EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 46046 and PSD-TX-984

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**
BDO-RD1	BDO Tank No. 1	VOC	0.21	0.07
BDO-RD2	BDO Tank No. 2	VOC	0.21	0.07
BDO-ST1	BDO Tank No. 3	VOC	0.86	0.22
BDO-ST2	BDO Tank No. 4	VOC	0.86	0.22
BDO-ST3	BDO Tank No. 5	VOC	0.86	0.22
THF-ST1	THF Tank No. 1	VOC	0.70	2.41
THF-ST2	THF Tank No. 2	VOC	0.70	2.41
THF-ST3	THF Tank No. 3	VOC	0.67	2.29
THF-RD1	THF Tank No. 4	VOC	0.56	1.30
THF-RD2	THF Tank No. 5	VOC	0.56	1.30
THF-OS1	THF/BDO Tank No. 1	VOC	0.86	1.32
THF-OS2	THF/BDO Tank No. 2	VOC	0.86	1.32
MALEICTK	Maleic Acid Solution Tank	VOC	0.72	0.88
BDO-CRUDE	BDO Tank No. 6	VOC	0.03	0.10
PROC-W2	Organic Residue Column Purge and BDO Column Purge Tank	VOC	0.04	0.02

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
MW-ACID	Equipment Cleanings Tank No. 1	VOC	<0.01	<0.01
MW-ALCOHOL	Equipment Cleanings Tank No. 2	VOC	0.03	0.02
MW-NEUT	Equipment Cleanings Tank No. 3	VOC	0.06	0.01
PROC-W3	Tank No. 1	VOC	1.04	0.15
THF-W1	THF Tank No. 6	VOC	0.35	1.07
PROC-W1	Tank No. 2	VOC	0.02	0.01
THF-BLOW	THF Tank No. 7	VOC	0.37	0.07
THF-STAB	THF Tank No. 8	VOC	<0.01	<0.01
ACID-SUL	Sulfuric Acid Tank	H_2SO_4	0.33	<0.01
CAUSTIC	Caustic Tank	Caustic	16.03	0.05
PROC-W4	Tank No. 3	VOC	0.23	0.01
COOL-TWR	Cooling Tower	PM_{10} (5)	1.58	6.90
		VOC	1.89	8.28
BDO-FLARE	BDO Unit Flare	CO (5)	21.35	60.53
		NO_x	4.19	11.88
		SO_2	0.05	0.24
		VOC	15.08	36.10
SU-HTR	Maleic Anhydride Reactor Start-Up Heater	CO (5)	0.01	<0.01
		NO_x	2.21	0.79
		PM_{10} (5)	1.20	0.43
		SO_2	0.64	0.23
		VOC	<0.01	<0.01

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
SOGB	Scrubber Off-Gas Boiler	CO (5)	61.37	268.80
		NO_x	6.11	26.77
		PM_{10} (5)	24.70	108.20
		SO_2	7.75	24.35
		VOC	12.51	54.79
CAT-HANDL	Catalyst Handling Fugitive	PM_{10} (5)	0.30	1.30
CAT-DRUM	Catalyst Drum Handling	PM_{10} (5)	0.62	2.70
BDO-FUG	BDO/THF Unit Fugitives (4)	VOC	2.84	12.44
	BDO Loading (6)	VOC		0.28
LOAD4	BDO Truck Loading (6)	VOC	0.78	
LOAD5	BDO Rail Loading (6)	VOC	0.78	
LOAD6	BDO Rail Loading (6)	VOC	0.78	
	THF Loading (7)	VOC		5.77
LOAD4	THF Truck Loading (7)	VOC	19.92	
LOAD5	THF Rail Loading (7)	VOC	19.92	
LOAD6	THF Rail Loading (7)	VOC	19.92	

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source names. For fugitive sources use area name or fugitive source name.
(3) CO - carbon monoxide
H_2SO_4 - sulfuric acid
NO_x - total oxides of nitrogen
PM_{10} - 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.
SO_2 - sulfur dioxide

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VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

(5) Emissions and sources reviewed and authorized under Permit Number PSD-TX-984.

(6) The sum of all the annual BDO emissions from Emissions Point Nos. (EPNs) LOAD4, LOAD5, and LOAD6 may not exceed the allowable annual emissions shown.

(7) The sum of all the annual THF emissions from EPNs LOAD4, LOAD5, and LOAD6 may not exceed the allowable annual emissions shown.

* 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.

Dated December 5, 2002