

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 18241

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	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
12	Incinerator Stack	VOC, total	0.38	0.14
		Generic Solvent	0.38	0.14
		Generic Glycol	0.02	0.005
		Generic Oil	0.06	0.01
		Generic Monomer	0.05	0.01
		MEK	0.38	0.14
		Ethyl Acetate	0.38	0.14
		Isopropanol	0.38	0.14
		MPK	0.38	0.14
		Toluene	0.38	0.14
		VM and P	0.38	0.14
		Butylene Acetate	0.38	0.14
		Butyl Alcohol	0.38	0.14
		MIBK	0.38	0.14
		Isopar L	0.38	0.14
		Solvent 150	0.38	0.14
		Solvent 100	0.38	0.14
		Solvent 140	0.38	0.14
		Xylene	0.38	0.14
		Xylene-P	0.38	0.14
		Ethyl Benzene	0.38	0.14
		Mineral Spirits	0.38	0.14
		Propyl Propasol Solvent	0.38	0.14
		MAK	0.06	0.14
		EEP Solvent	0.38	0.14
		MPK	0.38	0.14
		MIAC	0.07	0.14

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
		Glycol Ether EB	0.38	0.14
		Glycol Ether PM	0.38	0.14
		Acetate		
12	Incinerator Stack	Glycol Ether DPM	0.38	0.14
		Butyl Carbitol	0.38	0.14
		Glycol Ether PTB	0.38	0.14
		Solution		
		Texanol Ester	0.38	0.14
		Alcohol		
		Hexylcarbitol	0.38	0.14
		Isobutanol	0.38	0.14
		Secondary Butyl	0.38	0.14
		Alcohol		
		Dimethyl Ethanolamine	0.05	0.14
		Glycol Ether EP	0.38	0.14
		Styrene	0.05	0.01
		Alpha Methyl Styrene	0.05	0.01
		Para Methyl Styrene	0.05	0.01
		Methyl Acrylic Acid	0.05	0.01
		Diethylene Glycol	0.025	0.005
		Ethylene Glycol	0.025	0.005
		Glycerine Vapor	0.025	0.005
		Propylene Glycol	0.025	0.005
		Vapor		
		Dipropylene Glycol	0.025	0.005
		Neopcotyl Glycol	0.025	0.005
		Coconut Oil	0.06	0.01
		Linseed Oil	0.06	0.01
		Safflower Oil	0.06	0.01
		Sunflower Oil	0.06	0.01
		TOFA 2 percent	0.06	0.01
		TOFA 5 percent	0.06	0.01
		Tung Oil	0.06	0.01
		Tall Oil	0.06	0.01

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
		NO _x (Comb.)	0.89	2.28
		CO (Comb.)	0.21	0.48
		PM ₁₀ (Comb.)	0.06	0.26
		SO ₂ (Comb.)	0.003	0.01
13A and 13AA	Filter Press	VOC	0.10	0.45
13B	Drumming Room Stack	VOC, total	35.44	10.99
		Generic Solvent (non-HAP)	35.44	10.99
		Generic Solvent HAP	35.44	3.99
		Generic Glycol	0.003	0.0012
		Generic Monomer	1.84	0.74
		MEK	19.96	3.99
		Ethyl Acetate	12.48	5.10
		Isopropanol	6.03	3.73
		MPK	7.91	3.16
		Toluene	13.50	3.99
		VM and P	11.74	4.69
		Butylene Acetate	5.48	2.19
		Butyl Alcohol	2.09	0.84
		MIBK	7.73	3.09
		Isopar L	1.45	0.58
		Solvent 150	1.06	0.42
		Solvent 100	4.50	1.80
		Solvent 140	1.81	0.72
		Xylene	6.37	2.54
		Xylene-P	1.27	0.51
		Ethyl Benzene	1.27	0.51
		Mineral Spirits	3.22	1.29
		Propyl Propasol Solvent	3.63	1.45
		EEP Solvent	0.74	0.30

