

EMISSION SOURCES - EMISSION CAPS AND RATES

Flexible Permit Numbers 4437A, PSDTX808, and N014M1

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)	Emission Rates *	
			lb/hr	TPY

Flare System - Normal Operation **

216	Flare	CO		
308	Flare	CO		
408	Flare	CO		
	Emission Cap (9)	CO	403.22	401.68

Flare System - MSS:

216	Flare	CO		
308	Flare	CO		
408	Flare	CO		
	Emission Cap	CO	117.12	(9)

Flare System - Normal Operation

216	Flare	NO _x		
308	Flare	NO _x		
408	Flare	NO _x		
	Emission Cap (9)	NO _x	47.03	46.85

Flare System - MSS:

216	Flare	NO _x		
308	Flare	NO _x		
408	Flare	NO _x		
	Emission Cap	NO _x	13.66	(9)

Flare System - Normal Operation

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
216	Flare	SO ₂		
308	Flare	SO ₂		
408	Flare	SO ₂		
	Emission Cap	SO ₂	0.25	0.19

Flare System - Normal Operations:

216	Flare	VOC		
308	Flare	VOC		
408	Flare	VOC		
	Emission Cap	VOC (7)	134.79	212.32

Flare System - MSS:

216	Flare	VOC		
308	Flare	VOC		
408	Flare	VOC		
	Emission Cap	VOC (7)	135.59	(9)

Flare System Cap - Offgas Flaring

216	Flare	VOC		
308	Flare	VOC		
408	Flare	VOC		
	Emission Cap	VOC*** (7)	71.59	113.62

Non Flare CO Sources

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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
1002	Activator No. 2 HEPA Filter	CO		
1003	Activator No. 5 HEPA Filter	CO		
1003A	Activator No. 3 HEPA Filter	CO		
1003B	Activator No. 4 HEPA Filter	CO		
20	Emergency Generator (100 hours per calendar year)	CO		
27	Water Well #5 Engine (876 hours per calendar year)	CO		
	Emission Cap	CO	34.52	16.80

Non-Flare NO_x Sources:

83	Activator No. 2 Main Burner	NO _x		
86	Activator No. 3 Main Burner	NO _x		
146	Activator No. 4 Main Burner	NO _x		
170	Activator No. 5 Main Burner	NO _x		
1000	Activator No. 1 Main Burner	NO _x		
20	Emergency Generator (100 hours per calendar year)	NO _x		
27	Water Well #5 Engine (876 hours per calendar year)	NO _x		
	Emission Cap	NO _x	17.11	14.24

Non Flare PM/PM₁₀ Sources:

