

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 17276

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**
S-6	Phenyl Acetate Surge Tank	VOC	0.0088	0.0480
P-10	4-HAP Dust Collection	PM <sub>10</sub>	0.0870	0.3810
		VOC	0.0077	0.0336
P-11	4-HAP Flaker Fugitives (4)	PM <sub>10</sub>	0.7500	0.0650
		VOC	0.0100	0.0100
P-12	APAP Mill Fugitives (4)	PM <sub>10</sub>	0.0069	0.0300
		VOC	0.0100	0.0100
P-13	Premilled APAP Blower Guard Filter	PM <sub>10</sub>	0.0206	0.0904
		VOC	0.0004	0.0018
S-14	Flare, T-510	VOC	2.8515	12.4901
		NO <sub>x</sub>	0.1727	0.7566
		CO	2.4522	10.7408
S-15	SO <sub>2</sub> Vent Scrubber, T-508	VOC	0.0651	0.2850
		SO <sub>2</sub> 0.1258	0.1437	
S-17	Acetic Acid/Acetic Anhydride Storage Tank	VOC	0.0453	0.0747
S-18	Acetic Anhydride Storage Tank	VOC	2.2935	0.2644
S-19	Phenol Storage Tank	VOC	2.6746	0.2660

## 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**
S-20	Unit Process Fugitives (4)	VOC	2.0153	8.8270
		SO <sub>2</sub>	1.2370	5.4180
		HF	0.5614	2.4590
		NH <sub>3</sub>	0.2772	1.2140
		SOCl <sub>2</sub>	0.1584	0.6940
S-21	Tank Farm Fugitives (4)	VOC	1.9753	8.652
		SO <sub>2</sub>	0.4596	2.0130
		HF	0.2779	1.2170
		HAS	0.0210	0.0920
S-24	Oxime Crystallizer Vent	VOC	0.0002	0.0002
P-25	4-HAP Rework System	PM <sub>10</sub>	0.1323	0.0110
		VOC	0.0100	0.0100
P-26	4-HAP Manual Charge Fugitives (4)	PM <sub>10</sub>	1.4771	0.0739
		VOC	0.0100	0.0100
P-28	Dry Oxime Bin Vent Filter	PM <sub>10</sub>	0.0174	0.0760
		VOC	0.0008	0.0033
P-29	Dry Oxime Bin Vent Filter	PM <sub>10</sub>	0.0174	0.0760
		VOC	0.0008	0.0033
S-31	Oxime Wash Water Tank,	VOC	0.0001	0.0001
P-32	Oxime Transfer Filter/ Charge Hopper	PM <sub>10</sub>	0.1864	0.1713
		VOC	0.0081	0.0074
P-33	Dry APAP Bin Vent Filter	PM <sub>10</sub>	0.0016	0.0070
		VOC	0.0001	0.0001
P-34	Dry APAP Bin Vent Filter	PM <sub>10</sub>	0.0016	0.0070
		VOC	0.0001	0.0001
P-35	Carbon Storage Bin Vent Filter	PM <sub>10</sub>	0.0386	0.0084

## 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**
P-36	Carbon Filter Precoat Tank Air Filter	PM <sub>10</sub>	0.0013	0.0056
P-37	Sodium Dithionate Loading Vent	Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub> -PM	1.4000	0.0175
P-38	Potassium Iodide Charging Vent	PM	0.0544	0.0050
P-39	Citric Acid Receiving Bin	PM <sub>10</sub> VOC	1.000 0.0100	0.0276 0.0100
P-40	APAP Rework Transfer Guard Filter	PM <sub>10</sub> VOC	0.0224 0.0005	0.0049 0.0001
S-42	Oxime Wastewater Tank	VOC	0.0010	0.0004
S-44	4-HAP Rework System	VOC	0.0164	0.0105
S-46	1st APAP Centrate Surge Tank	VOC Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub>	0.0001 0.0100	0.0001 0.0100
S-47	2nd APAP Centrate Surge Tank,	VOC Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub>	0.0022 0.0100	0.0005 0.0100
S-48	2nd APAP Wash Water Tank	VOC Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub>	0.0001 0.0100	0.0001 0.0100
P-50	General Dust Collection Filter	Dust-PM <sub>10</sub> VOC	0.2250 0.0041	0.9450 0.0171
P-51	APAP Rework Transfer Guard Filter	PM <sub>10</sub> VOC	0.2250 0.0004	0.0049 0.0001
P-52	Milled Acetaminophen Bin Vent Filter	PM <sub>10</sub> VOC	0.0087 0.0002	0.0380 0.0007