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
		MAK Solvent	0.00	0.00
		MIAC	0.06	0.026
		Glycol Ether EB	1.31	0.53
		Glycol Ether PM	13.31	3.99
		Acetate		
		Glycol Ether DPM	0.90	0.36
		Butyl Carbitol	0.16	0.065
		Glycol Ether	3.99	1.60
		PTB Solvent		
		Hexylcarbitol	0.19	0.077
		Texanol Ester	0.05	0.022
		Alcohol		
		Isobutanol	9.33	3.73
		Secondary Butyl	14.56	5.82
		Alcohol		
		Glycol Ether EP	3.11	1.24
		Styrene	1.84	0.74
		Alpha Methyl Styrene	1.84	0.74
		Para Methyl Styrene	1.84	0.74
		Methyl acrylic Acid	1.84	0.74
		Diethylene Glycol	0.003	0.0012
		Ethylene Glycol	0.003	0.0012
		Glycerine Vapor	0.003	0.0012
		Propylene Glycol	0.003	0.0012
		Vapor		
		Dipropylene Glycol	0.003	0.0012
		Neopcotyl Glycol	0.003	0.0012
13BB	Process Drum Stack	VOC, total	35.44	10.99
		Generic Solvent		
		(non-HAP)	35.44	10.99
		Generic Solvent HAP	35.44	3.99
		Generic Glycol	0.003	0.0012
		Generic Monomer	1.84	0.74
		MEK	19.96	3.99

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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>
		Ethyl Acetate	12.48	5.10
		Isopropanol	6.03	3.73
		MPK	7.91	3.16
		Toluene	13.50	3.99
		VM and P	11.74	4.69
		Butyl Acetate	5.48	2.19
		Butyl Alcohol	2.09	0.84
		MIBK	7.73	3.09
		Isopar L	1.45	0.58
		Solvent 150	1.06	0.42
		Solvent 100	4.50	1.80
		Solvent 140	1.81	0.72
		Xylene	6.37	2.54
		Xylene-P	1.27	0.51
		Ethyl Benzene	1.27	0.51
		Mineral Spirits	3.22	1.29
		Propyl Propasol	3.63	1.45
		Solvent		
		MAK	1.54	0.62
		EEP Solvent	0.74	0.30
		MIAC	0.06	0.026
		Glycol Ether EB	1.31	0.53
		Glycol Ether PM	13.31	3.99
		Acetate		
		Glycol Ether DPM	0.90	0.36
		Butyl Carbitol	0.16	0.065
		Glycol Ether PTB Sol	13.99	1.60
		Texanol Ester Alcohol	10.05	0.022
		Hexylcarbitol	0.19	0.077
		Isobutanol	9.33	3.73
		Secondary Butyl	14.56	5.82
		Alcohol		
		Dimethyl ethanolamine	1.14	2.15
		Glycol Ether EP	3.11	1.24
		Styrene	1.84	0.74

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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>
		Alpha Methyl Styrene	1.84	0.74
		Para Methyl Styrene	1.84	0.74
		Methyl Acrylic Acid	1.84	0.74
		Diethylene Glycol	0.003	0.0012
		Ethylene Glycol	0.003	0.0012
		Glycerine Vapor	0.003	0.0012
		Propylene Glycol	0.003	0.0012
		Vapor		
		Dipropylene Glycol	0.003	0.0012
		Neopcotyl Glycol	0.003	0.0012
21	Curing Agent Bagging	PM ₁₀	0.06	0.25
22	Curing Agent Scrubber	PM ₁₀	0.021	0.028
23	Curing Agent Tank	VOC	0.004	0.015
24	Mix Tank	VOC	0.004	0.010
30	Inert Gas Generator	POC	0.04	0.17
31	Therminol Heater	POC	8.00	6.79
33	Carbon Abs. Sys. Vent	For backup control only		
RM-8	Oil Storage Vent	Generic Oil	0.48	0.014
		Coconut Oil	0.48	0.014
		Linseed Oil	0.48	0.014
		Supreme Linseed Oil	0.48	0.014
		Safflower Oil	0.48	0.014
		Sunflower Oil	0.48	0.014
		TOFA 2 percent	0.48	0.014

