

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 55464

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**

Emission rates for Phase I (Import/Export Operations)

B-1 (A- H, J) (7)	Johnstone Heaters (9 Heaters) 155 MMBtu/hr	NO _x	1.71	-
		CO	2.79	-
		VOC	0.31	-
		PM ₁₀	1.09	-
		SO ₂	0.78	-
		H ₂ SO ₄	0.06	-
K-7 (A-C) (7)	Waukesha (3 Compressors) 1,380 bhp	NO _x	0.61	-
		CO	6.08	-
		VOC	0.15	-
		PM ₁₀	0.10	-
		SO ₂	0.01	-
		H ₂ SO ₄	0.0005	-
FLR (4)	Flare Normal Operations (Pilots + Purge Gas)	NO _x	0.80	-
		CO	4.00	-
		VOC	0.00	-
		PM ₁₀	0.00	-
		SO ₂	0.007	-
		H ₂ SO ₄	0.0005	-
	Export Operations	NO _x	67.93	-
		CO	367.52	-
		VOC	11.14	-
		PM ₁₀	0.00	-
		SO ₂	0.67	-
		H ₂ SO ₄	0.05	-

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B-1 (A-H,J) K-7 (A-C) FLR (4)	Annual Emission Rate for Heaters, Compressors and Flare	NO _x	-	24.06
		CO	-	80.00
		VOC	-	4.38
		PM ₁₀	-	6.56
		SO ₂	-	2.19
		H ₂ SO ₄	-	0.17
Z-10 (5)	Emergency Air Compressor (200 hp)	NO _x	1.32	0.07
		CO	1.15	0.06
		VOC	0.50	0.25
		PM ₁₀	0.07	0.003
		SO ₂	0.41	0.02
		H ₂ SO ₄	0.03	0.002
Z-10TK	Diesel Tank for Emergency Air Compressor (Z-10) (100 gal)	VOC	0.52	0.0002
FUG (6)	Fugitives	VOC	0.16	0.71
FUG-BOGLIQ	BOG Liquefaction System Fugitives	VOC	0.01	0.05

Emission Rates for Phase II (Import Operations)

B-1 (K-M)	Johnstone Heaters (14 heaters) 155 MMBtu/hr (7)	NO _x	1.71	-
B-21 (A-H)		CO	2.79	-
B-21 (J-L)		VOC	0.31	-
		PM ₁₀	1.09	-
		SO ₂	0.78	-
		H ₂ SO ₄	0.06	-
B-1 (K-M) B-21 (A-H) B-21 (J-L)	Annual Emission Rate for Heaters	NO _x	-	41.25
		CO	-	67.50
		VOC	-	7.50
		PM ₁₀	-	11.25
		SO ₂	-	18.75
		H ₂ SO ₄	-	1.44
Z-210 (5)	Emergency Air Compressor (400 hp)	NO _x	3.12	0.16
		CO	0.78	0.04
		VOC	0.11	0.01

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		PM ₁₀	0.13	0.01
		SO ₂	0.54	0.03
		H ₂ SO ₄	0.04	<0.01
Z-210TK	Diesel Tank for Emergency Air Compressor (Z-210) (300 gal)	VOC	0.15	0.0001
FUG-PHII (6)	Phase II Fugitives	VOC	0.27	1.18
Ancillary Equipment (Phase I and Phase II)				
EG-1 (5)	Emergency Generator Process Area (350kW)	NO _x	7.24	0.36
		CO	0.90	0.04
		VOC	0.10	0.005
		PM ₁₀	0.08	0.004
		SO ₂	0.31	0.02
		H ₂ SO ₄	0.02	0.001
EG-1TK	Diesel Tank for Emergency Generator (EG-1) (400 gal)	VOC	0.40	0.0003
EG-ADMIN (5)	Emergency Generator Admin. Bldg. (250 kW)	NO _x	3.12	0.16
		CO	0.19	0.01
		VOC	0.04	0.002
		PM ₁₀	0.03	0.001
		SO ₂	0.82	0.04
		H ₂ SO ₄	0.06	0.003
EG-ADMINTK	Diesel Tank for Emergency Generator (EG-ADMIN) (300 gal)	VOC	0.48	0.0003
EG-DOCK (5)	Emergency Generator Dock Area (175 kW)	NO _x	2.72	0.14
		CO	0.28	0.01
		VOC	0.04	0.002
		PM ₁₀	0.03	0.002
		SO ₂	0.75	0.04
		H ₂ SO ₄	0.06	0.003

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EG-DOCKTK	Diesel Tank for Emergency Dock Generator (EG-DOCK) (200 gal)	VOC	0.52	0.0003
FWP (5)	Fire Water Pump (660 hp)	NO _x	12.19	0.61
		CO	0.55	0.03
		VOC	0.07	0.004
		PM ₁₀	1.24	0.06
		SO ₂	0.27	0.01
		H ₂ SO ₄	0.02	0.001
FWPTK	Diesel Tank for Firewater Pump (FWP) (830 gal)	VOC	0.46	0.0006
EG-21 (5)	Emergency Generator (400 hp)	NO _x	4.96	0.25
		CO	0.21	0.01
		VOC	0.06	<0.01
		PM ₁₀	0.05	<0.01
		SO ₂	0.82	0.04
		H ₂ SO ₄	0.06	<0.01
EG-21TK	Diesel Tank Emergency Generator (EG-21) (300 gal)	VOC	0.43	0.0003

- (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 an area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM₁₀ - particulate matter equal to or less than 10 microns in diameter
- CO - carbon monoxide
- H₂SO₄ - sulfuric acid

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- (4) Normal flare emissions are based on the pilot gas combustion emissions for 8,760 hours per year (hr/yr). The emission rates (lb/hr and tpy) for the flare include Phase I and Phase II operations.
- (5) Emission rates are based on and the facilities are limited to 100 hr/yr
- (6) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (7) Pounds per hour (lb/hr) emission limits are per unit

- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

- ** Compliance with annual emission limits is based on a rolling 12-month period.

Dated May 14, 2009