

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 18568

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**
F-1343	1343 Unit Fugitives (4)	Benzene	0.40	1.74
		Butadiene, 1,3-	0.25	1.11
		Cumene	<0.01	0.01
		Ethyl Benzene	0.04	0.16
		Hexane,	0.02	0.07
		Toluene	0.08	0.36
		Xylene,	0.04	0.19
		Xylene, o-	0.03	0.13
		Xylene, p-	0.03	0.11
		VOC	0.47	2.03
F-1743	1743 Unit Fugitives (4)	Benzene	0.03	0.11
		Cyclohexane	0.33	1.45
F-1749	1749 Unit Fugitives (4)	Benzene	0.95	4.18
		Butadiene, 1,3-	<0.01	<0.01
		Cumene	0.01	0.04
		Ethyl Benzene	0.03	0.11
		Hexane,	0.06	0.25
		Toluene	0.30	1.30
		Xylene,	0.01	0.05
		Xylene, o-	<0.01	0.02
		Xylene, p-	0.01	0.05
		VOC	0.23	1.02
E-01-1343	Process Heater PH-1 (72.13 MMBtu/hour)	VOC	0.39	1.70
		NO _x	4.33	18.96
		SO ₂	1.82	7.98
		PM	0.55	2.40
		CO	5.33	23.34

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E-02-1343	Process Heater PH-2 (48.09 MMBtu/hour)	VOC	0.26	1.14
		NO _x	2.89	12.64
		SO ₂	1.12	4.89
		PM	0.37	1.60
		CO	3.55	15.56
E-07-1343	Process Heater PH-7 (72.13 MMBtu/hour)	VOC	0.39	1.70
		NO _x	4.33	18.96
		SO ₂	1.82	7.98
		PM	0.55	2.40
		CO	5.33	23.34
E-08-1343	Process Heater PH-8	VOC	0.65	2.83
		NO _x	4.32	18.92
		SO ₂	4.07	8.22
		PM	0.89	3.92
		CO	8.86	38.82
CA-1	Carbon Adsorption Unit	Benzene	15.0	5.4
F-169-CT	Cooling Tower 169	VOC (5)	1.89	8.28

(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 Title 30 Texas Administrative Code § 101.1 excluding benzene, 1,3-butadiene; cumene, ethyl benzene, n-hexane, toluene, and xylenes (m-, o-, and p-) which are designated as hazardous air pollutants under § 112(b) of the Federal Clean Air Act

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - particulate matter, suspended in the atmosphere, including PM₁₀.

PM₁₀ - particulate matter 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.

CO - carbon monoxide

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(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emissions rate.

(5) VOC emitted from Cooling Tower 169 may be comprised of isopentane, benzene, cyclohexane, and/or heavy reformat.

* 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

** Compliance with the emission caps shall be based on a 12-month rolling average of emissions.

Dated June 7, 2002