

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 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 Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
ACLFUG	Acid Chloride Fugitives (4)	VOC	0.75	3.24
		PCl ₃	0.02	0.06
		H ₂ O ₂	0.01	0.03
B1FUG	B-1 Fugitives (4)	VOC	0.36	1.56
B1AFUG	B-1 Alamo Fugitives (4)	VOC	0.55	2.39
B1PKGE	B-1 Packaging East Vent	VOC	0.15	0.18
B1PKGW	B-1 Packaging West Vent	VOC	0.15	0.18
B1WFUG	B-1 Weigh Area Fugitives (4)	VOC	0.11	0.50
		H ₂ O ₂	0.02	0.08
B530	Boiler (5 MMBtu/hr)	VOC	0.03	0.12
		NO _x	0.50	2.19
		SO ₂	0.01	0.01
		PM ₁₀	0.04	0.17
		CO	0.42	1.84
C1	C-1 Vent Scrubber	VOC	0.44	0.05
		PCl ₃	0.01	
C330	M350 Blending/Reactor Tank	VOC	0.65	0.01
		Inorganic Bases	0.08	0.01
C851A	M-1 Room Fugitives (4)	VOC	1.20	5.24

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CTFUG	Central Tank Farm Fugitives (4)	VOC	0.20	0.88
		H ₂ O ₂	0.05	0.22
D35	Phosphorous Acid Reactor	Phosphorous Acid	0.01	0.01
		HCl	0.01	0.01
D201	D201 B-1 Reactor Tank	VOC	1.02	0.26
		H ₂ SO ₄	0.01	0.01
		H ₂ O ₂	0.01	0.01
D202	D202 B-1 Reactor Tank	VOC	1.02	0.26
		H ₂ SO ₄	0.01	0.01
		H ₂ O ₂	0.01	0.01
D203	H ₂ SO ₄ /NaOH Mix Tank	H ₂ SO ₄	0.01	0.01
D233	D233 B-1 Reactor Tank	VOC	0.62	0.12
		H ₂ SO ₄	0.01	0.01
		H ₂ O ₂	0.01	0.01
D700	W-2 Blend Vessel	VOC	0.41	0.02
ETFUG	East Tank Farm Fugitives (4)	VOC	0.22	0.97
		PCl ₃	0.03	0.14
F1	Flare	VOC	11.85	4.36
		NO _x	0.49	0.49
		SO ₂	0.03	0.04
		CO	8.73	4.24
F103	H ₂ SO ₄ Weigh Tank	H ₂ SO ₄	0.01	0.01
F121A/B	Dilute Chilled NaOH Tanks	NaOH	0.01	0.01
F201	MEK/DMP Weigh Tank	VOC	1.82	0.19

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F202	H ₂ SO ₄ Weigh Tank	H ₂ SO ₄	0.01	0.01
F203	H ₂ O ₂ Weigh Tank	H ₂ O ₂	0.01	0.01
F204	Weigh Tank	VOC	2.83	0.06
F206	TXIB Weigh Tank	VOC	0.01	0.01
F207	H ₂ O ₂ Weigh Tank	H ₂ O ₂	0.01	0.01
F306	TBHP Blending	VOC	0.16	0.01
F403	Crude MEKP Storage Tank	VOC	1.09	0.06
F419	Sodium Bicarbonate Tank	Sodium Bicarbonate	0.01	0.01
F420	Crude MEKP Storage Tank	VOC	0.49	0.03
F421	Crude MEKP Storage Tank	VOC	0.49	0.03
F422	Crude MEKP Storage Tank	VOC	0.01	0.01
F423	Crude MEKP Storage Tank	VOC	0.01	0.01
I1002	Incinerator	VOC	0.20	0.29
		NO _x	0.35	0.51
		SO ₂	0.16	0.23
		PM ₁₀	0.45	0.66
		CO	0.76	1.11
M1FUG	M-1 Fugitive Emissions (4)	VOC	0.53	2.30
M1PKG	M-1 Packaging Fugitives (4)	VOC	0.02	0.01
M1SFUG	M-1 Storage Area Fugitives (4)	VOC	0.23	1.01

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M2PKG	M-2 Packaging Fugitives (4)	VOC	0.30	0.86
M2RFUG	M-2 Room Fugitives (4)	VOC	0.59	2.90
		H ₂ O ₂ 0.01	0.01	
M2SFUG	M-2 Storage Area Fugitives (4)	VOC	0.31	1.34
Q8000	M-2 Process Dryer	VOC	1.20	5.24
T1	T-1 H ₂ SO ₄ Tank	H ₂ SO ₄	0.03	0.01
T2	T-2 KOH Tank	KOH	0.01	0.01
T3	T-3 TBA Tank	VOC	9.53	0.28
T4	T-4 DMP Tank	VOC	0.01	0.01
T5	Organic Hydroperoxide Tanks	VOC	1.06	0.59
T6	T-6 H ₂ O ₂ Tank	H ₂ O ₂	0.08	0.01
T6A	T-6A H ₂ O ₂ Tank	H ₂ O ₂	0.06	0.01
T7	T-7 NaOH Tank	NaOH	0.01	0.01
T7A	T-7A NaOH Tank	NaOH	0.01	0.01
T8	T-8 MEK/DMP Tank	VOC	23.52	0.99
T10	T-10 NaOH Tank	NaOH	0.01	0.01
T11	T-11 H ₂ O ₂ Tank	H ₂ O ₂	0.05	0.01
T12	T-12 TXIB Tank	VOC	0.01	0.01

