#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### Permit No. 9458/PSD-TX-675M3

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.

#### **CONTAMINANTS DATA**

AIR

Emission	Emission Source		Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
9	Glycol Heater	$NO_x$	0.05	0.22
		CO	0.04	0.18
		VOC	< 0.01	0.01
		$SO_2$	< 0.01	< 0.01
		PM	< 0.01	0.02
		H₂S	< 0.01	<0.01
10-H-1	Amine Reboiler	$NO_x$	0.75	3.29
		CO	0.63	2.76
		VOC	0.04	0.18
		$SO_2$	<0.01	0.02
		PM	0.06	0.25
		H₂S	<0.01	<0.01
10-IC-1	Incinerator	NO	1.35	1 52
10-10-1	Incinerator	NO <sub>x</sub> CO	0.29	1.53 1.29
		VOC	0.29	0.08
		SO <sub>2</sub>	<0.02	0.08
		PM	0.01	0.01
		H <sub>2</sub> S	1.12	4.90
		1123	1.12	4.90
10-AM-REGEN	Amine Regenerator	VOC	0.01	0.06
	Ğ	SO <sub>2</sub>	42.13	184.51
		$H_2S$	1.11	4.85
FU-SWN	Fugitives (4)	VOC	0.09	0.40
		H <sub>2</sub> S	<0.01	<0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emissior lb/hr	n Rates * TPY
<u>1 OIII: 140. (±)</u>	Name (2)	Name (5)	10/111	<u> </u>
12	Flare	$NO_x$	0.02	0.08
		CO	0.15	0.67
		VOC	0.02	0.10
		$SO_2$	0.02	0.08
		PM	<0.01	<0.01
		H₂S	<0.01	<0.01
12-DEHY	Flare	VOC	0.03	0.14
		H₂S	<0.01	<0.01
15	Boiler	СО	0.04	0.17
		$SO_2$	<0.01	<0.01
		NO <sub>x</sub>	0.05	0.20
		PM	<0.01	0.01
		VOC	< 0.01	0.01
		H₂S	<0.01	<0.01
21-513	Tank 513	VOC	0.55	2.21
		H₂S	<0.01	<0.01
21a	Tank 726	VOC	0.23	0.84
		H <sub>2</sub> S	<0.01	<0.01
22-514	Tank 514	VOC	0.55	2.21
		H <sub>2</sub> S	<0.01	<0.01
22a	Tank 727	VOC	0.23	0.84
		H <sub>2</sub> S	<0.01	<0.01
23-507	Tank 507	VOC	0.16	0.55
		H₂S	<0.01	<0.01
24-508	Tank 508	VOC	0.16	0.55
		H <sub>2</sub> S	<0.01	<0.01
25-509	Tank 509	VOC	0.13	0.44

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>
		H <sub>2</sub> S	<0.01	<0.01
26-510	Tank 510	VOC H₂S	0.13 <0.01	0.44 <0.01
27-503	Tank 503	VOC H₂S	0.23 <0.01	0.81 <0.01
28-504	Tank 504	VOC H₂S	0.23 <0.01	0.81 <0.01
29-501	Tank 501	VOC H₂S	0.12 <0.01	0.37 <0.01
30-502	Tank 502	VOC H₂S	0.12 <0.01	0.37 <0.01
31-499	Tank 499	VOC H₂S	0.09 <0.01	0.29 <0.01
32-500	Tank 500	VOC H₂S	0.09 <0.01	0.29 <0.01
33-497	Tank 497	VOC H₂S	0.23 <0.01	0.84 <0.01
34-498	Tank 498	VOC H₂S	0.23 <0.01	0.84 <0.01
35-763	Tank 763	VOC H₂S	0.18 <0.01	0.61 <0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
36-764	Tank 764	VOC	0.18	0.61
		H <sub>2</sub> S	<0.01	<0.01
37	Heater	СО	<0.01	0.05
		$SO_2$	< 0.01	0.04
		NO <sub>x</sub>	< 0.01	0.05
		PM	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		H <sub>2</sub> S	<0.01	<0.01
38	Heater	СО	<0.01	0.05
		SO <sub>2</sub>	<0.01	0.04
		NO <sub>x</sub>	<0.01	0.05
		PM	< 0.01	<0.01
		VOC	<0.01	<0.01
		H <sub>2</sub> S	<0.01	<0.01
40	Heater	СО	<0.01	0.05
.0	. reace.	SO <sub>2</sub>	< 0.01	0.04
		NO <sub>x</sub>	<0.01	0.05
		PM	<0.01	<0.01
		VOC	<0.01	<0.01
		H <sub>2</sub> S	<0.01	<0.01
41	Flare	СО	0.02	0.09
	· iaio	SO <sub>2</sub>	< 0.01	0.01
		NO <sub>x</sub>	< 0.01	0.01
		VOC	< 0.01	0.01
		H <sub>2</sub> S	<0.01	<0.01
42	Flare	СО	0.04	0.17
72	riare	SO <sub>2</sub>	< 0.01	0.02
		NO <sub>x</sub>	<0.01	0.02
		VOC	<0.01	0.02
		H <sub>2</sub> S	<0.01	<0.01
43	Flare	СО	0.01	0.03