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		
1004	Quench Station Vent (5)	PM ₁₀		
1005	Raw Catalyst Charging Building	PM ₁₀		
1006	Drum Unloading Enclosure	PM ₁₀		
1007	Catalyst Fugitives (4)	PM ₁₀		
208	PE6 Pellet Storage Tanks	PM ₁₀		
209	PE6 Off-Spec Tank	PM ₁₀		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
210	PE6 Pellet Storage Tanks/ Cyclone Vents	PM ₁₀		
217 A, B	PE6 Extruder Feed/Blender	PM ₁₀		
219	PE6 Pellet Load out	PM ₁₀		
254	PE6 Pellet Blend Tanks	PM ₁₀		
255	PE6 Off-Spec Tank	PM ₁₀		
257	PE6 Pellet PE6 Pellet Storage Tanks/ Cyclone Vents		PM ₁₀	
261 A, B	PE6 Extruder Feed/Blender	PM ₁₀		
302	PE7 Powder Storage Tank	PM ₁₀		
304	PE7 Pellet Blend Tanks	PM ₁₀		
305	PE7 Pellet Load out	PM ₁₀		
311	PE7 Fluff Load out	PM ₁₀		
313	PE7 Extruder Feed/Blender	PM ₁₀		
352	PE7 Powder Storage Tank	PM ₁₀		
354	PE7 Pellet Blend Tanks	PM ₁₀		
355	PE7 Extruder Feed/Blender	PM ₁₀		
402	PE8 Powder Storage Tank	PM ₁₀		
405	PE8 Pellet Load out	PM ₁₀		
413	PE8 Extruder Feed/Blender	PM ₁₀		
452	PE8 Powder Storage Tank	PM ₁₀		
455	PE8 Extruder Feed/Blender	PM ₁₀		
39C	Pellet Loading Spot 14	PM ₁₀		
716	Train 2 Pure Additive Hopper	PM ₁₀		
736	Trains 4 Pure Additive Hopper	PM ₁₀		
748	Train 4 Extruder Feed Chute	PM ₁₀		
751	Baghouse	PM ₁₀		
39D	S-E PP Hopper Car Loading	PM ₁₀		
810A	Additive Vent Filter A	PM ₁₀		
810C	Additive Vent Filter C	PM ₁₀		
811	Additive Pressure ELBF	PM ₁₀		
813	Powder Feed Weigher Vent Filter	PM ₁₀		
817A	Pellet Silo A Filter	PM ₁₀		
817B	Pellet Silo B Filter	PM ₁₀		
817C	Pellet Silo C Filter	PM ₁₀		
819A	Blender Silo A	PM ₁₀		
819B	Blender Silo B	PM ₁₀		
821 A, B	Pellet Feed Hopper	PM ₁₀		

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
822	Pellet Feed Hopper Filter	PM ₁₀		
827	Railcar Unloading Filter Receiver	PM ₁₀		
39A	Tank Farm	PM ₁₀		
39B	Pellet Loading Spot 13	PM ₁₀		
206	PE6 Powder Additive Tank	PM ₁₀		
252	PE6 Powder Additive Tank	PM ₁₀		
312	PE7 Pellet Loading	PM ₁₀		
404	PE8 Pellet Blending/Storage/ Cyclone	PM ₁₀		
454	PE8 Pellet Blending/Storage/ Cyclone	PM ₁₀		
812 A, B	Grizzly Vent Filter	PM ₁₀		
1001	Activator No. 1 HEPA Filter	PM ₁₀		
1002	Activator No. 2 HEPA Filter	PM ₁₀		
1003	Activator No. 5 HEPA Filter	PM ₁₀		
1003A	Activator No. 3 HEPA Filter	PM ₁₀		
1003B	Activator No. 4 HEPA Filter	PM ₁₀		
10	Sandblasting Fugitives	PM ₁₀		
902	Rail Repair Sandblasting Fugitives	PM ₁₀		
20	Emergency Generator (100 hours per calendar year)	PM ₁₀		
27	Water Well # 5 Engine (876 hours per calendar year)	PM ₁₀		
39Df	Hopper Car Loading Spot	PM ₁₀		
721	Train 2 Weigh Tank	PM ₁₀		
722	Train 2 Finishing Vent	PM ₁₀		
732	Train 4 Finishing Vent	PM ₁₀		
741	Train 4 Weigh Tank	PM ₁₀		
761	HAC Train 4 Peroxide Hopper	PM ₁₀		
	Emission Cap	PM ₁₀	5.90	9.08

Non-Flare SO₂ Sources:

83	Activator No. 2 Main Burner	SO ₂
86	Activator No. 3 Main Burner	SO ₂
146	Activator No. 4 Main Burner	SO ₂
170	Activator No. 5 Main Burner	SO ₂

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
1000	Activator No. 1 Main Burner	SO ₂		
20	Emergency Generator (100 hours per calendar year)	SO ₂		
27	Water Well # 5 Engine (876 hours per calendar year)	SO ₂		
	Emission Cap	SO ₂	0.89	0.13

Non Flare PE VOC Sources:

