#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### Permit No. 20134

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.

Emission Point No. (1)	Source Name (2) Name (3)	Air Contaminant lb/hr TPY	Emission I	Rates *
	(2)			
E3TE3125	Storage Tanks	Surfactants (5)	5.88	0.34
E3TE3128	Storage Tanks	Surfactants (5)	5.88	0.15
E3TE3147	Storage Tanks	Surfactants (5)	4.12	0.11
E3TE3148	Storage Tanks	Surfactants (5)	4.12	0.11
E3TE3149	Storage Tanks	Surfactants (5)	4.12	0.11
E3TE3150	Storage Tanks	Surfactants (5)	4.12	0.11
E3TE3152	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3153	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3154	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3155	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3357	Storage Tanks	Surfactants (5)	5.88	0.47
E2TE3358	Storage Tanks	Surfactants (5)	5.88	0.14
E3TE3359	Storage Tanks	Surfactants (5)	5.88	0.24
E3TE3360	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3361	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3362	Storage Tanks	Surfactants (5)	5.06	1.18

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# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Source Point No. (1) Name	Air Contaminant <u>Emission</u> e (2) Name (3) lb/hr	Rates * TPY		
E3TE3363	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3364	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3372 E3TE3374	Storage Tanks Storage Tanks	LA Surfactants (5)	4.05 5.88	0.063 0.34
E3TE3375	Storage Tanks	Surfactants (5)	5.88	0.34
E2TE3376	Storage Tanks	Surfactants (5)	5.88	0.47
E3TE3377	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3378	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE3380	Storage Tanks	Surfactants (5)	5.06	0.13
E3TE344	Storage Tanks	Surfactants (5)	5.88	0.15
E3TE345	Storage Tanks	Surfactants (5)	5.88	0.47
E3TE346	Storage Tanks	Surfactants (5)	5.88	0.34
E3TE347	Storage Tanks	Surfactants (5)	5.88	0.85
E3TE348	Storage Tanks	Surfactants (5)	5.88	0.34
E3TE3385	Storage Tanks	Surfactants (5)	5.06	0.29
E3TE3386	Storage Tanks	Surfactants (5)	5.88	0.46
E3TE391	Storage Tanks	Surfactants (5)	5.88	0.15
E3TE392	Storage Tanks	Surfactants (5)	5.88	0.15

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# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Source	Air Contaminant	<b>Emission</b>	Rates *		
Point No. (1) Name		lb/hr	TPY		
E3TE393	Storage Tanks		Surfactants (5)	5.88	0.15
E3TE394	Storage Tanks		Surfactants (5)	5.88	0.15
E3TE61	Storage Tanks		MNP	0.98	0.16
E6TE610	Storage Tanks		Surfactants (5)	10.13	1.78
E6TE611	Storage Tanks		Surfactants (5)	10.13	1.70
E6TE614	Storage Tanks		MNP/Alcohols	0.02	0.01
E6TE62	Storage Tanks		Alcohols	0.73	1.58
E6TE6212	Storage Tanks		Alcohols	1.5	0.14
E6TE623	Storage Tanks		Surfactants (5)	10.13	0.42
E6TE628A	Storage Tanks		Surfactants (5)	5.88	0.35
E6TE628B	Storage Tanks		Surfactants (5)	10.13	0.35
E6TE63	Storage Tanks		Alcohols	0.73	1.55
E6TE632	Storage Tanks		Alcohols	0.14	0.05
E6TE633	Storage Tanks		Surfactants (5)	10.13	0.88
E6TE634	Storage Tanks		Surfactants (5)	10.13	0.88
E6TE635	Storage Tanks		Surfactants (5)	10.13	0.88
E6TE64	Storage Tanks		Surfactants (5)	10.13	1.14
E6TE65	Storage Tanks		Surfactants (5)	10.13	1.14
E6TE66	Storage Tanks		Surfactants (5)	10.13	1.14

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Source Air Contaminant <u>Emission Rates *</u>					
Point No. (1) Name	e (2) Name (3) lb/hr	<u>TPY</u>			
E6TE67	Storage Tanks	Surfactants (5)	10.13	1.14	
E6TE68	Storage Tanks	Surfactants (5)	10.13	1.14	
E3TE69	Storage Tanks	Surfactants (5)	10.13	1.11	
E6LROSCW	Railcar/Tankwagon Loading (5)	MNP/Alcohols Surfactants	0.05 2.99	0.22 0.49	
E6LROSPC	Railcar Loading (5)	MNP/Alcohols Surfactants	0.22 3.16	0.96 1.31	
E6LROSPW	Tankwagon Loading (5)	MNP/Alcohols Surfactants	0.023 2.963	0.1 0.23	
E3LROSCW	Railcar/Tankwagon Loading (5)	Surfactants	3.05	1.31	
RSEE3E6D	Drum Loading (5)	Surfactants	1.42	0.23	
E6MTKF	MNP Fugtives ((4)	MNP	0.14	0.62	
E3LTKF	Lactic Acid	MNP	0.35	1.55	
	Fugitive (4)				
F24KTFG	Kettle Fugitives (4)	MNP/Alcohols Surfactants	0.037 0.037	0.16 0.16	
F24NPFG	Kettle Charge Fugitives (4)	MNP/Alcohols	0.005	0.02	
UEUL30	Cooling Tower No. 5 (5) (4)	VOC	0.245	1.073	

#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### AIR CONTAMINANTS DATA

Emission Source Point No. (1) Name		n Rates * TPY		
E6TKFUG	E6 Tank Fugitives (4)	Surfactants MNP/Alcohols EO	1.656 0.03 0.033	7.245 0.13 0.142
E3TKFUG	E3 Tank Fugitives (4)	Surfactants EO	1.849 0.033	8.115 0.142
E6ATKF	Alcohol Fugitives (4)	Alcohols	0.4	1.77
E6NSCRB	Scrubber Vent	MNP Alcohols	3.86 8.83	3.10 7.09
E6NSCB	Scrubber Fugitives (4)	MNP/Alcohols	0.019	0.0802

- (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) EO ethylene oxide

LA - lactic acid

MNP - mono-nonyl-phenol

Alcohol - C6 through C20 fatty linear alcohols

Surfactants - alkylphenolethoxylate or alcoholethoxylate

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emission rates specified are those associated with production from the F-E6-24 Kettle only and do not include grandfathered emissions associated with the other kettles on-site.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day	Days/week	: Weeks/ye	ear or Hrs/	year 8	8,76	30
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# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Air Contaminant	<b>Emission</b>	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY