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**

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 18978/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)	Emission Rates (4) lb/hr	TPY **
QE1001B	Furnace 1	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1002B	Furnace 2	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1002B	Furnace 3	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50

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**
QE1004B	Furnace 4	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1005B	Furnace 5	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1006B	Furnace 6	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1007B	Furnace 7	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1008B	Furnace 8	NO_x	30.30	132.71
		CO	8.17	35.78
		SO_2	0.30	1.31
		VOC	0.70	3.00
		PM_{10}	1.00	3.50
QE1009B	Furnace 9	NO_x	31.75	139.10

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**
		CO	12.75	55.80
		SO_2	0.36	1.56
		VOC	0.83	3.63
		PM_{10}	2.10	6.57
QE5802UA	Boiler A	NO_x	22.50	98.55
		CO	7.90	34.60
		SO_2	0.14	0.61
		VOC	0.34	1.49
		PM_{10}	0.34	1.49
QE5802UB	Boiler B	NO_x	22.50	98.55
		CO	7.90	34.60
		SO_2	0.14	0.61
		VOC	0.34	1.49
		PM_{10}	0.34	1.49
QECOMP1	Diesel Compressor	NO_x **(PSD)**	6.10	6.70
		CO **(PSD)**	0.10	0.10
		SO_2	0.10	0.10
		VOC	0.10	0.20
		PM_{10} **(PSD)**	0.10	0.10
QECOMP2	Diesel Compressor	NO_x **(PSD)**	6.10	6.70
		CO **(PSD)**	0.10	0.10
		SO_2	0.10	0.10
		VOC	0.10	0.20
		PM_{10} **(PSD)**	0.10	0.10
QECOMP3	Diesel Compressor	NO_x	2.33	6.61
		CO	0.50	1.42
		SO_2	0.15	0.44

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**
		VOC	0.19	0.54
		PM_{10}	0.17	0.47
QE6410F	Pyrolysis Gasoline Tank	VOC	2.50	5.90
QE6411F	Pyrolysis Fuel Oil Tank	VOC	0.02	0.09
QE2410F	Wash Oil Drum	VOC	0.60	0.07
QE3416F	Methanol Tank	VOC	19.20	0.34
QE1416F	Decoking Drum	CO **(PSD)**	519.00	101.60
		PM_{10} **(PSD)**	4.14	0.90
QE7801U	Cooling Tower Fugitives (4)	VOC	7.14	31.27
QE3418F	MAPD Decoke Pot	CO **(PSD)**	17.30	1.45
QE3050B	ARU Flare	CO **(PSD)**	15.10	6.00
		NO_x **(PSD)**	2.90	1.10
		SO_2	0.10	0.10
		VOC	12.50	1.10
QE8050B	Elevated Flare	CO **(PSD)**	187.00	34.20
		NO_x **(PSD)**	58.00	20.10
		SO_2	10.30	0.30
		VOC	117.00	1.60
QE7412F	Wash Oil Tank	VOC	0.67	0.13
QELOAD	Organic Loading	VOC	1.40	1.24
QESTORE	Organic Storage	VOC	0.98	1.01
QE8001A	Wastewater System	VOC	3.64	14.66

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**
QELAB	Analyzers and Sampling	VOC	7.03	2.23
QEFUG	Process Fugitives (4)	VOC	14.6	64.00
QEANALYZ2	Analyzer's Control Devices (Thermal Oxidizer)	VOC	0.01	0.01
		CO **(PSD)**	0.01	0.01
		NO_x **(PSD)**	0.01	0.01
QEZIMPRO	Zimpro Vent	VOC (6)	4.50	3.80
QEUNIT	Dock Thermal Oxidizer (5)	NO_x **(PSD)**	10.70	4.70
		CO **(PSD)**	7.70	6.20
		VOC	13.80	4.10
		PM_{10} **(PSD)**	0.06	0.03
PW7614JA	Emergency Engine	NO_x	11.69	5.12
		CO	2.68	1.17
		VOC	0.34	0.15
		SO_2	3.94	1.73
		PM_{10}	0.34	0.15
PW7605JB	Emergency Engine	NO_x	15.84	6.94
		CO	3.63	1.59
		VOC	0.47	0.20
		SO_2	5.34	2.34
		PM_{10}	0.46	0.20
PW7605JC	Emergency Engine	NO_x	15.84	6.94
		CO	3.63	1.59
		VOC	0.47	0.20
		SO_2	5.34	2.34
		PM_{10}	0.46	0.20

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(1) Emission point identification - either specific equipment designation or emission point number (EPN) 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
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM_{10} - particulate matter (PM) less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM 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) This pre-control emission rate applies until July 12, 2005. After this date, ZIMPRO Vent emissions will be sent to either Boiler A (EPN QE5802UA) or Boiler B (EPN QE5802UBA) for control at a minimum of 98 percent DRE to comply with Title 40 Code of Federal Regulations § 63.1100.

* 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 September 14, 2004