

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 20160

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 **
POFLARE	PO Ground Flare	NO _x	7.90	6.97
		CO	57.02	50.34
		VOC	97.00	32.91
		SO ₂	0.09	0.38
HK-F5-003	Boiler	NO _x	14.26	62.44
		CO	20.77	90.98
		VOC	0.86	3.75
		SO ₂	1.60	6.99
		PM ₁₀	2.85	12.49
STEAMGEN	Steam Generator Nos. 1 and 2	NO _x	28.60	125.20
		CO	28.57	37.34
		VOC	2.86	6.05
		SO ₂	1.89	3.51
		PM ₁₀	3.22	14.11
PODUST	Catalyst Prep Dust Filter	PM ₁₀	0.01	0.01
POCATNH3	Catalyst Prep Scrubber	NH ₃	0.01	0.01
		VOC	0.02	
POTK001	Catalyst Solution Tank	VOC	1.49	0.05
POTK003	Catalyst Solution Tank	VOC	1.49	0.05
POTK007	TBA Day Tank	VOC	0.33	1.46
POTK008	Dry TBA Tank	VOC	0.43	1.89
POTK009	I-Octane Tank	VOC	0.13	0.59

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
	TPY**			
POPERFUG	Peroxidation Unit (4)	VOC	0.67	2.92
POEPOFUG	Epoxidation Unit (4)	VOC	0.48	2.12
POPURFUG	PO Purification Unit (4)	VOC	0.43	1.88
POMTFUG	MTBE One-Step Unit (4)	VOC	0.37	1.62
POCPFUG	Catalyst Prep Area (4)	VOC	0.15	0.67
POTRAFUG	TBA Removal Area (4)	VOC	0.28	1.21
POCRFUG	Catalyst Recovery (4)	VOC	0.13	0.55
POPRFUG	Propylene Refrigeration Area (4)	VOC	0.10	0.44
MTBFUG-2	MTBE Synth. Unit (4)	VOC	0.20	0.88
WWSFUG	Wastewater Stripper (4)	VOC	0.07	0.30
POLODFUG	Railcar/Tankwagon Loading (4)	VOC	0.06	0.24
RSELDSFUG	Barge Loading (4)	VOC	0.02	0.08
TKEFUG	PO/MTBE Tankage (4)	VOC	0.24	1.05
BUTFUG	Butane Bullets (4)	VOC	0.04	0.18
MTBEFUG	MTBE Storage (4)	VOC	0.05	0.20
SGFUG	Steam Generators Area (4)	VOC	0.06	0.25
CTFUG	Cooling Tower (4)	NH ₃	0.08	0.33
		VOC	5.80	23.57
RSELDCLR	Dock Flare	NO _x	4.53	2.69

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<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	
	TPY**			
		CO	9.04	5.36
		SO ₂	0.04	0.01
		VOC	12.37	3.87
PODOWSUMP	Wastewater Sump/Pond (5)	NH ₃	0.04	0.01
		VOC	28.12	22.59
PODOWSUMP	Wastewater Sump/Pond (6)	NH ₃	0.01	0.01
		VOC	18.20	3.35
T-O-79	EGME Tank	VOC	0.02	0.05
CRFUG	Catalyst Recycle Fugitives (4)	VOC	0.06	0.25
EGMEFUG	EGME Storage Fugitives (4)	VOC	0.10	0.44
PRCOFUG	Propylene Recovery Column Overhead (4)	VOC	0.07	0.30
PROFUG	Propylene Recovery Overhead (4)	VOC	0.14	0.61
POFUG	PO Fugitives (4)	VOC	0.04	0.19
POFUG-1	PO Fugitives (4) (Primary Fractionator)	VOC	0.01	0.04
POFUG-2	PO Fugitives (T&I) (4)	VOC	0.21	0.93

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- (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) PM₁₀ - particulate matter (PM) 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.
VOC - volatile organic compounds as defined in 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
CO - carbon monoxide
NH₃ - ammonia
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) Maintenance/Startup/Shutdown emission limits prior to control (Special Conditions Nos. 22 & 23), control which must be achieved on or before March 16, 2009.
- (6) Maintenance/Startup/Shutdown emission limits (Special Conditions Nos. 22 & 23) after control.

* 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.