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Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		TOFA 5 percent	0.48	0.014
		Tung Oil	0.48	0.014
		Tall Oil	0.48	0.014
RM-9	Oil Storage Vent	Generic Oil	0.48	0.014
		Coconut Oil	0.48	0.014
		Linseed Oil	0.48	0.014
		Supreme Linseed Oil	0.48	0.014
		Safflower Oil	0.48	0.014
		Sunflower Oil	0.48	0.014
		TOFA 2 percent	0.48	0.014
		TOFA 5 percent	0.48	0.014
		Tung Oil	0.48	0.014
		Tall Oil	0.48	0.014
RM-10	Oil Storage Vent	Generic Oil	0.48	0.014
		Coconut Oil	0.48	0.014
		Linseed Oil	0.48	0.014
		Supreme Linseed Oil	0.48	0.014
		Safflower Oil	0.48	0.014
		Sunflower Oil	0.48	0.014
		TOFA 2 percent	0.48	0.014
		TOFA 5 percent	0.48	0.014
		Tung Oil	0.48	0.014
		Tall Oil	0.48	0.014
RM-11	Oil Storage Vent	Generic Oil	0.63	0.018
		Coconut Oil	0.63	0.018
		Linseed Oil	0.63	0.018
		Supreme Linseed Oil	0.63	0.018
		Safflower Oil	0.63	0.018
		Sunflower Oil	0.63	0.018
		TOFA 2 percent	0.63	0.018
		TOFA 5 percent	0.63	0.018
		Tung Oil	0.63	0.018
		Tall Oil	0.63	0.018

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
RM-12	Oil Storage Vent	Generic Oil	0.63	0.018
		Coconut Oil	0.63	0.018
		Linseed Oil	0.63	0.018
		Supreme Linseed Oil	0.63	0.018
		Safflower Oil	0.63	0.018
		Sunflower Oil	0.63	0.018
		TOFA 2 percent	0.63	0.018
		TOFA 5 percent	0.63	0.018
		Tung Oil	0.63	0.018
		Tall Oil	0.63	0.018
		Generic Glycol	0.11	0.0018
		Diethylene Glycol	0.11	0.0018
		Ethylene Glycol	0.11	0.0018
		Glycerin Vapor	0.11	0.0018
		Propylene Glycol Vapor		0.11
				0.0018
		Dipropylene Glycol	0.11	0.0018
		Neopcotyl Glycol	0.11	0.0018
RM-17	Oil Storage Vent	Generic Oil	0.37	0.012
		Coconut Oil	0.37	0.012
		Linseed Oil	0.37	0.012
		Supreme Linseed Oil	0.37	0.012
		Safflower Oil	0.37	0.012
		Sunflower Oil	0.37	0.012
		TOFA 2 percent	0.37	0.012
		TOFA 5 percent	0.37	0.012
		Tung Oil	0.37	0.012
		Tall Oil	0.37	0.012
RM-18	IPDI or ADI Storage TK Vent <0.0001	IPDI or ADI		<0.0005
RM-19	TDI Storage Tank Vent	TDI	<0.0001	<0.0001
RM-21	Maleic Anhydride Tank Vent 0.003	Maleic Anhydride		0.058

RM-22	Phthalic Anhydride TK Vent	Phthalic Anhydride	0.39
	0.17		
RM-23	E-Cap RM Storage TK Vent	E-Caprolactam	0.012
	0.0006		

(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

NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
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 PM greater than 10 microns is emitted.

CO - carbon monoxide
POC - products of combustion
ADI - aliphatic diisocyanate
MEK - methyl ethyl ketone
MIBK - methyl isobutyl ketone

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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

MPK - methyl propyl ketone

VM and P	-	naptha	
MIBK	-	methyl isobutyl ketone	
MAK	-	methyl amyl ketone	
MIAC	-	methyl isoamyl ketone	
Glycol Ether EB	-	ethyl glycol monobutyl ether	
Glycol Ether DPM	-	dipropylene glycol methyl ether	
Glycol Ether PTB	-	polylene glycol mono-tert-butyl ether	
Glycol Ether EP	-	ethylene glycol monopropyl ether	
HAP	-	hazardous air pollutant	
IPDI	-	isophorone diisocyanate	
EEP	-	ethyl 3-ethoxypropionate	
TDI	-	toluene dissocyanate	
TOFA 2 percent Oil	-	tall oil fatty acid, 2	
percent			
TOFA 5 percent Oil	-	tall oil fatty acid, 5	
percent			

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

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

Dated _____