## 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**
P-54	Carbon Blower Guard Filter	PM <sub>10</sub>	0.0222	0.0049
P-55	Precoat Recirculation Tank Vent	PM <sub>10</sub>	0.1155	0.0265
S-56	APAP Crystallizer Acetic Anhydride Addition System	VOC	0.0071	0.0300
S-60	Oxime Centrifuge Feed Tank Vent 0.0002		VOC	0.0016
S-61	Oxime Centrifuge	VOC	0.0024	0.0100
S-62	Oxime Dryer Feed Hopper	VOC	0.0024	0.0100
S-64	APAP Vacuum Jet Vent	VOC	0.0024	0.0100
S-65	APAP Purification Vent Header	Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub>	0.0024	0.0100
S-66	APAP Drying System	VOC	0.0024	0.0100
P-67	APAP Blender Bin Vent Filter	PM <sub>10</sub> VOC	0.0156 0.0003	0.0656 0.0012
S-68	Oxime Vacuum Jet Vent	VOC NH <sub>3</sub> N <sub>2</sub> O	0.0027 0.4662 0.6033	0.0100 1.9580 2.5338
S-69	4-HAP Tower Jet Condenser Vent 0.0100		VOC	0.0023
P-70	4-HAP Packaging Room Fugitives (4)	PM <sub>10</sub> VOC	0.0057 0.0100	0.0250 0.0100
P-73	Celite Bag Dumper	PM <sub>10</sub>	0.0013	0.0003
P-74	APAP Packaging Room	PM <sub>10</sub>	0.0060	0.0250

## 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**
	Fugitives (4)	VOC	0.0100	0.0100
P-75	Citric Acid Storage Tank Filter	PM <sub>10</sub>	0.3674	0.0276
		VOC	0.0100	0.1000
P-76	APAP Packaging Hopper	PM <sub>10</sub>	0.0060	0.0250
P-77	APAP Partials to Blender (4)	PM <sub>10</sub>	0.2205	0.1653
		VOC	0.0100	0.0100
P-78	APAP Packaging Blower Guard Filter	PM <sub>10</sub>	0.0145	0.0634
		VOC	0.0003	0.0011
P-79	General Dust Collection Blower Guard Filter	PM <sub>10</sub>	0.2250	0.9855
		VOC	0.0041	0.0178
S-81	Oxime Centrifuge	VOC	0.0010	0.0100
S-82	Continuous 4-Stage Oxime Reaction Vessel	VOC	0.0001	0.0003
		NH <sub>3</sub>	0.0291	0.1224
		N <sub>2</sub> O	0.0377	0.1584
P-87	Oxime Dryer Blower Guard Filter	PM <sub>10</sub>	0.2456	1.0314
		VOC	0.0094	0.0396
P-88	APAP Dryer Blow Guard Filter	PM <sub>10</sub>	0.2141	0.8991
		VOC	0.0039	0.0162
P-90	APAP Packaging Hopper	PM <sub>10</sub>	0.0060	0.0250
P-93	Phenyl Acetate Truck Loading	VOC	0.1365	0.0036

- (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) PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.  
 PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.  
 VOC - volatile organic compounds as defined in the 30 Title Texas Administrative Code Section 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 CO - carbon monoxide  
 HAS - hydroxyl ammonium sulfate  
 HCl - hydrogen chloride  
 HF - hydrogen fluoride  
 NH<sub>3</sub> - ammonia  
 N<sub>2</sub>O - nitrous oxide  
 Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub> - sodium dithionite  
 SOCl<sub>2</sub> - thionyl chloride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emissions rate.
- (5) VOC emissions not including hexane.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

\_\_\_\_\_Hrs/day\_\_\_\_\_Days/week\_\_\_\_\_Weeks/year or 8,760 Hrs/year

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

Dated November 30, 2001