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
411	PE8 Fluff Loadout	PM ₁₀		
412	PE8 Pellet Loading	PM ₁₀		
413	PE8 Extruder Feed/Blender	PM ₁₀		
452	PE8 Powder Additive Tank	PM ₁₀		
454	PE8 Pellet Blend Tanks	PM ₁₀		
455	PE8 Extruder Feed/Blender	PM ₁₀		

HAC Polypropylene Plant:

39A	Tank Farm	PM ₁₀
39B	Pellet Loading Spot 13	PM ₁₀
39C	Pellet Loading Spot 14	PM ₁₀
39D	Hopper Car Loading	PM ₁₀
39E	Bagging and Boxing	PM ₁₀
52	Fluff Filter	PM ₁₀
53	Bagging House	PM ₁₀

HAC Polypropylene Plant (continued):

701	Train 1 Fluff Surge Tank	PM ₁₀	
702	Train 2 Fluff Surge Tank	PM ₁₀	
704	Train 4 Fluff Surge Tank	PM ₁₀	
710	Train 1 Extruder Feed Tank		PM ₁₀
711	Train 1 Weigh Tank	PM ₁₀	
712	Train 1 Finishing Vent	PM ₁₀	
716	Train 1 Pure Add. Hopper	PM ₁₀	
719	Train 1 Pellet Dryer	PM ₁₀	
720	Train 2 Extruder Feed Tank		PM ₁₀
721	Train 2 Weigh Tank	PM ₁₀	
722	Train 2 Finishing Vent	PM ₁₀	
729	Train 2 Pellet Dryer	PM ₁₀	
730	Train 3 Tank Vent Filter	PM ₁₀	
731	Train 3 Weigh Tank	PM ₁₀	
732	Trains 3,4 Finishing Vent		PM ₁₀
736	Trains 3,4 Pure Add. Hopper		PM ₁₀
739	Train 3 Pellet Dryer	PM ₁₀	
740	Train 4 Extruder Feed Tank		PM ₁₀

EMISSION SOURCES -EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

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

741	Train 4 Weigh Tank	PM ₁₀		
750	Train 4 Pellet Dryer	PM ₁₀		

GPH Polypropylene Plant:

810A	Additive Vent Filter A	PM ₁₀		
810B	Additive Vent Filter B	PM ₁₀		
810C	Additive Vent Filter C	PM ₁₀		
810D	Additive Vent Filter D	PM ₁₀		
810E	Additive Vent Filter E	PM ₁₀		
810F	Additive Vent Filter F	PM ₁₀		
810G	Additive Vent Filter G	PM ₁₀		
811	Additive Pressure ELBF	PM ₁₀		
816	Pellet Dryer Vent	PM ₁₀		
817A	Pellet Silo A Filter	PM ₁₀		
817B	Pellet Silo B Filter	PM ₁₀		
817C	Pellet Silo C Filter	PM ₁₀		
817D	Pellet Silo D Filter	PM ₁₀		
818	Pellet Service Hopper	PM ₁₀		
819A	Blender Silo A	PM ₁₀		
819B	Blender Silo B	PM ₁₀		
820	Off Pellet Hopper	PM ₁₀		
821	B-Pellet Feed Hopper	PM ₁₀		
822	Pellet Feed Hopper Filter		PM ₁₀	
39D	S-E PP Hopper Car Loading		PM ₁₀	
39E	PP Boxing and Bagging	PM ₁₀		
Emission Cap		PM₁₀	5.3	16.5

VOC Sources:

Flare System:

216	Flare	VOC		
308	Flare	VOC		
408	Flare	VOC		

Hydrocarbon Loading/Unloading Facility:

900	Piping Fugitives (4) (6)	VOC		
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Polyethylene Catalyst Activation Facility:

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
83	Activator No. 2 Main Burner		VOC	
86	Activator No. 3 Main Burner		VOC	
146	Activator No. 4 Main Burner		VOC	
170	Activator No. 5 Main Burner		VOC	
1000	Activator No. 1 Main Burner		VOC	

Polyethylene Plant:

201	PE6 Flash Tank	VOC	
207	PE6 Pellet Dryer	VOC	
208	PE6 Pellet Blend Tanks	VOC	
209	PE6 Off-Spec Tank	VOC	
210	PE6 Pellet Silos	VOC	
212	PE6 Pellet Blender	VOC	
213	PE6 Supply Silos	VOC	
217	PE6 Extruder Feed/Blender		VOC
219	PE6 Pellet Loadout	VOC	
250	PE6 Flash Tank	VOC	
253	PE6 Pellet Dryer	VOC	
254	PE6 Pellet Blend Tanks	VOC	
255	PE6 Off-Spec Tank	VOC	
257	PE6 Pellet Silos	VOC	
258	PE6 Pellet Blender	VOC	
259	PE6 Piping Fugitives (4)	VOC	
260	PE6 Cooling Tower (4)	VOC	
261	PE6 Extruder Feed/Blender		VOC
300	PE7 Flash Tank	VOC	
303	PE7 Pellet Dryer	VOC	
304	PE7 Pellet Blend Tanks	VOC	
305	PE7 Pellet Loadout	VOC	
306	PE7 Piping Fugitives (4)	VOC	
307	PE7 Cooling Tower (4)	VOC	

