EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 865A

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*
BMT-1E/T	Fugitives (4) (6)	VOC	2.40	10.50
	Train 1 - EtSH or	H_2S	<0.01	<0.01
	TBM Production	TRS	<0.01	<0.01
BMT-1M	Fugitives (4) (6)	VOC	0.33	1.43
	Train 1 - MeSH Production	H_2S	0.01	0.06
		TRS	0.02	0.10
BMT-2M	Fugitives (4)	VOC	0.89	3.89
	Train 2 - MeSH Production	H_2S	<0.01	0.03
		TRS	0.01	0.05
BMT-3M	Fugitives (4)	VOC	0.33	1.43
	Train 3 - MeSH Production	H_2S	0.01	0.06
		TRS	0.02	0.10
CT-1	Cooling Tower	H_2S	0.03	0.07
D215	Diesel Tank D-215	VOC	0.02	0.01
D307	Methanol Tank D-307	VOC	0.05	0.25
D310	Methanol Tank D-310	VOC	0.07	0.36
D398	Gasoline Tank D-398	VOC	4.56	0.22
D399	Diesel Tank D-399	VOC	0.02	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates ** lb/hr	TPY*
D2307	Methanol Tank D-2307	VOC	0.05	0.25
D3191A	Diesel Tank 3191A	VOC	0.02	0.01
D3191B	Diesel Tank 3191B	VOC	0.02	0.01
DMDS	Dimethyl Disulfide Area Fugitives (4)	VOC	0.06	0.24
		TRS	0.06	0.24
DMS	Dimethyl Sulfide Area Fugitives (4)	VOC	0.06	0.25
		TRS	0.06	0.25
F-1	Fugitives (4)	VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		TRS	<0.01	<0.01
		COS	<0.01	<0.01
		CS_2	<0.01	<0.01
F-2	Fugitives (4)	VOC	<0.01	<0.01
		H_2S	<0.01	<0.01
		TRS	<0.01	<0.01
Flare/Flare2	Plant Flares, H-225 and H-2225 (5)	VOC	62.62	6.99
		NO_X	37.49	9.11
		SO_2	6330.00	467.19
		CO	321.48	78.10
		H_2S	29.53	1.82
		TRS	96.25	6.37
FlareFug	Flare Area Fugitives (4)	VOC	<0.01	<0.01
Flare2Fug	Flare Area Fugitives (4)	VOC	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates ** lb/hr	TPY*
		AIR CONTAMINANTS DATA		
H202	Heat Transfer Fluid Heater (31 MMBTU/hr)	VOC	0.17	0.74
		NO_X	3.08	13.48
		SO_2	0.02	0.08
		PM_{10}	0.23	1.02
		CO	2.59	11.32
H401 - H402	Sulfur Heater/Methane Heater	VOC	0.04	0.20
		NO_X	1.56	6.83
		SO_2	0.01	0.04
		PM_{10}	0.21	0.93
		CO	0.52	2.30
H501 - H502	Sulfur Heater/Methane Heater	VOC	0.04	0.20
		NO_X	1.56	6.83
		SO_2	0.01	0.04
		PM_{10}	0.21	0.93
		CO	0.52	2.30
H2202	Heat Transfer Fluid Heater (31 MMBTU/hr)	VOC	0.17	0.74
		NO_X	3.08	13.48
		SO_2	0.02	0.08
		PM_{10}	0.23	1.02
		CO	2.59	11.32
H2VENT	Hydrogen Reformer Vent	VOC	0.11	0.40
		NO_X	1.00	0.85
		SO_2	0.004	0.02
		PM_{10}	0.17	0.43
		CO	0.71	1.87
		NH_3	0.10	0.45

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates ** lb/hr	TPY*
		AIR CONTAMINANTS DATA		
MEOHSCBR	Methanol Scrubber	VOC	0.93	4.05
		H_2S	<0.01	0.01
		TRS	0.01	0.04
RCSHIP	Fugitives (4) Railcar Loading/Unloading	VOC	0.09	0.37
		TRS	0.08	0.36
RUNDOWN	Rundown Tank Fugitives (4)	VOC	0.23	0.99
		H_2S	<0.01	<0.01
		TRS	0.23	0.99
S-1	Sulfur Storage Tank	SO_2	0.86	3.75
		H_2S	0.23	1.00
S-1E	Sulfur Storage Tank	SO_2	0.86	3.75
		H_2S	0.23	1.00
S-2	Sulfur Pit	SO_2	0.17	0.09
		H_2S	<0.01	0.02
S-2E	Sulfur Pit	SO_2	0.17	0.11
		H_2S	0.04	0.11
S-3	Sulfur Truck	SO_2	0.07	0.04
		H_2S	0.02	0.01
S-3E	Sulfur Truck	SO_2	0.07	0.05
		H_2S	0.02	0.01
STORAGE	Fugitives (4) Storage Tanks	VOC	0.28	1.24
		TRS	0.28	1.24
SWS	Fugitives (4) Sour Water Strippers	VOC	0.10	0.04
		H_2S	0.03	0.15
		TRS	0.04	0.18

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates ** lb/hr	TPY*
		AIR CONTAMINANTS DATA		
TTSHIP	Fugitives (4) Tank Truck Loading/Unloading	VOC	0.04	0.19
		TRS	0.04	0.19
WWTP	Fugitives (4) Wastewater Treatment Plant	VOC	0.12	0.50
		H_2S	0.05	0.20
X-426A	Steam Boiler (15.8 MMBTU/hr)	VOC	0.09	0.38
		NO_X	2.05	9.00
		SO_2	0.01	0.04
		PM_{10}	0.12	0.53
		CO	1.33	5.81
X-426B	Steam Boiler (15.8 MMBTU/hr)	VOC	0.09	0.38
		NO_X	2.05	9.00
		SO_2	0.01	0.04
		PM_{10}	0.12	0.53
		CO	1.33	5.81
X-930	Steam Boiler (30 MMBTU/hr)	VOC	0.17	0.72
		NO_X	3.00	13.14
		SO_2	0.02	0.08
		PM_{10}	0.22	0.97
		CO	2.52	11.04
THE FOLLOWING ALLOWABLES ARE IN EFFECT UNTIL THE INCINERATOR IS PERMANENTLY SHUT-DOWN				
Incinerator	Incinerator (7)	NO_X	4.6	20.0
		CO	2.25	9.9
		VOC	0.06	0.24
		SO_2	139	608
		PM_{10}	1.55	6.79

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		H_2S	0.10	0.44
		Cl_2	1.0	<0.01
Fug-Incin	Incinerator Fugitives (4)	VOC	0.02	0.08
		H_2S	<0.01	<0.01

(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 30 Texas Administrative Code Section 101.1
NO_X - total oxides of nitrogen
SO_2 - sulfur dioxide
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.
CO - carbon monoxide
H_2S - hydrogen sulfide
TRS - total reduced sulfur. Includes H_2S and sulfur bearing VOC. Excludes SO_2
Cl_2 - chlorine
COS - carbonyl sulfide
CS_2 - carbon disulfide
NH_3 - ammonia
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) The combined emissions from Flares 225, 2225, and all temporary flares shall not exceed the values shown for EPN FLARE/FLARE2.
(6) The BMT-1 Unit can produce either MeSH, EtSH, or TBM. Therefore, emissions from BMT-1M and BMT-1E/T do not occur simultaneously.

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

(7) The thermal oxidizer shall operate with no less than 99.9 percent efficiency in destructing the carbon compounds captured by the collection system as represented in the permit application dated December 5, 1997.

* 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

Dated_____