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 **
1	Plant 1 Scrubber System (Scrubber Nos. 1 and 2)	VOC	<0.01	0.02
		CH_2O	0.03	0.018
		HCl	<0.01	<0.01
		Carbonyl Sulfide	0.006	0.001
2	Flare F-1	VOC	7.56	1.62
		EO	1.37	0.18
		Naphthalene	<0.01	<0.01
		Methanol	<0.01	<0.01
		PO	1.46	0.20
		Xylene	<0.01	<0.01
		NO_x	0.35	0.10
		CO	2.97	0.87
		SO_2	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	VOC	1.41	0.15
7	3 Oil Heaters	VOC	0.04	0.16
		NO_x	0.25	1.09
		CO	0.57	2.49
		SO_2	0.05	0.21
		PM_{10}	0.05	0.23
8	Plant 1 Tank Farm	VOC	0.07	0.155
		HCl	0.02	0.075

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
9	Plant 1 Fugitives (4), Transfer, and Drumming Operations	VOC	0.098	0.337
		HCl	0.003	<0.001
		CH_2O	0.042	0.085
		NH_3	0.06	0.26
10	Oil/Water Separator Basin	CH_2O	<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
		Methanol	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	5.59	3.28
		EO	0.05	0.22
		Naphthalene	0.04	0.05
		Methanol	0.42	0.42
		PO	0.05	0.12
		Xylene	0.12	0.15
		Acrylic Acid	0.08	0.05
		Toluene Diisocyanate	<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. S-7940	VOC	0.04	<0.01
22	Scrubber No. S-7944	VOC	0.14	<0.01
24	Tank 7938	VOC	0.03	<0.01
25	Tank 7929	Code 199	6.61	0.09

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
26	Tank 7930	VOC	0.03	<0.01
27	Tank 7936	VOC	0.63	2.75
28	Tank 7935	HS 150	0.90	0.02
29	Tank 7934	HS 150	0.75	0.02
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	Tank 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	Tank 7925	PPG 3815	0.01	0.04
37	Boiler	VOC	0.05	0.24
		NO_x	0.29	1.28
		CO	0.83	3.62
		SO_2	0.07	0.31
		PM_{10}	0.07	0.33
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 and 7970)	EO	0.02	0.10
		PO	0.02	0.10

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 **
40	TF-16 (Tank and Fugitives) (Tanks 7971 and 7972)	HAN	0.02	0.07
		Xylene	0.02	0.01
		Ethyl Benzene	0.01	0.01
		Polyols	0.01	0.05
41	Tank 7953	VOC	0.01	0.01
42	Tank 7968	VOC	0.01	0.01
43	Tank 7940	Xylene	5.19	0.11
44	Tank 7941 (Tank and Fugitives)	DETA	0.01	0.04
		Imidazoline	0.01	0.01
46	Tank 7955	Monoethanol amine	0.16	0.01
47	Tank 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
		Methanol	0.01	0.01
		2-Butoxy-ethanol	0.01	0.01
48	Tank 7967 (Tank and Fugitives)	HAN	0.14	0.15
		Xylene	0.01	0.01
		Ethyl Benzene	0.01	0.01
		Isopropanol	0.01	0.01
		Complex Polyol	0.01	0.01
		Polyol Resin	0.01	0.01
		Nonyl Phenol Resin	0.01	0.01
49	Drum and Tote Loading, Plant 4	VOC	4.95	0.15
		HAN	3.45	0.10
		Xylene	0.05	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 **
		Methanol	1.23	0.04
		Isopropanol	0.16	0.01
		Ethyl Benzene	0.01	0.01
50	Tank 7910	Code 1506	5.88	0.20
		HAN	0.68	0.03
		Naphthalene	0.01	0.01
51	Tank 7903	VOC	0.68	0.01
52	Tank 7908	VOC	0.18	0.01
53	Tank 7911	VOC	0.01	0.01
54	Tank 7947	VOC	0.01	0.02
55	Tank 7948	VOC	9.63	0.46
56	Tank 7950	VOC	0.06	0.01
57	Tank 7956	VOC	4.65	0.39
58	Tank 7960	VOC	5.22	0.40
59	Tank 7964	VOC	0.01	0.01
60	Tank 7976	VOC	5.24	0.34
61	Tank 7977	VOC	5.22	0.28
62	Tank 7978	Methanol	20.90	0.72
63	Tank 7984	VOC	5.24	0.28
64	Tank 7985	VOC	0.48	0.03
65	R113 Fugitives (4)	VOC	0.33	1.46

