EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 4691

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 **
E-B422	Primary Boiler 2	VOC	0.18	0.81
		PM 0.46	2.01	
		SO_2 0.24	1.04	
		SO_3 0.07	0.32	
		NO_x 4.02	17.61	
		CO 2.81	12.32	
		MSA 0.01	0.02	
		HCHO	0.12	0.24
		H_2SO_4 0.01	0.01	
		SCENARIO ONE***		
E-BH-1A and E-BH-1B	Baghouse No. 1 Exhaust Stack 1A, 1B	VOC	1.76	7.72
		PM	6.26	27.40
		NO_x 2.36	10.34	
		CO 11.84	51.88	
		HCHO	0.83	0.62
		SO_2 0.02	0.06	
E-BH-2	Baghouse No. 2 Exhaust Stack	VOC	0.26	0.94
		PM	3.77	13.77
		NO_x 5.08	18.53	
		CO 3.30	12.03	
		HCHO	1.02	3.72
		SO_2 0.01	0.02	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
SCENARIO TWO**				
E-BH-1A and E-BH-1B	Baghouse No. 1 Exhaust Stack 1A, 1B	VOC	1.80	7.87
		PM	6.26	27.40
		NO_x 2.36	10.34	
		CO 13.04	57.10	
		HCHO	0.83	3.62
		SO_2 0.02	0.06	
E-T-403	Scrubber	VOC	3.78	0.95
		SO_2 0.08	0.02	
		SO_3 0.20	0.05	
		HCHO	0.06	0.02
		H_2SO_4 0.01	0.01	
E-T413	Condensate Tank	VOC	0.04	0.01
		HCHO	0.01	0.01
E-DUMPFUG	Open-Top Dumpsters (4)	VOC	0.01	0.01
		HCHO	0.01	0.01
E-R500	Soap Reactor	VOC	0.01	0.01
		PHTA 1.47	0.06	
E-T70	Dryer No. 2 Feed Tank	VOC	1.12	0.05
		HCHO	0.01	0.01
E-T71	Dryer No. 2 Feed Tank	VOC	1.12	0.05
		HCHO	0.01	0.01
E-T100	Product Tank	VOC	5.33	0.39
E-T101	Dryer No. 1 Feed Tank	VOC	0.45	0.08

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
E-T102	Dryer No. 1 Feed Tank	VOC	2.08	0.10
		HCHO	0.01	0.01
E-T103	Dryer No. 1 Feed Tank	VOC	2.08	0.10
		HCHO	0.01	0.01
E-T104	Product Tank	VOC	4.73	0.09
E-T105	Product Tank	VOC	4.73	0.09
E-T106	Product Tank	VOC	3.11	0.05
E-T107	Product Tank	VOC	1.89	0.01
E-T108	Product Tank	VOC	1.30	0.05
E-T109	Finished Product Tank	VOC	1.76	0.17
		HCHO	0.01	0.01
E-T110	Product Scrap/Blends Tank	VOC	2.95	0.04
E-T113	Product Tank	VOC	2.05	0.03
E-T114	Product Tank	VOC	1.86	0.02
E-T115	Product Tank	VOC	0.89	0.06
E-T117	Product Tank	VOC	3.62	0.02
E-T118	Product Tank	VOC	1.88	0.12
E-T121	Raw Material Storage Tank - Glycerine	VOC	0.10	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
E-T201	Product Blowdown Tank	VOC	2.14	0.01
E-T202	Product Tank	VOC	3.06	0.06
E-T203	Raw Material Storage Tank - Nonene	VOC	0.02	0.03
E-T204	Storage Tank - Reacted Naphthalate Oil	VOC	0.05	0.01
E-T205	Raw Material Storage Tank - Sec-Butyl Alcohol	VOC	0.17	0.03
E-T206	Raw Material Storage Tank - Isopropanol	VOC	0.07	0.16
E-T207	99 percent Sulfuric Acid Tank	H_2SO_4	0.05	0.01
E-T208	99 percent Sulfuric Acid Tank	H_2SO_4	0.05	0.01
E-T209	99 percent Sulfuric Acid Tank	H_2SO_4	0.04	0.01
E-T213	Raw Material Storage Tank - Distillate Naphthalate Oil	VOC	0.17	0.02
E-T217 (5)	Sulfuric Acid Mist Eliminator Vent	H_2SO_4	0.54	0.01
E-T219	Naphthalene Storage Tank	VOC (Naphthalene)	0.63	0.01
E-T316	Batch Tank - Sec-Butyl Alcohol	VOC	0.01	0.01
E-T317	Batch Tank - Isopropanol	VOC	0.02	0.05
E-T318	Batch Tank - Octene	VOC	0.02	0.04

