

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 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 ₁₀	0.0870	0.3810
		VOC	0.0077	0.0336
P-11	4-HAP Flaker Fugitives (4)	PM ₁₀	0.7500	0.0650
		VOC	0.0100	0.0100
P-12	APAP Mill Fugitives (4)	PM ₁₀	0.0069	0.0300
		VOC	0.0100	0.0100
P-13	Premilled APAP Blower Guard Filter	PM ₁₀	0.0206	0.0904
		VOC	0.0004	0.0018
S-14	Flare, T-510	VOC	2.8515	12.4901
		NO _x	0.1727	0.7566
		CO	2.4522	10.7408
S-15	SO ₂ Vent Scrubber, T-508	VOC	0.0651	0.2850
		SO ₂	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
S-20	Unit Process Fugitives (4)	VOC	2.0153	8.8270
		SO ₂	1.2370	5.4180
		HF	0.5614	2.4590
		NH ₃	0.2772	1.2140
		SOCl ₂	0.1584	0.6940

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-21	Tank Farm Fugitives (4)	VOC	1.9753	8.652
		SO ₂	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 ₁₀	0.1323	0.0110
		VOC	0.0100	0.0100
P-26	4-HAP Manual Charge Fugitives (4)	PM ₁₀	1.4771	0.0739
		VOC	0.0100	0.0100
P-28	Dry Oxime Bin Vent Filter	PM ₁₀	0.0174	0.0760
		VOC	0.0008	0.0033
P-29	Dry Oxime Bin Vent Filter	PM ₁₀	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 ₁₀	0.1864	0.1713
		VOC	0.0081	0.0074
P-33	Dry APAP Bin Vent Filter	PM ₁₀	0.0016	0.0070
		VOC	0.0001	0.0001
P-34	Dry APAP Bin Vent Filter	PM ₁₀	0.0016	0.0070
		VOC	0.0001	0.0001
P-35	Carbon Storage Bin Vent Filter	PM ₁₀	0.0386	0.0084
P-36	Carbon Filter Precoat Tank Air Filter	PM ₁₀	0.0013	0.0056
P-37	Sodium Dithionate Loading Vent	Na ₂ S ₂ O ₄ -PM	1.4000	0.0175
P-38	Potassium Iodide Charging Vent	PM	0.0544	0.0050

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates*</u>	
			lb/hr	TPY**
P-39	Citric Acid Receiving Bin	PM ₁₀	1.000	0.0276
		VOC	0.0100	0.0100
P-40	APAP Rework Transfer Guard Filter	PM ₁₀	0.0224	0.0049
		VOC	0.0005	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	0.0001	0.0001
		Na ₂ S ₂ O ₄	0.0100	0.0100
S-47	2nd APAP Centrate Surge Tank,	VOC	0.0022	0.0005
		Na ₂ S ₂ O ₄	0.0100	0.0100
S-48	2nd APAP Wash Water Tank	VOC	0.0001	0.0001
		Na ₂ S ₂ O ₄	0.0100	0.0100
P-50	General Dust Collection Filter	Dust-PM ₁₀	0.2250	0.9450
		VOC	0.0041	0.0171
P-51	APAP Rework Transfer Guard Filter	PM ₁₀	0.2250	0.0049
		VOC	0.0004	0.0001
P-52	Milled Acetaminophen Bin Vent Filter	PM ₁₀	0.0087	0.0380
		VOC	0.0002	0.0007
P-54	Carbon Blower Guard Filter	PM ₁₀	0.0222	0.0049
P-55	Precoat Recirculation Tank Vent	PM ₁₀	0.1155	0.0265
S-56	APAP Crystallizer Acetic Anhydride Addition System	VOC	0.0071	0.0300

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates*</u>	
			lb/hr	TPY**
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 ₂ S ₂ O ₄	0.0024	0.0100
S-66	APAP Drying System	VOC	0.0024	0.0100
P-67	APAP Blender Bin Vent Filter	PM ₁₀	0.0156	0.0656
		VOC	0.0003	0.0012
S-68	Oxime Vacuum Jet Vent	VOC	0.0027	0.0100
		NH ₃	0.4662	1.9580
		N ₂ O	0.6033	2.5338
S-69	4-HAP Tower Jet Condenser Vent 0.0100		VOC	0.0023
P-70	4-HAP Packaging Room Fugitives (4)	PM ₁₀	0.0057	0.0250
		VOC	0.0100	0.0100
P-73	Celite Bag Dumper	PM ₁₀	0.0013	0.0003
P-74	APAP Packaging Room Fugitives (4)	PM ₁₀	0.0060	0.0250
		VOC	0.0100	0.0100
P-75	Citric Acid Storage Tank Filter	PM ₁₀	0.3674	0.0276
		VOC	0.0100	0.1000
P-76	APAP Packaging Hopper	PM ₁₀	0.0060	0.0250
P-77	APAP Partial to Blender (4)	PM ₁₀	0.2205	0.1653

		VOC	0.0100	0.0100
P-78	APAP Packaging Blower Guard Filter	PM ₁₀ VOC	0.0145 0.0003	0.0634 0.0011
P-79	General Dust Collection Blower Guard Filter	PM ₁₀ VOC	0.2250 0.0041	0.9855 0.0178
S-81	Oxime Centrifuge	VOC	0.0010	0.0100
S-82	Continuous 4-Stage Oxime Reaction Vessel	VOC NH ₃ N ₂ O	0.0001 0.0291 0.0377	0.0003 0.1224 0.1584
P-87	Oxime Dryer Blower Guard Filter	PM ₁₀ VOC	0.2456 0.0094	1.0314 0.0396
P-88	APAP Dryer Blow Guard Filter	PM ₁₀ VOC	0.2141 0.0039	0.8991 0.0162
P-90	APAP Packaging Hopper	PM ₁₀	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 PM₁₀.

PM₁₀ - 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 Title 30 Title Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO	- carbon monoxide	
HAS	- hydroxyl ammonium sulfate	
HCl	- hydrogen chloride	
HF	- hydrogen fluoride	
NH ₃	- ammonia	
N ₂ O	- nitrous oxide	
Na ₂ S ₂ O ₄	-	sodium dithionite
SOCl ₂	- thionyl chloride	

Permit Number 17276

Page 6

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(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 June 20, 2002