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 **
66	Thermal Fluid Heater HOH-4	VOC	0.04	0.18
		NO_x	0.28	1.20
		CO	0.63	2.75
		SO_2	0.10	0.44
		PM_{10}	0.06	0.25
67	Flare F-2	VOC	0.52	0.02
		NO_x	1.45	0.67
		CO	12.52	4.30
		SO_2	0.01	0.01
		SO_2 (landfill gas)	0.06	0.10
68	Thermal Oxidizer TO-1	VOC (R111)	0.20	0.01
		VOC (R113)	0.18	0.01
		VOC (R114)	0.32	0.01
		VOC (R115)	1.06	0.03
		VOC (T4132)	0.15	0.01
		VOC (T4146)	0.01	0.01
		VOC (natural gas)	0.01	0.05
		NO_x (natural gas)	0.20	0.90
		CO (natural gas)	0.17	0.75
		SO_2 (natural gas)	0.01	0.02
		PM_{10} (natural gas)	0.02	0.07
		VOC (landfill gas)	0.03	0.12
		NO_x (landfill gas)	0.50	2.18
		CO (landfill gas)	0.42	1.84
		SO_2 (landfill gas)	0.02	0.06
		PM_{10} (landfill gas)	0.04	0.17
69	R113 Truck Loading Losses	VOC	0.20	0.01
70	Tank 4105	VOC	0.04	<0.01
71	Tank 4106	VOC	0.04	<0.01
73	Tank 4119	VOC	0.09	<0.01
75	Tank 4145	VOC	0.10	<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 **
76	Tank 4128	VOC	0.06	0.01
78	Tank 4134	VOC	0.05	0.01
79	Tank 4135	VOC	0.01	<0.01
81	Tank 4143	VOC	0.07	0.01
82	Tank 4144	VOC	0.09	0.01
83	Tank 7982	VOC	<0.01	<0.01
84	R114 Fugitives (4)	VOC	0.12	0.52
85	R115 Fugitives (4)	VOC	0.08	0.35
86	R114/R115 Tank Fugitives (4)	VOC	0.32	1.41
87	R114 Truck Loading Losses	VOC	0.47	0.01
88	R115 Truck Loading Losses	VOC	0.35	0.01
89	R111 Truck Loading Losses	VOC	0.50	0.01
90	R111 Fugitives (4)	VOC	0.11	0.14
T7983	Tank 7983	VOC	3.38	0.10
ACCUTANK	Accumulator Tank	VOC	0.25	<0.01
SRULOAD	SRU Truck Loading Losses	VOC	0.99	0.05
SRUFUG	SRU Equipment Fugitives	VOC	0.43	1.87

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

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 **

(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
CH_2O - formaldehyde
HCl - hydrogen chloride
DETA - diethylenetriamine
EO - ethylene oxide
HAN - heavy aromatic naphtha
PO - propylene oxide
NH_3 - ammonia
non-HAP VOC - nonhazardous air pollutant VOC
Total VOC - total volatile organic compounds
NO_x - total oxides of nitrogen
CO - carbon monoxide
SO_2 - sulfur dioxide
PM_{10} - particulate matter equal to or less than 10 microns in diameter

(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.

* 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

** Compliance with the annual emission rates is based on a rolling 12-month period.

Dated April 30, 2008