

# 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 and UW6R1	North/South Flare (5) Normal Mode of Operation	VOC	32.06	7.67
		1,3 butadiene	6.47	4.35
		NO <sub>x</sub>	0.78	0.45
		CO	5.85	3.64
UWNR1 and UW6R1	North/South Flare (5) Maintenance Mode of Operation	VOC	70.57	9.96
		1,3 butadiene	36.05	4.71
		NO <sub>x</sub>	3.11	0.42
		CO	22.47	3.03
UWNR1	North Flare Pilot Emissions	NO <sub>x</sub>	0.05	0.22
		CO	0.37	1.62
UW6R1	South Flare Pilot Emissions	NO <sub>x</sub>	0.05	0.22
		CO	0.37	1.62
RSWLDFLR	Dock Flare	VOC	44.09	17.49
		1,3 butadiene	45.85	8.24
		NO <sub>x</sub>	27.16	7.13
		CO	82.30	34.91
UW6BB1	Boiler 1	NO <sub>x</sub>	264.00	1036.00
		CO	85.00	219.00
		SO <sub>2</sub>	9.30	36.5
		VOC	0.85	3.35
		PM <sub>10</sub>	4.25	16.85

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY**
UW6BB9	Boiler 9 285 MMBtu/hr	NO <sub>x</sub>	5.70	24.92
		CO	23.62	48.11
		SO <sub>2</sub>	4.04	14.99
		VOC	1.14	4.36
		PM <sub>10</sub>	2.15	7.97
UW6BB10	Boiler 10 285 MMBtu/hr	NO <sub>x</sub>	5.70	24.92
		CO	23.62	48.11
		SO <sub>2</sub>	4.04	14.99
		VOC	1.14	4.36
		PM <sub>10</sub>	2.15	7.97
UW6BB9 and UW6BB10	Boiler 9 and 10 Annual Cap	NO <sub>x</sub>	--	44.86
		CO	--	86.59
		SO <sub>2</sub>	--	26.98
		VOC	--	7.85
		PM <sub>10</sub>	--	14.35
BDMTS3BA	Air Heater	PM <sub>10</sub>	0.04	0.06
		VOC	0.04	0.06
		NO <sub>x</sub>	0.98	1.48
		SO <sub>2</sub>	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

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			lb/hr	TPY**
C4BUND	Bundle Furnaces	PM <sub>10</sub>	1.00	4.38
		VOC	0.02	0.10
		NO <sub>x</sub>	0.20	0.88
		SO <sub>2</sub>	<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 <sub>10</sub>	5.07	0.07
		VOC	6.61	0.09
		NO <sub>x</sub>	70.46	0.92
		SO <sub>2</sub>	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, 2007, IF IT IS OPERATED FOR 750 HOURS OR LESS PER CALENDAR YEAR:

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

THE FOLLOWING SHALL APPLY TO BOILER 8 AFTER JULY 31, 2007, IF IT IS OPERATED FOR

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## AIR CONTAMINANTS DATA

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

## MORE THAN 750 HOURS PER CALENDAR YEAR:

UW6BB8	Boiler 8	NO <sub>x</sub>	5.70	24.96
	285 MMBtu/hr	CO	23.62	51.72
		SO <sub>2</sub>	4.04	17.71
		VOC	1.14	4.98
		PM <sub>10</sub>	2.15	9.42

- (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<sub>x</sub> - total oxides of nitrogen  
CO - carbon monoxide  
PM<sub>10</sub> - 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.  
SO<sub>2</sub> - sulfur dioxide
- (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:

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

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

Dated \_\_\_\_\_