

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 20485

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**
UWNR1, UW6R1	North/South Flare (5) Normal Mode of Operation	VOC	32.06	7.67
		1,3 butadiene	6.47	4.35
		NO _x	0.78	0.45
		CO	5.85	3.64
UWNR1, UW6R1	North/South Flare (5) Maintenance Mode of Operation	VOC	70.57	9.96
		1,3 butadiene	36.05	4.71
		NO _x	3.11	0.42
		CO	22.47	3.03
UWNR1	North Flare Pilot Emissions	NO _x	0.05	0.22
		CO	0.37	1.62
UW6R1	South Flare Pilot Emissions	NO _x	0.05	0.22
		CO	0.37	1.62
RSWLDFLR	Dock Flare	VOC	33.84	12.55
		1,3 butadiene	0.05	0.22
		NO _x	16.45	4.24
		CO	60.92	29.14
UW6BB1&2	Boilers 1 and 2	PM ₁₀	8.50	33.70
		VOC	1.70	6.70
		NO _x	528.00	2072.00
		SO ₂	18.60	73.00
		SO ₃	1.50	5.60
		CO	170.00	438.00

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			lb/hr	TPY**
BDMTS3BA	Air Heater	PM ₁₀	0.04	0.06
		VOC	0.04	0.06
		NO _x	0.98	1.48
		SO ₂	0.08	0.12
		CO	0.25	0.37
WWCT1-6	Cooling Tower	VOC	46.30	50.67
		1,3 butadiene (4)	37.57	41.43
6-TK-48	Storage Tank 48	VOC	0.57	<0.01
6-TK-72	Storage Tank 72	VOC	0.57	<0.01
6-TK-73	Storage Tank 73	VOC	0.57	<0.01
C4BUND	Bundle Furnaces	PM ₁₀	1.00	4.38
		VOC	0.02	0.10
		NO _x	0.20	0.88
		SO ₂	<0.01	<0.01
		CO	3.35	14.60
C4TKMAIN	Tank Maintenance (6)	VOC	1.01	0.16
		1,3 butadiene	1.03	0.17
C4FUG	Fugitives (4)(7)	VOC	13.87	60.33
C4ICE	Internal Combustion Engines (7)	PM ₁₀	5.07	0.07
		VOC	6.61	0.09
		NO _x	70.46	0.92
		SO ₂	4.46	0.06
		CO	15.15	0.20
C4ICEDFT	Diesel Fuel Tanks (7)	VOC	<0.01	<0.01
C4MCST	Miscellaneous Chemical Storage Tanks (7)	VOC	0.05	0.20

THE FOLLOWING SHALL APPLY TO BOILER 8 BEFORE AUGUST 1, 2007 AND AFTER JULY 31,

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**

2007, IF IT IS OPERATED FOR 750 HOURS OR LESS PER CALENDAR YEAR:

UW6BB8	Boiler 8 285 MMBtu/hr	NO _x	8.54	37.38
		CO	11.81	51.72
		SO ₂	4.04	17.71
		VOC	1.14	4.98
		PM ₁₀	2.15	9.42

THE FOLLOWING SHALL APPLY TO BOILER 8 AFTER JULY 31, 2007, IF IT IS OPERATED FOR MORE THAN 750 HOURS PER CALENDAR YEAR:

UW6BB8	Boiler 8 285 MMBtu/hr	NO _x	5.70	24.96
		CO	11.81	51.72
		SO ₂	4.04	17.71
		VOC	1.14	4.98
		PM ₁₀	2.15	9.42

THE FOLLOWING SHALL APPLY TO TEMPORARY BOILERS AUTHORIZED BY SPECIAL CONDITION NO. 37:

BBTEMP100	Temporary Boiler 133.7 MMBtu/hr	NO _x	8.02	--
		CO	11.01	--
		SO ₂	0.08	--
		VOC	0.72	--
		PM ₁₀	1.00	--
BBTEMP70	Temporary Boiler 84.2 MMBtu/hr	NO _x	5.05	--
		CO	6.93	--
		SO ₂	0.05	--
		VOC	0.45	--
		PM ₁₀	0.63	--
BBTEMP50	Temporary Boiler	NO _x	3.79	--

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63.2 MMBtu/hr	CO	5.20	--
	SO ₂	0.04	--
	VOC	0.34	--
	PM ₁₀	0.47	--

- (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
 - NO_x - total oxides of nitrogen
 - CO - carbon monoxide
 - 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.
 - SO₂ - sulfur dioxide
 - SO₃ - sulfur trioxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) The north and south flares are connected to a header system that allows either flare to combust the waste streams.
- (6) Estimate of emissions generated from wastewater during cleaning of spherical process tanks.
- (7) Emissions from several small internal combustion engines and storage tanks.

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

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

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year

Dated July 29, 2004