

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 1862A

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	OP Caustic Scrubber	HCl	0.18	0.04
		VOC	0.46	0.08
5	Phosgene Plant Flare (5)	Cl <sub>2</sub>	0.01	0.01
		CO	2.33	3.65
		COCl <sub>2</sub>	0.01	0.01
		NO <sub>x</sub>	0.19	0.06
		VOC	0.28	0.06
		SO <sub>2</sub>	0.02	0.04
		HCl	7.51	1.50
		Acetone	0.43	0.09
F13	5000 and 6000 Area Fugitives (4)	VOC	0.16	0.69
14	Drumming Scrubber	VOC	2.44	0.59
		HCl	0.33	0.03
F15	Area Tank Fugitives (4)	VOC	0.02	0.32
F17	250K Storage Fugitives (4)	VOC	0.01	0.03
F19	Products Area Fugitives (4)	VOC	0.44	1.86
		HCl	0.01	0.01
F23	Phosgene Plant Fugitives (4)	Cl <sub>2</sub>	0.05	0.21
		CO	0.01	0.02
		VOC	0.06	0.22
25	RX-3100 Vent	PM <sub>10</sub>	0.03	0.02
F27	L-ASP Charging Fugitives (4)	PM <sub>10</sub> (Z-ASP)	0.01	0.01

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29	L-ASP Solid Handling System Vent	VOC	0.01	0.01
		PM <sub>10</sub> (Z-ASP)	0.01	0.01
F31	Z-ASP Reactor Fugitives (4)	VOC (Na-Z-ASP)	0.03	0.11
F36	BCF Storage Tank Fugitives (T-3110)(4)	VOC	0.01	0.04
41	DMO Loading	VOC	0.01	0.01
46	Z-ASP Day Tank (T-3111)	VOC (Na-Z-ASP)	0.01	0.01
47	Z-ASP Day Tank (T-3112)	VOC (Na-Z-ASP)	0.01	0.01
48	Z-ASP Storage Tank (T-3113)	VOC (Na-Z-ASP)	0.01	0.01
49	Z-ASP Storage Tank (T-3114)	VOC (Na-Z-ASP)	0.01	0.01
F50	Na-Z-ASP Tank Area Fugitives (4)	VOC (Na-Z-ASP)	0.01	0.01
51	Na-Z-ASP Truck Loading Emissions	VOC (Na-Z-ASP)	0.01	0.01
52	South Boiler	CO	1.11	2.21
		NO <sub>x</sub>	1.19	2.38
		PM <sub>10</sub>	0.16	0.32
		SO <sub>2</sub>	0.02	0.04
		VOC	0.09	0.18
53	Thermal Oxidizer Stack	Cl <sub>2</sub>	0.16	0.68
		CO	1.44	6.00
		HCl	0.43	1.65
		NO <sub>x</sub>	1.44	1.50
		VOC	1.01	2.39
F54	Thermal Oxidizer Fugitives (4)	VOC	0.05	0.17

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F55	Cold Vent Fugitives (4)	VOC	0.04	0.11
F56	LPE Product Unit Fugitives (4)	VOC	0.26	1.11
57	LPE Carbon Adsorption Outlet	VOC	0.04	0.01
F58	Solvent Truck Loading Fugitives	VOC	0.01	0.03
F59	DCPI Plant Fugitives (4)	VOC	0.12	0.46
F60	DCPI Loading Collection Losses	VOC	0.01	0.01
61	DCPI Cooling Tower Emissions	VOC	0.02	0.07
62	DCPI Tar Loading	VOC	0.01	0.01
70	ETOH Tank Vent (T-3)	VOC	5.71	0.28
67	MEOH Tank Vent (T-7)	VOC	8.02	0.36
68	2-EHOH Tank Vent (T-9)	VOC	0.04	0.01
71	North BOH Tank Vent (T-5)	VOC	0.01	0.01
69	SBOH Tank Vent (T-10)	VOC	3.00	0.06
72	South BOH Tank Vent (T-6)	VOC	0.01	0.01
73	Z-ASP BOH Tank Vent	VOC	0.02	0.01
F-MOSF	Multipurpose Organic Synthesis	VOC	0.10	0.46
		COCl <sub>2</sub>	0.01	
F74	Truck Loading Area Fugitives (4)	VOC	0.02	0.06
F77	CO Storage Area Fugitives (4)	CO	0.15	0.66

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78	Walk-In Hood Caustic Scrubber	Cl <sub>2</sub>	0.01	0.01
		HCl	0.01	0.01
		VOC	2.42	0.58

(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) Cl<sub>2</sub> - chlorine  
 CO - carbon monoxide  
 COCl<sub>2</sub> - phosgene  
 HCl - hydrochloric acid  
 Na-L-ASP - sodium salt of carbobenzoxy L- aspartic acid  
 Na-Z-ASP - sodium salt of carbobenzoxy aspartic acid  
 NO<sub>x</sub> - total oxides of nitrogen  
 PM<sub>10</sub> - 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.  
 PVal - pivaloyl chloride  
 SO<sub>2</sub> - sulfur dioxide  
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §

101.1

Z-ASP - carbobenzoxy aspartic acid

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

(5) Includes 400 hours for Pharmaceutical Expansion Plant (LPE) vents when the thermal oxidizer is unavailable.

\* 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 annual emission limits is based on a rolling 12-month period.

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Dated October 13, 2006