

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2152

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	Air Contaminant	<u>Emission Rates</u>	
Point No. (1)	Name (2)	Name (3)	<u>lb/hr</u>	<u>TPY</u>
TGU-ICN	Tail Gas Thermal Oxidizer	NO <sub>x</sub>	9.98	22.59
		CO	24.68	25.95
		VOC	0.31	0.68
		PM <sub>10</sub>	1.52	3.33
		SO <sub>2</sub>	104.88	
		H <sub>2</sub> S	0.06	
TGU-ICN2	Tail Gas Thermal Oxidizer	NO <sub>x</sub>	9.98	22.59
		CO	24.68	25.95
		VOC	0.31	0.68
		PM <sub>10</sub>	1.52	3.33
		SO <sub>2</sub>	104.88	
		H <sub>2</sub> S	0.06	
TGU-ICN, TGU-ICN2	Tail Gas Thermal SO <sub>2</sub>			
	544.8			
	Oxidizers (5)	H <sub>2</sub> S		0.28
LL19DOCKD	Barge Loading	H <sub>2</sub> S	7.79	3.26
LL11TT	Tank Truck Loading	H <sub>2</sub> S	3.19	2.50
TKT1	DEA Tank	VOC	<0.01	<0.01
TK817	DEA Tank	VOC	<0.01	<0.01
TK872	MDEA Tank	VOC	0.91	0.97

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
TK921	Sour Water Tank	H <sub>2</sub> S	0.04	0.11
		NH <sub>3</sub>	0.08	0.21
		VOC	1.26	3.47
TK922	Sour Water Tank	H <sub>2</sub> S	0.04	0.11
		NH <sub>3</sub>	0.08	0.21
		VOC	1.26	3.47
TK810	Sour Water Tank	(6)		
TK868	Sour Water Tank	(6)		
TK870	Molten Sulfur Storage Tank	H <sub>2</sub> S	<0.001	<0.001
TK871	Molten Sulfur Storage Tank	H <sub>2</sub> S	<0.001	<0.001
TK2163	Anyhydrous Ammonia Storage Tank	NH <sub>3</sub>	<0.001	<0.001
VES202	Sulfuric Acid Storage	H <sub>2</sub> SO <sub>4</sub>	<0.001	<0.001
VES203	Sulfuric Acid Storage	H <sub>2</sub> SO <sub>4</sub>	<0.001	<0.001
SRU-FE	Sulfur Plant Fugitives (4)	VOC	0.12	0.52
		SO <sub>2</sub>	0.01	0.04
		H <sub>2</sub> S	0.51	2.22
		CO	<0.01	<0.01
		COS	<0.01	<0.01
		CS <sub>2</sub>	<0.01	<0.01
		NH <sub>3</sub>	0.02	0.11
SWS-FE	Sour Water System Fugitives (4)	VOC	0.02	0.08
		H <sub>2</sub> S	<0.01	<0.01

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Emission * Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		NH <sub>3</sub>	<0.01	<0.01
1415-FE	Amine Treating Units No. 14 and 15 Fugitives (4)	VOC	0.04	0.18
		H <sub>2</sub> S	0.23	0.99
AMINE-FE	New Amine Treating Unit Fugitives (4)	VOC	0.02	0.09
		H <sub>2</sub> S	0.11	0.49
50TN-FE	50-Ton Amine Treating Unit Fugitives (4)	H <sub>2</sub> S	0.15	0.66
100TN-FE	100-Ton Amine Treating Unit Fugitives (4)	VOC	0.04	0.17
		H <sub>2</sub> S	<0.01	<0.01
LCT-SULF	Cooling Tower 1	VOC	0.28	1.23
CT-SRU	Cooling Tower 2	VOC	0.50	2.21
FL44SRUNO	SRU North Emergency Flare		(6)	
FL44SRUSO	SRU South Emergency Flare		(6)	

(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 General Rule 101.1

PM<sub>10</sub> - particulate matter less than 10 microns

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

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

CO - carbon monoxide

NH<sub>3</sub> - anhydrous fluoride

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

H<sub>2</sub>S - hydrogen sulfide  
COS - carbonyl sulfide  
CS<sub>2</sub> - carbon disulfide

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Annual emissions of sulfur compounds shall be limited to the total emissions from both tail gas incinerators.
- (6) Emergency Use Only

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

Hrs/day\_\_\_\_\_Days/week\_\_\_\_\_Weeks/year\_\_\_\_\_ or Hrs/year 8,760

Dated\_\_\_\_\_