

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 4005

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

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY (5)
1	Plant 1 Scrubber System (Scrubber Nos. 1 and 2)	VOC	<0.01	0.02
		CH ₂ O	0.03	0.018
		HCl	<0.01	<0.01
		COS	0.006	0.001
2	Flare	VOC	4.70	1.20
		EO	1.37	0.18
		Naphthalene	<0.01	<0.01
		MeOH	<0.01	<0.01
		PO	1.46	0.20
		Xylene	<0.01	<0.01
4	Plant 2 Tank Farm	VOC	0.12	0.52
5	Plant 2 Fugitives (4)	VOC	1.06	4.65
6	Plant 2 Loading and Drumming Operations	VOC	1.41	0.15
7	Oil Heaters	VOC	0.016	0.07
		NO _x	0.90	3.94
		CO	1.51	6.62
8	Plant 1 Tank Farm	VOC	0.07	0.155
		HCl	0.02	0.075

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY (5)
9	Plant 1 Fugitives, Transfer, and Drumming Operations (4)	VOC	0.021	<0.01
		HCl	0.003	<0.001
		CH ₂ O	0.042	0.085
		NH ₃	0.06	0.26
10	Oil/Water Separator Basin	CH ₂ O	<0.01	0.03
11	Plant 2 Cooling Tower	VOC	0.36	1.58
16	Scrubber System (Scrubbers 79S-2A, 2B and C)	VOC	1.20	0.84
		MeOH	0.06	0.01
		Xylene	0.01	0.01
		HAN 0.17	0.01	
		Isopropanol	0.01	0.01
		Ethylbenzene	0.01	0.01
17	Scrubber System, S-7951	VOC	<0.01	0.01
18	R108 Fugitives (4), Plant 3	Total VOC	4.60	3.18
		EO	0.05	0.22
		Naphthalene	0.04	0.05
		MeOH	0.42	0.42
		PO	0.05	0.12
		Xylene	0.12	0.15
		Acrylic Acid	0.08	0.05
		TDI	<0.01	0.01
		Non-HAP VOC	3.31	2.12
		HAN 0.01	0.02	
		Ethyl Benzene	0.01	0.01
20	Scrubber No. S7940	VOC	0.04	<0.01
22	Scrubber No. S7944	VOC	0.03	<0.01
23	Tank 7942	VOC	<0.01	<0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY (5)
24	Tank 7938	VOC	0.03	<0.01
25	Tank 7929	VOC	0.03	<0.01
26	Tank 7930	VOC	0.03	<0.01
27	Tank 7936	VOC	0.63	2.75
28	Tank 7935	VOC	0.58	0.01
29	Tank 7934	VOC	0.57	0.01
30	Tank 7945	VOC	<0.01	<0.01
31	R110 Drum Loading, Plant 3	VOC	<0.01	<0.01
		Polymerized Polyol	0.12	0.02
32	T-7949	Xylene	0.46	0.01
		Ethyl Benzene	0.12	0.01
33	Resin Storage (Tank 7948)	VOC	0.98	0.16
34	Fatty Acid Storage (Tank 7950)	VOC	<0.01	<0.01
35	PTBP Storage (Tank 7947)	VOC	<0.01	<0.01
36	T-7925	Polyol	0.98	0.04

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY (5)
37	Boiler	VOC	0.05	0.22
		NO _x	0.98	4.29
		CO	0.83	3.64
38	TF-13 Fugitives and Loading (Tanks 7956, 7957, 7958, 7959, 7960, 7961, 7962, 7963, 7964, and 7965)	VOC	27.00	0.83
39	TF-15 Fugitives (Tanks 7969, 7970)	EO	0.02	0.10
		PO	0.02	0.10
40	TF-16 (Tank and Fugitives) (Tanks 7971, 7972)	HAN	0.02	0.07
		Xylene	0.02	0.01
		Ethyl Benzene	0.01	0.01
		Polyols	0.01	0.05
41	T-7953	VOC	0.01	0.01
42	T-7968	VOC	0.01	0.01
43	T-7940 (Tank and Fugitives)	Deta	0.01	0.02
44	T-7941 (Tank and Fugitives)	Deta	0.01	0.04
		imidazoline	0.01	0.01
45	T-7942 (Tank and Fugitives)	Deta	0.01	0.04
46	T-7955 (Tank and Fugitives)	Monoethanol amine	0.01	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY (5)
47	T-7966 (Tank and Fugitives)	Imadazoline	0.03	0.02
		HAN	0.01	0.01
		Oxyalkylated Amine	0.02	0.02
		Amide	0.01	0.01
		MeOH	0.01	0.01
		2-Butoxy-ethanol	0.01	0.01
48	T-7967 (Tank and Fugitives)	HAN	0.14	0.15
		Xylene	0.01	0.01
		Ethyl Benzene	0.01	0.01
		IPA	0.01	0.01
		Complex Polyol	0.01	0.01
		Polyol Resin	0.01	0.01
49	Drum and Tote Loading, Plant 4	Nonyl Phenol Resin	0.01	0.01
		VOC	4.95	0.15
		HAN	3.45	0.10
		Xylene	0.05	0.01
		MeOH	1.23	0.04
		IPA	0.16	0.01
50	T-7910	Ethyl Benzene	0.01	0.01
		HAN	0.68	0.03
		Naphthalene	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION SOURCES

- (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 Title 30 Texas Administrative Code § 101.1
 - CH₂O - formaldehyde
 - HCl - hydrogen chloride
 - COS - carbonyl sulfide
 - EO - ethylene oxide
 - MeOH - methyl alcohol
 - HAN - heavy aromatic naphtha
 - IPA - isopropanol
 - PO - polypropylene oxide
 - NO_x - total oxides of nitrogen
 - CO - carbon monoxide
 - NH₃ - ammonia
 - TDI - toluene diisocyanate
 - non-HAP VOC - nonhazardous air pollutant VOC
 - total VOC - total volatile organic compound
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* 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

- (5) Annual emissions are based on a rolling 12-month basis.

Dated February 10, 2006