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		SO <sub>2</sub> NO <sub>x</sub> VOC	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01
		VOC H₂S	<0.01	<0.01
		1123	<b>\0.01</b>	<b>\0.01</b>
44	Flare	CO	<0.01	0.02
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	0.01
		VOC	<0.01	<0.01
		$H_2S$	<0.01	<0.01
45	Flare	CO	0.03	0.14
		SO <sub>2</sub>	< 0.01	0.02
		NO <sub>x</sub>	< 0.01	0.02
		VOC	< 0.01	0.01
		$H_2S$	<0.01	<0.01
46	Flare	СО	0.01	0.05
		$SO_2$	<0.01	0.01
		$NO_x$	<0.01	0.01
		VOC	< 0.01	0.01
		H₂S	<0.01	<0.01
47	Flare	СО	0.02	0.08
		SO <sub>2</sub>	< 0.01	0.01
		$NO_x$	< 0.01	0.01
		VOC	< 0.01	0.01
		H <sub>2</sub> S	<0.01	<0.01
48	Flare	СО	0.08	0.36
		SO <sub>2</sub>	0.02	0.08
		$NO_x$	0.40	0.18
		VOC	0.02	0.11
		H <sub>2</sub> S	0.01	0.03
100	Heater	СО	<0.01	0.05

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant		n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		$SO_2$ $NO_x$	<0.01 <0.01	0.04 0.05
		PM	< 0.01	<0.01
		VOC	< 0.01	<0.01
		H₂S	<0.01	<0.01
200	Heater	CO	<0.01	0.05
		$SO_2$	< 0.01	0.04
		$NO_x$	< 0.01	0.05
		PM	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		H <sub>2</sub> S	<0.01	<0.01
300	Heater	CO	<0.01	0.05
		$SO_2$	< 0.01	0.04
		$NO_x$	< 0.01	0.05
		PM	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		H <sub>2</sub> S	<0.01	<0.01
400	Heater	CO	<0.01	0.05
		$SO_2$	< 0.01	0.04
		$NO_x$	< 0.01	0.05
		PM	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		H <sub>2</sub> S	<0.01	<0.01
500	Heater	CO	0.01	0.06
		SO <sub>2</sub>	0.12	0.53
		$NO_x$	0.07	0.32
		$PM_{10}$	< 0.01	0.02
		VOC	<0.01	0.02

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Emission Source Air Contam		Emission	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY	
900	Heater	CO	< 0.01	0.05	
		$SO_2$	<0.01	0.04	
		NO <sub>x</sub>	<0.01	0.05	
		PM	<0.01	<0.01	
		VOC	<0.01	<0.01	
		H <sub>2</sub> S	<0.01	<0.01	
1200	Heater	CO	<0.01	0.09	
		SO <sub>2</sub>	< 0.01	0.08	
		NO <sub>x</sub>	< 0.01	0.11	
		PM	< 0.01	0.01	
		VOC	< 0.01	0.01	
		H₂S	<0.01	<0.01	
1300	Heater	СО	<0.01	0.09	
		SO <sub>2</sub>	< 0.01	0.08	
		NO <sub>x</sub>	< 0.01	0.11	
		PM	< 0.01	0.01	
		VOC	< 0.01	0.01	
		H <sub>2</sub> S	<0.01	<0.01	
1400	Heater	СО	<0.01	0.09	
		SO <sub>2</sub>	< 0.01	0.08	
		$NO_x$	< 0.01	0.11	
		PM	< 0.01	0.01	
		VOC	< 0.01	0.01	
		H <sub>2</sub> S	<0.01	<0.01	
1500	Heater	СО	<0.01	0.09	
		$SO_2$	< 0.01	0.08	
		$NO_x$	< 0.01	0.11	
		PM	< 0.01	0.01	
		VOC	< 0.01	0.01	
		H <sub>2</sub> S	<0.01	<0.01	
9702	Heater	со	<0.01	0.05	

