EMISSION SOURCES - EMISSION CAPS AND RATES

Flexible Permit Numbers 4437A, PSD-TX-808, 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**	**393.38**
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	**NO_x**	**47.03**	**45.88**
Flare System - MSS:				
216	Flare	NO_x		
308	Flare	NO_x		
408	Flare	NO_x		
	Emission Cap	**NO_x**	**13.66**	**(9)**

EMISSION SOURCES - EMISSION CAPS AND RATES

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	SO_2		
308	Flare	SO_2		
408	Flare	SO_2		
	Emission Cap	**SO_2**	**0.17**	**0.26**
Flare System - Normal Operations:				
216	Flare	VOC		
308	Flare	VOC		
408	Flare	VOC		
	Emission Cap	**VOC (7)**	**134.79**	**162.34**
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

EMISSION SOURCES - EMISSION CAPS AND RATES

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	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		
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**	**7.79**	**18.00**

Non-Flare NO$_X$ Sources:

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lb/hr	TPY
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**	**14.25**

Non Flare PM/PM$_{10}$ Sources:

EMISSION SOURCES - EMISSION CAPS AND RATES

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	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}		
210	PE6 Pellet Storage Tanks/ Cyclone Vents	PM_{10}		
217 A, B	PE6 Extruder Feed/Blender	PM_{10}		
219	PE6 Pellet Loadout	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 Loadout	PM_{10}		
311	PE7 Fluff Loadout	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 Loadout	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}		

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

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

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
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}**	**5.42**	**8.13**

Non-Flare SO_2 Sources:

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

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	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		
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		

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
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		
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)**	**119.64**	**480.89**

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		

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
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 Line Bag Filter	VOC		
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 Transportation Blower	VOC		
825	GPH Powder Silo Transportation Blower Vent	VOC		
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 Mixer Vent	VOC		
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)**	**31.15**	**77.62**

Miscellaneous Facilities VOC Sources

256	PE6 Analyzer Vents	VOC		

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
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 (100 hours per calendar year)	VOC		
27	Water Well # 5 Engine (876 hours per calendar year)	VOC		
65	Underground Gasoline Tank	VOC		
65.2	Diesel Tank	VOC		
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**	**46.23**	**27.38**

Hexene Sources:

216	Flare	Hexene		
308	Flare	Hexene		
408	Flare	Hexene		

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
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		
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			
901	HC Storage Fugitives	Hexene		
	Emission Cap	**Hexene**	**21.82**	**79.53**

EMISSION SOURCES - EMISSION CAPS AND RATES

AIR CONTAMINANTS DATA

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

(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.

(3) CO   -   carbon monoxide

NO_x -   total oxides of nitrogen

PM_{10} -   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.

SO_2 -   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 PSD-TX-808 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_____