#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## Permit Nos. 8356 and PSD-TX-331M1

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	Source	ce Air Contaminant		Emission Rates *			
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**			
				_			
B-004	Steam Boilers (5)	VOC	0.63	2.76			
		$NO_x$	20.11	88.09			
		SO <sub>2</sub>	6.69	8.79			
		PM	1.85	8.08			
		CO	5.03	22.03			
B-005	Boiler SP-5	VOC	0.21	0.90			
		$NO_x$	2.82	12.40			
		$SO_2$	1.31	2.47			
		PM	0.35	1.50			
		CO	2.45	10.70			
B-006	Steam Boiler	VOC	0.44	1.90			
		NO <sub>x</sub>	5.94	26.00			
		$SO_2$	3.94	5.20			
		PM	0.73	3.20			
		CO	8.83	38.60			
F-0681	Oil/Water Separator	VOC	1.62	7.10			
F-2200	Alky Splitter Fugitive (4)	VOC	0.89	3.90			
F-2310	Amine Unit Fugitive (4)	VOC	1.05	4.60			
F-2320	No. 1 SWRU Fugitive (4)	VOC	0.18	0.80			
F-2330	ATS Unit Fugitive (4)	SO <sub>2</sub>	< 0.01	<0.01			
	3 ( )	H <sub>2</sub> S	0.02	0.09			
		$NH_3$	0.09	0.41			
F-2410	FCC Fugitive (4)	VOC	5.34	23.40			
F-2420	LPG Merox Fugitive (4)	VOC	1.26	5.50			

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# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

# AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission	sion Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**	
F-2430	Cat Merox Fugitive (4)	VOC	1.07	4.70	
F-2500	Alky Fugitive (4)	VOC	2.31	10.10	
F-2800	East Plant Boiler Fugitive (4)	VOC	0.37	1.6	
F-2810	East Plant Cooling Tower	VOC	1.47	6.44	
F-3500	No. 1 Sulfur Plant Fugitives (	4) VOC SO₂ H₂S NH₃ Sulfur	0.01 <0.01 0.02 <0.01 <0.01	0.03 <0.01 0.09 <0.01 <0.01	
FL-003 only	Emergency Flare	VOC  NO <sub>x</sub> SO <sub>2</sub> PM CO	Emerg	ency use	
H-020	Isostripper Reboiler Heater	VOC NO <sub>x</sub> SO <sub>2</sub> PM CO	0.19 5.86 1.64 0.54 1.47	0.81 25.65 2.16 2.37 6.42	
H-039	No. 1 SRU Hot Oil Heater	$VOC$ $NO_x$ $SO_2$ $PM$ $CO$	0.04 0.21 0.17 0.06 0.21	0.09 0.91 0.23 0.26 0.92	
V-003	ATS Secondary Absorber	SO₂ H₂S	2.00 0.10	8.82 0.44	

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#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	<u>Emissio</u>	Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**		
V-008	No. 1 Sulfur Plant Vent	VOC	0.06	0.17		
		$NO_x$	1.26	3.68		
		$SO_2$	15.55	68.09		
		PM	0.08	0.23		
		CO	0.42	1.23		

- (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 30 Texas Administrative Code Section 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

H<sub>2</sub>S - hydrogen sulfide

PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>

PM<sub>10</sub> - 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

NH<sub>3</sub> - ammonia

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Two boilers venting through a common stack. Each boiler when operating alone is limited to emit one-half of the values shown.

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

\_Hrs/day \_\_\_\_\_Days/week \_\_\_\_\_Weeks/year or <u>8,760</u>Hrs/year

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

Dated	May 2, 2001