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
		00	.0.04	0.04
		SO <sub>2</sub>	< 0.01	0.04
		NO <sub>x</sub>	<0.01	0.05
		PM	< 0.01	<0.01
		VOC	<0.01	<0.01
		H <sub>2</sub> S	<0.01	<0.01
9613	Heater	СО	<0.01	0.09
		SO <sub>2</sub>	< 0.01	0.08
		NO <sub>x</sub>	< 0.01	0.11
		PM	< 0.01	0.01
		VOC	< 0.01	0.01
		H₂S	< 0.01	< 0.01
9616	Heater	CO	<0.01	0.05
		$SO_2$	< 0.01	0.04
		$NO_x$	< 0.01	0.05
		PM	< 0.01	<0.01
		VOC	< 0.01	< 0.01
		$H_2S$	< 0.01	<0.01
0005	Llaatau	00	40 O1	0.05
9625	Heater	CO	< 0.01	0.05
		SO <sub>2</sub>	< 0.01	0.04
		NO <sub>x</sub>	< 0.01	0.05
		PM	< 0.01	<0.01
		VOC	< 0.01	<0.01
		H₂S	<0.01	<0.01
9626	Heater	СО	< 0.01	0.05
		$SO_2$	< 0.01	0.04
		$NO_x$	< 0.01	0.05
		PM	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		H₂S	<0.01	<0.01
0627	Tank 605	VOC	0.62	2 51
9627	Tank 695		0.63	2.51
		H₂S	<0.01	<0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
9628	Tank 696	VOC	0.63	2.51
		H <sub>2</sub> S	< 0.01	<0.01
9629	Tank 57162	VOC	0.18	0.67
9029	TATIK 37 102	VOC H₂S	<0.10	<0.01
		1123	<b>\0.01</b>	<b>\0.01</b>
9802	Heater	CO	< 0.01	0.05
		$SO_2$	< 0.01	0.04
		$NO_x$	< 0.01	0.05
		PM	< 0.01	<0.01
		VOC	< 0.01	< 0.01
		H₂S	<0.01	<0.01
9803	Tank	VOC	0.17	0.55
		$H_2S$	<0.01	<0.01
9804	Tank	VOC	0.17	0.55
9804	Talik	VOC H₂S	< 0.17	<0.01
		1123	<b>\0.01</b>	<b>\0.01</b>
9805	Compressor	CO	1.19	4.96
		SO <sub>2</sub>	0.21	0.89
		NO <sub>x</sub>	8.64	35.95
		VOC	0.34	1.42
		$H_2S$	<0.01	<0.01
9806	Compressor	CO	0.99	4.13
	<b>,</b>	SO <sub>2</sub>	0.18	0.74
		NO <sub>x</sub>	7.20	29.96
		VOC	0.29	1.19
		H₂S	< 0.01	< 0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr TPY	
9807	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.99 0.18 7.20 0.29 <0.01	4.13 0.74 29.96 1.19 <0.01
9808	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.93 0.17 6.72 0.27 <0.01	3.86 0.69 27.96 1.11 <0.01
9809	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.76 0.14 5.52 0.22 <0.01	3.17 0.57 22.97 0.91 <0.01
9810	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.60 0.11 4.32 0.17 <0.01	2.48 0.44 17.98 0.71 <0.01
9811	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.38 0.07 2.76 0.11 <0.01	1.58 0.28 11.48 0.45 <0.01
9812	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.38 0.07 2.76 0.11 <0.01	1.58 0.28 11.48 0.45 <0.01

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR

Emission	Source	Air Contaminant	Emissior	n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
9813	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.35 0.06 2.52 0.10 <0.01	1.45 0.26 10.49 0.42 <0.01
9814	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.26 0.05 1.92 0.08 <0.01	1.10 0.20 7.99 0.32 <0.01
9815	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.20 0.04 1.44 0.06 <0.01	0.83 0.15 5.99 0.24 <0.01
9816	Compressor	CO SO <sub>2</sub> NO <sub>x</sub> VOC H <sub>2</sub> S	0.14 0.03 1.01 0.04 <0.01	0.58 0.10 4.19 0.17 <0.01
9817	Compressor	$CO$ $SO_2$ $NO_x$ $VOC$ $H_2S$	0.38 0.07 2.76 0.11 <0.01	1.58 0.28 11.48 0.45 <0.01

#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (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) PM particulate matter, suspended in the atmosphere, including PM<sub>10</sub>
  - $PM_{10}$  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.
  - 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

CO - carbon monoxide

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

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- \* 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_	

Dated
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