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			lb/hr	TPY**
T13	T-13 MEK Recovery Tank	VOC	2.44	0.15
T14	T-14 MEK Recovery Tank	VOC	2.97	0.13
T15	T-15 MEK Recovery Tank	VOC	1.85	0.06
T23, T24, and T30	Organic Acid Tanks	VOC	0.26	0.01
T25	T-25 OMS Tank	VOC	0.16	0.02
T25A	T-25A OMS Tank	VOC	0.60	0.02
T35A	T-35A Phosphorous Acid Tank	Phosphorous Acid	0.01	0.01
		HCl	0.01	0.01
T35B	T-35B Phosphorous Acid Tank	Phosphorous Acid	0.01	0.01
		HCl	0.01	0.01
T41	T-41 Diesel Tank	VOC	0.02	0.01
T42	T-42 Diesel Tank	VOC	0.03	0.01
T43	T-43 Diesel Tank	VOC	0.02	0.01
T80	T-80 Wastewater Tank	VOC	0.30	1.30
T83	T-83 Wastewater Tank	VOC	0.30	1.30
T84	T-84 Caustic Tank	NaOH	0.01	0.01
T85	T-85 Caustic Surge Tank	VOC	0.01	0.01
T85A	T-85A Caustic Surge Tank	VOC	0.01	0.01

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T95	Reactor Tank/ Knock Out Pot	VOC	0.03	0.01
	PCl ₃	0.03	0.01	
T130	T-130 t-Amyl Hydroperoxide	VOC	0.06	0.02
T150	T-150 Santicizer 160	VOC	0.01	0.01
T207	T-207 Red MEKP Tank	VOC	0.01	0.01
T301	T-301 Still Feed Tank	VOC	0.36	0.04
T311	T-311 DTBP Wash Tank	VOC	1.65	0.39
T312	T-312 DTBP Wash Tank	VOC	1.65	0.39
T313	B-1 Packaging Tank	VOC	7.72	0.25
T525	T-525 Brown Water Tank	VOC	0.01	0.01
T552	MEK Tank/Still Overhead Tank	VOC	0.42	0.12
T572	T-572 Glycol Tank	VOC	0.01	0.01
T700	T-700 B-1 Wastewater Tank	VOC	0.64	2.82
T702	T-702 DTBP Wastewater Tank	VOC	0.01	0.01
T705	T-705 Sodium Sulfate Tank	Sodium Sulfate	0.01	0.01
T720	T-720 DTBP Waste Acid Tank	VOC	0.01	0.01
T850	T-850 Product Tank	VOC	0.02	0.01
T900	T-900 Product Tank	VOC	0.02	0.03
T910	T-910 Product Tank	VOC	0.02	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
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T920	T-920 Product Tank	VOC	0.02	0.01
T925	T-925 OMS Tank	VOC	0.01	0.01
T980	T-980 M-1 Wastewater Tank	VOC	0.01	0.01
T5050	T-5050 NaOH Tank	NaOH	0.01	0.01
T7050	T-7050 Sodium Sulfate Tank	Sodium Sulfate	0.01	0.01
T7080	T-7080 Sodium Sulfate Tank	Sodium Sulfate	0.01	0.01
T7500	T-7500 Sodium Sulfate Tank	Sodium Sulfate	0.01	0.01
T8500	T-8500 Product Tank	VOC	0.01	0.02
T9000	T-9000 Product Tank	VOC	0.01	0.02
T9100	T-9100 Product Tank	VOC	0.01	0.02
T9200	T-9200 Product Tank	VOC	0.01	0.02
T9500	T-9500 Glycol Tank	VOC	0.01	0.01
T9600	T-9600 Glycol Tank	VOC	0.01	0.01
U541	B-1 Cooling Tower	VOC	0.01	0.01
W2DRUM	W-2 Drumming Vent	VOC	0.89	0.20
		Ammonia	0.08	0.04
W2FUG	W-2 Unit Fugitives (4)	VOC	0.14	0.63
W930	M-1 Cooling Tower	VOC	0.01	0.01

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			lb/hr	TPY
WTFUG	West Tank Farm Fugitives (4)	VOC	0.25	1.11

- (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 Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM₁₀ - particulate matter (PM) 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.
 CO - carbon monoxide
 HCl - hydrochloric acid
 H₂O₂ - hydrogen peroxide
 H₂SO₄ - sulfuric acid
 KOH - potassium hydroxide
 NaOH - sodium hydroxide
 PCl₃ - phosphorous trichloride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* 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 September 22, 2006