

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Nos. 1105 and PSD-TX-185M1

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
004T308R	Storage Tank	VOC	<0.1	<0.1
004T330	Storage Tank	VOC	<0.1	<0.1
004T331	Storage Tank	VOC	<0.1	<0.1
004T332	Storage Tank	VOC	<0.1	<0.1
004T333	Storage Tank	VOC	<0.1	<0.1
022T109	Storage Tank	VOC	0.3	<0.1
022T113	Storage Tank	VOC	3.3	0.2
022T114	Storage Tank	VOC	0.4	1.2
026T194	Storage Tank	VOC	0.7(0.5)**	0.2
026T303	Storage Tank	VOC	0.7(0.5)**	0.2
050T403	Storage Tank	VOC	6.8	0.1
050T405	Storage Tank	VOC	0.1	<0.1
050T412	Storage Tank	VOC	2.7	0.1
053T285R	Storage Tank	VOC	<0.1	<0.1
100T33	Storage Tank	VOC	0.3	1.0
100T34	Storage Tank	VOC	0.2	0.7

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
008LR1 or 022LT51	Solvent B-624 Loading	VOC	0.3	<0.1
008LR1 or 022LT51	Solvent B-38 Loading	VOC	4.5	0.1
027FL1	Flare	NO _x	0.6	0.2
		CO	1.1	0.3
		SO ₂	<0.1	<0.1
		VOC	22.8	3.1
050FL1	Emergency Flare	VOC	Emergency Service	
061D100	Quench Water System	CO	7.1	31.1
062CD18A, 062CD18B, or 062CD18C	Reformer Furnace No. 17	NO _x	7.8	28.3
		CO	2.0	7.1
		SO ₂	0.1	0.1
		PM	0.3	1.0
		NMHC	0.2	0.6
		MEA	3.3	14.5
062CD26 or 062CD28	Reformer Furnace No. 18	NO _x	7.8	28.3
		CO	2.0	7.1
		SO ₂	0.03	0.1
		PM	0.02	0.1
		NMHC	0.16	0.6
		MEA	2.6	11.4
062CD28 or 062CD26	Reformer Furnace No. 19	NO _x (5)	12.1	43.8
		CO	2.0	7.1
		SO ₂	0.02	0.1
		PM	0.02	0.1
		NMHC	0.16	0.6

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
		MEA	2.6	11.4
062CD32 or 062CD26	Reformer Furnace No. 20 (6)	NO _x	11.0	48.2
		CO	3.2	14.0
		SO ₂	0.02	0.1
		PM	0.03	0.2
		NMHC	0.26	1.2
		MEA	2.1	9.1
062H21	Reformer Furnace No. 21	NO _x	3.5	15.3
		CO	1.5	6.6
		SO ₂	<0.1	<0.1
		PM	0.4	1.9
		VOC	<0.1	<0.1
062C17	Compressor Engine	NO _x	58.6	243.3
		CO	5.9	24.3
		SO ₂	0.02	0.1
		VOC	0.92	3.8
062C19	Compressor Engine	NO _x (5)	55.5	243.1
		CO	6.3	26.1
		SO ₂	0.02	0.1
		VOC	1.80	7.5
062C20	Compressor Engine	NO _x (5)	55.5	243.1
		CO	6.3	26.1
		SO ₂	0.02	0.1
		VOC	1.80	7.5
062C22	Compressor Engine	NO _x	20.9	86.8
		CO	16.8	69.5
		SO ₂	0.02	0.1
		VOC	0.50	2.1

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
F053WW1	Wastewater Fugitives	VOC	<0.1	<0.1
F053WW2	Wastewater Fugitives	VOC	2.3	10.2
F063CT3	Cooling Tower Fugitives	VOC	0.9	3.7
F053FG1	Fugitives (4)	CO	2.1	9.2
		VOC	29.0	127.0
F062FG1	Fugitives (4)	CO	10.7	47.0
		MEA	2.8	12.1
F062GA20	Analyzer Vents	CO	0.3	1.5

- (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
 - CO - carbon monoxide
 - SO₂ - sulfur dioxide
 - PM - particulate matter (including particulate matter less than 10 microns in diameter).
 - MEA - monoethanolamine
 - NMHC - nonmethane hydrocarbons
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) These are the Permit No.PSD-TX-185M1 emissions.
- (6) Emission rates include contributions from Cell Nos. 18 and 19.

* 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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

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

** VOC emissions in paranthesis will apply after the reconfiguration of the distillation train (EPN: F053FG1) to include new vapor condensers and piping.

Dated_____