

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 18978 and PSD-TX-752M3

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)	<u>Emission Rates (4)</u>	
			lb/hr	TPY **
QE1001B	Furnace 1 (6)	NO _x (PSD)	10.2	409.2
		CO (PSD)	10.2	409.2
		SO ₂	0.3	11.4
		VOC	1.5	58.4
		PM ₁₀ (PSD)	2.2	88.0
QE1002B	Furnace 2 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	
QE1003B	Furnace 3 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	
QE1004B	Furnace 4 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	
QE1005B	Furnace 5 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	

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			<u>lb/hr</u>	<u>TPY**</u>
QE1006B	Furnace 6 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	
QE1007B	Furnace 7 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	
QE1008B	Furnace 8 (6)	NO _x (PSD)	10.2	
		CO (PSD)	10.2	
		SO ₂	0.3	
		VOC	1.5	
		PM ₁₀ (PSD)	2.2	
QE1009B	Furnace 9 (6)	NO _x (PSD)	11.2	
		CO (PSD)	11.2	
		SO ₂	0.3	
		VOC	1.6	
		PM ₁₀ (PSD)	2.4	
QE1010B	Furnace 10 (6)	NO _x (PSD)	11.2	
		CO (PSD)	11.2	
		SO ₂	0.3	
		VOC	1.6	
		PM ₁₀ (PSD)	2.4	
QE5802UA	Boiler A	NO _x (PSD)	8.9	39.1
		CO (PSD)	8.9	39.1
		SO ₂	0.3	1.1
		VOC	1.3	5.6
		PM ₁₀ (PSD)	1.9	8.4

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			lb/hr	TPY**
QE5802UB	Boiler B	NO _x (PSD)	8.9	39.1
		CO (PSD)	8.9	39.1
		SO ₂	0.3	1.1
		VOC	1.3	5.6
		PM ₁₀ (PSD)	1.9	8.4
QECOMP1	Diesel Compressor	NO _x (PSD)	6.1	6.7
		CO (PSD)	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		PM ₁₀ (PSD)	0.1	0.1
QECOMP2	Diesel Compressor	NO _x (PSD)	6.1	6.7
		CO (PSD)	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		PM ₁₀ (PSD)	0.1	0.1
QE6410F	Pyrolysis Gasoline Tank	VOC	2.5	5.9
QE6411F	Pyrolysis Fuel Oil Tank	VOC	0.10	0.19
QE2410F	Wash Oil Drum	VOC	0.26	0.08
QE3416F	Methanol Tank	VOC	0.18	0.15
QE1416F	Decoking Drum	CO (PSD)	519.0	101.6
		PM ₁₀ (PSD)	4.14	0.9
QE7801U	Cooling Tower Fugitives (4)	VOC	7.14	31.27
QE3418F	MAPD Decoke Pot	CO (PSD)	17.30	1.45

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
QE3050B	ARU Flare	CO (PSD)	15.1	6.0
		NO _x (PSD)	2.9	1.1
		SO ₂ 0.1	0.1	
		VOC	12.5	1.1
QE8050B	Elevated Flare	CO (PSD)	181.0	25.0
		NO _x (PSD)	52.0	10.7
		SO ₂	10.3	0.3
		VOC 117.0	1.6	
QE7412F	Wash Oil Tank	VOC	0.56	0.17
QELOAD	Organic Loading	VOC	1.40	1.24
QESTORE	Organic Storage	VOC	0.98	1.01
QE8001A	Wastewater System	VOC	3.64	14.66
QELAB	Analyzers and Sampling	VOC	6.0	0.13
QEFUG	Process Fugitives	VOC	14.6	64.0
QEANALYZ2	Analyzer Control Devices	VOC	0.1	0.1
		CO (PSD)	0.1	0.1
		NO _x (PSD)	0.1	0.1
QEZIMPRO	Zimpro Vent	VOC	4.5	3.8
QEUNIT	Dock Thermal Oxidizer (5)	NO _x (PSD)	10.7	4.7
		CO (PSD)	7.7	6.2
		VOC	13.8	4.1
		PM ₁₀ (PSD)	0.06	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (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) NO_x - total oxides of nitrogen
CO - carbon monoxide
SO₂ - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM₁₀ - particulate matter (PM) 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.
 - (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
 - (5) The Dock Thermal oxidizer is owned and operated by Millenium Petrochemicals, Inc., under Permit Number 4751.
 - (6) The combined annual emissions for these units shall not exceed the values listed at QE1001B.
- * 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 _____