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
201	PE6 Flash Tank	VOC
206	Powder Storage Tank	VOC
207	PE6 Pellet Dryer	VOC
217 A, B	PE6 Extruder Feed/Blender	VOC
PE6-PELLET	PE6 Pellet Loss	VOC
250	PE6 Flash Tank	VOC
252	Powder Storage Tank	VOC
253	PE6 Pellet Dryer	VOC
259	PE6 Piping Fugitives (4)	VOC
260	PE6 Cooling Tower	VOC
261 A, B	PE6 Extruder Feed/Blender	VOC
300	PE7 Flash Tank	VOC
302	Powder Storage Tank	VOC
303	PE7 Pellet Dryer	VOC
306	PE7 Piping Fugitives (4)	VOC
307	PE7 Cooling Tower	VOC
311	Fluff Hopper Car	VOC
313	PE7 Extruder Feed/Blender	VOC
PE7-PELLET	PE7 Pellet Loss	VOC
350	PE7 Flash Tank	VOC
352	Powder Storage Tank	VOC
353	PE7 Pellet Dryer	VOC
355	PE7 Extruder Feed/Blender	VOC

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
400	PE8 Flash Tank	VOC		
402	Powder Storage Tank	VOC		
403	PE8 Pellet Dryer	VOC		
406	PE8 Piping Fugitives (4)	VOC		
407	PE8 Cooling Tower	VOC		
413	PE8 Extruder Feed/Blender	VOC		
PE8-PELLET	PE8 Pellet Loss			
450	PE8 Flash Tank	VOC		
452	Powder Storage Tank	VOC		
453	PE8 Pellet Dryer	VOC		
455	PE8 Extruder Feed/Blender	VOC		
	Emission Cap	VOC (8)	119.57	480.59

Non Flare PP VOC Sources

132	Cooling Tower	VOC
803	Cooling Tower	VOC
PP-PELLET	HAC Pellet Loss	VOC
56	Piping Fugitives (4)	VOC
716	PP Train 2 Pure Additives Hopper	VOC
729	Train 2 Pellet Dryer	VOC
748	Train 4 Extruder Chute	VOC
749	Train 4 Extruder Vent	VOC
750	Train 4 Pellet Dryer	VOC
751	Baghouse	VOC
801	Piping Fugitives (4)	VOC
810A	GPH Additive Vent Filter A	VOC
810C	GPH Additive Vent Filter C	VOC
811	GPH Additive Pressure Equalization	VOC
	Line Bag Filter	
812 A, B	Grizzly Filter Vents	VOC
813	Powder Feed Weigher Vent Filter	VOC
816	Pellet Dryer Vent	VOC
GPH-PELLET	GPH Pellet Loss	VOC
824	GPH Aeration Hopper	VOC
	Transportation Blower	
825	GPH Powder Silo Transportation	VOC

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
	Blower Vent			
827	Railcar Talc Unloading	VOC		
752	Analyzer Vents	VOC		
754	Hot Oil Systems	VOC		
721	Train 2 Weigh Tank	VOC		
722	Train 2 Finishing Vent	VOC		
728	Train 2 Farrel Continuous	VOC		
	Mixer Vent			
732	Train 4 Finishing Vent	VOC		
736	Train 4 Pure Additives Hopper	VOC		
741	Train 4 Weigh Tank	VOC		
761	Train 4 Peroxide Hopper	VOC		
	Emission Cap	VOC (8)	31.01	77.02

Miscellaneous Facilities VOC Sources

256	PE6 Analyzer Vents	VOC
356	PE7 Analyzer Vents	VOC
456	PE8 Analyzer Vents	VOC
DEG-1	Maintenance Shop Degreaser No. 1	VOC
DEG-2	Maintenance Shop Degreaser No. 2	VOC
DEG-3	Catalyst Activator Degreaser	VOC
DEG-4	PE Maintenance Shop Degreaser	VOC
DEG-6	Hoist and Crane Shop Degreaser	VOC
8	Painting Fugitives	VOC
901	Storage Fugitives (4)	VOC
903	Painting Fugitives	VOC
123	Wastewater Pond No. 1	VOC
124	Wastewater Pond No. 2	VOC
125	Wastewater Pond No. 3	VOC
126	Wastewater Pond No. 4	VOC
20	Emergency Generator	VOC
	(100 hours per calendar year)	
27	Water Well # 5 Engine	VOC
	(876 hours per calendar year)	
65	Underground Gasoline Tank	VOC
65.2	Diesel Tank	VOC