Polyethylene Plant (continued):

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
313	PE7 Extruder Feed/Blender		VOC	
350	PE7 Flash Tank	VOC		
353	PE7 Pellet Dryer	VOC		
354	PE7 Pellet Blend Tanks	VOC		
355	PE7 Extruder Feed/Blender		VOC	
400	PE8 Flash Tank	VOC		
403	PE8 Pellet Dryer	VOC		
404	PE8 Pellet Blend Tanks	VOC		
405	PE8 Pellet Loadout	VOC		
406	PE8 Piping Fugitives (4)	VOC		
407	PE8 Cooling Tower (4)	VOC		
413	PE8 Extruder Feed/Blender		VOC	
450	PE8 Flash Tank	VOC		
453	PE8 Pellet Dryer	VOC		
454	PE8 Pellet Blend Tanks	VOC		
455	PE8 Extruder Feed/Blender		VOC	

HAC Polypropylene Plant:

39A	Tank Farm	VOC		
39B	Pellet Loading Spot 13	VOC		
39C	Pellet Loading Spot 14	VOC		
39E	Bagging and Boxing	VOC		
56	Piping Fugitives (4)	VOC		
132	Cooling Tower (4)	VOC		
701	Train 1 Fluff Surge Tank	VOC		
702	Train 2 Fluff Surge Tank	VOC		
704	Train 4 Fluff Surge Tank	VOC		
710	Train 1 Extruder Feed Tank		VOC	
711	Train 1 Weigh Tank	VOC		
712	Train 1 Finishing Vent	VOC		
719	Train 1 Pellet Dryer	VOC		
720	Train 2 Extruder Feed Tank		VOC	
721	Train 2 Weigh Tank	VOC		
722	Train 2 Finishing Vent	VOC		
729	Train 2 Pellet Dryer	VOC		

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
730	Train 3 Tank Vent Filter	VOC		
731	Train 3 Weigh Tank	VOC		
732	Trains 3,4 Finishing Vent		VOC	
740	Train 4 Extruder Feed Tank		VOC	
741	Train 4 Weigh Tank	VOC		
748	Train 4 Extruder Chute	VOC		
749	Train 4 Extruder Vent	VOC		
750	Train 4 Pellet Dryer	VOC		

GPH Polypropylene Plant:

801	Piping Fugitives (4)	VOC		
803	Cooling Tower (4)	VOC		
815	Extruder Vent	VOC		
816	Pellet Dryer Vent	VOC		
817A	Pellet Silo A Filter	VOC		
817B	Pellet Silo B Filter	VOC		
817C	Pellet Silo C Filter	VOC		
817D	Pellet Silo D Filter	VOC		
818	Pellet Service Hopper	VOC		
819A	Blender Silo A	VOC		
819B	Blender Silo B	VOC		
820	Off Pellet Hopper	VOC		
821	B-Pellet Feed Hopper	VOC		
822	Pellet Feed Hopper	VOC		
39D	S-E PP Hopper Car Loading		VOC	
39E	PP Boxing and Bagging	VOC		
	Emission Cap	VOC	300.7	925.2

Hexene Sources:

Flare System:

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
216	Flare	Hexene		
308	Flare	Hexene		
408	Flare	Hexene		

Hydrocarbon Loading/Unloading Facility:

900 Piping Fugitives (4) (6) Hexene

Polyethylene Plant:

201	PE6 Flash Tank	Hexene		
217	PE6 Extruder Feed/Blender		Hexene	
250	PE6 Flash Tank	Hexene		
259	PE6 Piping Fugitives (4)	Hexene		
261	PE6 Extruder Feed/Blender		Hexene	
300	PE7 Flash Tank	Hexene		
306	PE7 Piping Fugitives (4)	Hexene		
313	PE7 Extruder Feed/Blender		Hexene	
350	PE7 Flash Tank	Hexene		
355	PE7 Extruder Feed/Blender		Hexene	

Polyethylene Plant: (continued)

400	PE8 Flash Tank	Hexene		
406	PE8 Piping Fugitives (4)	Hexene		
413	PE8 Extruder Feed/Blender		Hexene	
450	PE8 Flash Tank	Hexene		
455	PE8 Extruder Feed/Blender		Hexene	
Emission Cap		Hexene	22.1	82.3

(1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.

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AIR CONTAMINANTS DATA

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

(2) Specific point source name. For fugitive sources use area name or fugitive source name.

(3) CO - carbon monoxide

NO_x - total oxides of nitrogen

PM₁₀ - particulate matter less than 10 microns

VOC - volatile organic compounds as defined in General Rule 101.1

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

(5) Emergency use only.

(6) Isobutane, hexene, and n-hexane emissions only. Emissions of other materials at EPN 900 are covered in Permit No. 21150.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule: Hrs/year 8,760

** The PSD-TX-808 emissions are those CO flare emissions attributable to Polyethylene VI, VII, and VIII.

Dated_____