

EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

Flexible Permit Number 6308 and PSD-TX-137M2

EMISSION CAP TABLE

This table lists the maximum allowable emission caps 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.

NO_x EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units	2000 through 2005	425.24	921.00
Fired Units, Boilers	2006	448.84	1024.00

CO EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units	2000 through 2005	272.15	479.12
Fired Units, Boilers	2006	300.45	603.02

SO₂ EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units	2000 through 2005	277.09	160.20
Fired Units, Boilers	2006	289.08	191.80

PM EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units	2000 through 2005	50.30	190.58
Fired Units, Boilers	2006	53.20	203.38

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EMISSION CAP TABLE EMISSION SOURCES

VOC EMISSION CAP

<u>Facility/Emission Source Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Fired Units, Cooling Towers, Tanks, Fugitives, Wastewater, Miscellaneous (4)	2000 through 2005	653.73	606.16
Fired Units, Cooling Towers, Tanks, Fugitives, Wastewater, Miscellaneous, Boilers (4)	2006	647.33	578.26

Toluene EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Tanks E11TKS23, E11TKR17, and E11TKR18	2000	0.96	2.53

Xylene EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Tanks E11TKS32, E11TKR9, and E11TKR11	2000	11.92	13.06

Benzene EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Tanks E11TKS22, E11TKR5, E11TKR7, and Tank E11TKS21	2000	1.34	2.77

Cyclohexane EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Tanks E11TKS21, E11TKR34, and E11TKR40	2000	0.78	2.67

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EMISSION CAP TABLE EMISSION SOURCES
MTBE EMISSION CAP

<u>Facility/Emission Point Categories</u>	<u>Year</u>	<u>lb/hr</u>	<u>TPY</u>
Tanks E12TK146 and E18TK125	2000	2.11	4.28

AIR CONTAMINANTS DATA

<u>Emission Point No. (1)</u>	<u>Source Name (2)</u>	<u>Air Contaminant Name (3)</u>	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>
FL-27	East Flare	VOC	23.51	71.49
		NO _x	2.34	
		CO	12.10	
		SO ₂	0.59	
		H ₂ S	0.01	
22	Boiler No. HA-5 (5)	VOC	0.65	2.84
		NO _x	33.0	
		CO	9.90	
		SO ₂	3.68	
		PM ₁₀	0.90	
23	Boiler No. HA-6 (5)	VOC	0.65	2.84
		NO _x	33.0	
		CO	9.90	
		SO ₂	3.68	
		PM ₁₀	0.90	
24	Boiler No. HA-7 (5)	VOC	0.65	2.84
		NO _x	33.0	
		CO	9.90	
		SO ₂	3.68	
		PM ₁₀	0.90	

AIR CONTAMINANTS DATA

<u>Emission</u>	<u>Source</u>	<u>Air Contaminant</u>	<u>Emission Rates *</u>
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EMISSION SOURCES, EMISSIONS CAPS, AND INDIVIDUAL EMISSION LIMITATIONS

EMISSION CAP TABLE EMISSION SOURCES				
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
Sulfur Recovery Unit No. 1 (6)				
S-84	SRU No. 1 Tail Gas	VOC	0.13	0.58
		Incinerator (TGI) Stack	NO _x	2.41
			10.60	
			CO 5.75	25.20
			PM 0.18	0.80
			SO ₂ 39.04	171.01
			H ₂ S 0.42	1.82
E29H417	SRU No. 1 Heater	VOC	0.02	0.09
			NO _x 0.58	2.53
			CO 0.31	1.36
			PM 0.03	0.12
			SO ₂ 0.12	0.31
F-SRU1	SRU No. 1 Fugitives (4)	VOC	0.05	0.21
			CO 0.03	0.13
			H ₂ S 0.05	0.20
F-AMINE1	ARU No 1 Fugitives (4)	VOC	0.07	0.31
			CO 0.01	0.03
			H ₂ S 0.02	0.09
FL-87	SRU No. 1 Flare	Emergency and Maintenance Only		
		VOC	0.10	0.22
		NO _x	0.08	0.18
		CO	0.71	1.55
		SO ₂	<0.01	0.01

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	<u>Emission Rates *</u>
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EMISSION CAP TABLE EMISSION SOURCES				
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
Sulfur Recovery Unit No. 2				
S-85	SRU No. 2 Incinerator Stack	VOC	0.06	0.28
		NO _x	1.18	5.15
		CO	14.00	61.20
		PM	0.09	0.39
		SO ₂	11.22	49.15
		H ₂ S	0.12	0.53
ARU2SUMP	ARU No. 2 Sump	VOC	0.02	<0.01
F-SRU2	SRU No. 2 Fugitives	VOC	0.05	0.21
		CO	0.03	0.13
		H ₂ S	0.05	0.20
F-AMINE2	ARU No. 2 Fugitives	VOC	0.07	0.31
		CO	0.01	0.03
		H ₂ S	0.02	0.09
FL-88	SRU No. 2 Acid Gas Flare	VOC	0.10	0.22
		NO _x	0.08	0.18
		CO	0.71	1.55
		SO ₂	<0.01	<0.01
SRU2SUMP	SRU No. 2 Sump	VOC	0.02	<0.01

- (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 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

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EMISSION CAP TABLE EMISSION SOURCES

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

MTBE - methyl-tert-butyl ether

H₂S - hydrogen sulfide

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Boilers HA-5, HA-6, and HA-7 emission rates are valid through 2005 or until Low-NO_x burners have been installed. After 2005, the boilers are in the emission caps.
- (6) Permit No. 1413 which authorized SRU No. 1 was consolidated into Permit No. 6308 in August 2002.

* 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

Dated August 21, 2002