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
900	Piping Fugitives (4) (6)	VOC		
1001	Activator No. 1 HEPA Filter Vent	VOC		
1002	Activator No. 2 HEPA Filter Vent	VOC		
1003	Activator No. 5 HEPA Filter Vent	VOC		
1003A	Activator No. 3 HEPA Filter Vent	VOC		
1003B	Activator No. 4 HEPA Filter Vent	VOC		
	Emission Cap	VOC	46.16	27.32

Hexene Sources:

216	Flare	Hexene
308	Flare	Hexene
408	Flare	Hexene
201	PE6 Flash Tank	Hexene
206	Powder Storage Tanks	Hexene
PE6-PELLET	PE6 Pellet Loss	Hexene
217 A, B	PE6 Extruder Feed/Blender	Hexene
250	PE6 Flash Tank	Hexene
252	Powder Storage Tanks	Hexene
259	PE6 Piping Fugitives (4)	Hexene
261 A, B	PE6 Extruder Feed/Blender	Hexene
300	PE7 Flash Tank	Hexene
302	Powder Storage Tanks	Hexene
306	PE7 Piping Fugitives (4)	Hexene
311	Fluff Hopper Car	Hexene
313	PE7 Extruder Feed/Blender	Hexene
PE7-PELLET	PE7 Pellet Loss	Hexene
350	PE7 Flash Tank	Hexene
352	Powder Storage Tanks	Hexene
355	PE7 Extruder Feed/Blender	Hexene
400	PE8 Flash Tank	Hexene
402	Powder Storage Tanks	Hexene
406	PE8 Piping Fugitives (4)	Hexene
413	PE8 Extruder Feed/Blender	Hexene
PE8-PELLET	PE8 Pellet Loss	Hexene
450	PE8 Flash Tank	Hexene
452	Powder Storage Tanks	Hexene

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
455	PE8 Extruder Feed/Blender	Hexene		
716	Train 2 Pure Additives Hopper	Hexene		
736	Train 4 Pure Additives Hopper	Hexene		
810A	GPH Additive Vent Filter A	Hexene		
810C	GPH Additive Vent Filter C	Hexene		
811	Additive Pressure Equalization Line Bag Filter	Hexene		
812 A, B	Grizzly Vent Filter	Hexene		
813	Powder Feed Weigher Vent Filter	Hexene		
827	Railcar Talc Unloading	Hexene		
901	HC Storage Fugitives	Hexene		
	Emission Cap	Hexene	19.83	74.99

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.

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- (3) CO - carbon monoxide
 - NO_x - total oxides of nitrogen
 - PM₁₀ - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
 - SO₂ - sulfur dioxide
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - AA - acetic acid
 - (4) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
 - (5) Emergency use only.
 - (6) Isobutane, hexene, and n-hexane emissions only. Emissions of other materials at EPN 900 are covered in Permit Number 5662A.
 - (7) The allowable emission rates listed for individual VOC species from this EPN are included in the total VOC emission rates.
 - (8) The allowable emission rates listed for individual VOC species from this EPN are included in the total VOC emission rates and represent emissions from the facility's cooling towers. These units are included in non-flare emissions HRVOC cap.
 - (9) The annual cap for flare system normal operations include MSS emissions.
- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:
- 24 Hrs/day 7 Days/week 52 Weeks/year
- ** The PSDTX808 emissions are those CO flare emissions attributable to Polyethylene VI, VII, and VIII.
- *** These are the N014M1 emissions only. The PE/PP off-gases are used as fuel gas in flares identified by EPN above. Other emissions associated with these flares are included in the emission caps found in the maximum allowable emission caps or rates table of this permit.

Dated October 26, 2009