

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 31510

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 *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
<u>M-2 Production Unit</u>				
T25	T-25 OMS	VOC	0.17	0.03
T8500	T-8500	VOC	0.01	0.02
T9000	T-9000	VOC	0.01	0.02
T9100	T-9100	VOC	0.01	0.02
T9200	T-9200	VOC	0.01	0.02
T6	T-6	H ₂ O ₂	0.06	0.01
T11	T-11	H ₂ O ₂	0.06	0.01
T24	T-24	VOC	< 0.01	< 0.01
CC32	CC-32 (5)	VOC	0.01	<0.01
C1	C-1 Vent Scrubber	VOC	0.10	0.01
C1	C-1 Vent Scrubber (6)	VOC	0.11	0.01
C813	C-813 Acid Chloride Vent Scrubber	VOC	0.51	0.05

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
CT1	Cooling Tower	VOC	<0.001	< 0.001
M2PKG	M-2 Packaging (4)	VOC	0.31	0.86
Q8000	M-2 Scrubber	VOC	1.20	5.24
M2SS	M-2 Storage Fugitives South (4)	VOC		0.16
		0.68		
M2SN	M-2 Storage Fugitives North (4)	VOC		0.16
		0.68		
M2RS	M-2 Reactor Room South (4)	VOC		0.24
		1.17		
M2RM	M-2 Reactor Room Middle (4)	VOC		0.24
		1.17		
M2RN	M-2 Reactor Room North	VOC	0.24	1.17
C7000	M-2 Centrifuges	VOC	<0.01	<0.01
T5050	T-5050	NaOH	<0.001	<0.001
T7050	T-7050	Sodium Sulfate	<0.001	<0.001
T7080	T-7080	Sodium Sulfate	<0.001	<0.001
T7500	T-7500	Sodium Sulfate	<0.001	<0.001
T7510	T-7510	Sodium Sulfate	<0.001	<0.001
T5	T-5	Tert-Butyl Hydroperoxide	1.07	0.53

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
T9	T-9	KOH	<0.01	<0.01
T10	T-10	NaOH	<0.01	<0.01
T39	T-39	Cumene Hydroperoxide	0.12	0.02
T130	T-130	t-Amyl Hydroperoxide 0.02		0.06
T150	T-150	Butyl Benzyl Phthalate <0.001		<0.001
T9500	T-9500	Ethylene Glycol	<0.001	<0.001
M-1 Production Unit				
80-Q-2	Scrubber	VOC	1.20	5.24
		HCl	<0.01	<0.01
FUG-M-1	M-1 Unit Fugitives (4)	VOC	1.52	6.67
		HCl	<0.01	<0.01
B-1 Production Unit				
D-201	Reactor	VOC	0.363	0.252
		H2SO4	<0.001	<0.002
		H2O2	0.062	0.044
D-202	Reactor	VOC	0.363	(5)
		H2SO4	<0.001	(5)
		H2O2	0.062	(5)
F-311	Wash Tank	VOC	0.165	0.116
F-312	Wash Tank	VOC	0.165	(6)

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	<u>Emission Rates</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
F-1	Flare	VOC	8.10	4.06
		NO _x	0.423	0.503
		SO ₂	0.030	0.037
		CO	3.63	4.32
B-1 Packing	DTAP Packaging	VOC	0.296	0.044
DTAP Fugitives	DTAP Fugitives (4)	VOC	0.304	1.33

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

F-203	H ₂ O ₂ Weigh Tank	H ₂ O ₂	0.30	0.02
F-204	Tertiary Amyl Alcohol Weigh Tank	VOC	2.30	0.092
B530	Boiler	VOC NO _x CO SO ₂ PM ₁₀		

- (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 General Rule 101.1
KOH - potassium hydroxide
H₂O₂ - hydrogen peroxide
NaOH - sodium hydroxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emissions from the carbon canisters prior to routing Tank 32 to Emission Point No. (EPN) C1.
- (6) Emissions after Tank 32 is removed from the Carbon Adsorption Unit (EPN CC32) and re-routed to the C-1 Vent Scrubber.
- (7) Total annual emissions for EPN D-201/202 shall not exceed the annual rate listed for EPN D-201.
- (8) Total annual emissions for EPN F-311/312 shall not exceed the annual rate listed for EPN F-311.

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

Permit No. 20458
Page 6

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

____Hrs/day ____Days/week ____Weeks/year or 8,760 Hrs/year

Dated _____