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY **
E-T319	Batch Tank - Nonene	VOC	0.01	0.01
E-T323	Batch Tank	VOC	0.03	0.01
E-T326	Batch Tank	VOC	0.08	0.01
E-T360	Drum Dumper	VOC	2.38	0.04
E-T401	Wastewater Tank	VOC	1.60	1.71
		HCHO	0.01	0.01
E-T411	Wastewater Tank	VOC	1.60	1.71
		HCHO	0.01	0.01
E-T412	Rotary Vacuum Pump Feed Tank	VOC	1.21	0.02
		HCHO	0.01	0.01
E-T501	Soap Tank - PHTA	VOC	0.01	0.01
		PHTA 21.50	0.03	
E-T502	Soap Tank - PHTA	VOC	0.01	0.01
		PHTA 5.28	0.01	
E-T503	Soap Tank - Caustic Mix	VOC	0.01	0.01
		PHTA 21.44	0.04	
E-T504	Soap Product Storage	VOC	0.01	0.01
		PHTA 21.43	0.07	
E-FILT1	Filtration Unit No. 1 (Rotary Vacuum Filter)	VOC	0.59	0.08
		HCHO	0.01	0.01
E-RCLU (5)	Railcar Loading/Unloading	VOC	0.78	0.03
		H_2SO_4 0.27	0.01	

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 **
E-TTLU (5)	Tank Truck Loading/Unloading	VOC	2.03	0.17
		H_2SO_4 0.54	0.01	
		Naphthalene	0.01	0.01
E-DL	Drum Loading	VOC	0.18	0.06
E-FUG3	Product Bagging Operation Fugitives (4)	PM	1.25	3.44
E-FUG4	Wastewater Pit Fugitives (4)	VOC	0.01	0.01
		HCHO	0.01	0.01
E-FUG5	Process Fugitives (4)	VOC	2.12	9.30
		H_2SO_4 0.49	2.16	
		HCHO	0.01	0.01
		Naphthalene	0.05	0.24

(1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
(2) Specific point source names. For fugitive sources use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1, but does not include formaldehyde or partially hydrogenated tallow acid where these compounds are listed as speciated components.
PM - particulate matter, suspended in the atmosphere, including PM_{10}
PM_{10} - 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.
SO_2 - sulfur dioxide
SO_3 - sulfur trioxide
NO_x - nitrogen oxides
CO - carbon monoxide
MSA - methane sulfonic acid
H_2SO_4 - sulfuric acid
HCHO - formaldehyde
PHTA - partially hydrogenated tallow acid

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(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) Emissions from Facility Identification No. TTLU and RCLU may be routed through EPN E-T217 when loading sulfuric acid.

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

Hrs/day ____ Days/week _____Weeks/year _____ or Hrs/year 8,760

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

*** Scenario One for E-BH-1A, E-BH-1B, and E-BH-2. Under Scenario One, either Spray Drying System Nos. 1
or 2 may operate. Either Scenario One or Two may be used.

****Scenario Two for E-BH-1A, E-BH-1B, and E-BH-2. Under Scenario Two, only Spray Drying System No. 1
may operate; Spray Drying System No.2 may not operate. Either Scenario One or Two may be used.

Dated April 15, 2005