#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### Permit Numbers 8925, PSDTX206M1 and PSDTX432M2

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.

Emission	Source	Air Contaminant	Emission F	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
4	800-hp White Superior 8G-825 (10)	CO $NO_x$ (6) $PM_{10}$ $SO_2$ VOC	5.29 3.52 0.14 0.01 1.76	23.15 15.44 0.60 0.01 7.72
11A	730-hp Caterpillar 399TA-LCR (10)	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	4.82 0.80 0.14 0.01 1.61	21.13 3.52 0.60 0.01 7.04
12A	730-hp Caterpillar 399TA-LCR (10)	$CO$ $NO_x$ (6) $PM_{10}$ $SO_2$ $VOC$	4.82 0.80 0.14 0.01 1.61	21.13 3.52 0.60 0.01 7.04
13A	730-hp Caterpillar 399TA-LCR (10)	CO NO <sub>x</sub> (6) PM <sub>10</sub> SO <sub>2</sub> VOC	4.82 3.22 0.11 0.01 1.61	21.13 14.09 0.48 0.01 7.04
14B	1,232-hp Waukesha L-7042 GL (10)	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	8.20 1.36 0.10 0.01 2.70	35.70 5.95 0.40 0.01 11.90

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Emission	Source	Air Contaminant	<u>Emission</u>	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
15	1,050-hp Waukesha L-7042	CO	9.30	40.60
	GSIU (7) (10)	$NO_{x}$ (6)	4.60	20.30
		$PM_{10}$	0.20	0.70
		SO <sub>2</sub>	0.01	0.01
		VOC	0.23	1.00
17	500-hp Caterpillar	CO	3.30	14.50
	398 NA (7) (10)	$NO_x$	0.55	2.41
		$PM_{10}$	0.10	0.30
		$SO_2$	0.01	0.01
		VOC	0.20	0.70
18	750-hp Caterpillar	СО	4.96	21.71
	399TA-LCR (10)	$NO_x$	0.83	3.62
	. ,	$PM_{10}$	0.14	0.60
		$SO_2$	0.01	0.01
		VOC	1.65	7.24
19B	750-hp Caterpillar	СО	4.96	21.71
	399TA-LCR (10)	$NO_x$	0.83	3.62
	,	$PM_{10}$	0.14	0.60
		$SO_2$	0.01	0.01
		VOC	1.65	7.24
24	2,100-hp MEP 8GT	СО	19.20	83.90
	Engine (5) (8)	$NO_x$	24.20	106.10
		$PM_{10}$	0.73	3.20
		$SO_2$	0.01	0.01
		VOC	1.85	8.10
25	2,100-hp MEP 8GT	СО	19.20	83.90
	Engine (5) (8)	$NO_x$	24.20	106.10
		$PM_{10}$	0.94	4.10
		SO <sub>2</sub>	0.01	0.01
		VOC	1.85	8.10
35	H-1B Regeneration Gas	СО	0.90	4.00
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### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Air Contaminant	Emission	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
	Heater	$NO_x$	1.10	4.80
		$PM_{10}$	0.10	0.40
		$SO_2$	0.01	0.01
		VOC	0.30	0.30
41	E-P Glycol Regenerator	СО	0.23	1.00
	Gas Heater	$NO_x$	0.30	1.10
		$PM_{10}$	0.03	0.10
		$SO_2$	0.01	0.01
		VOC	0.03	0.10
44	Fire Water Pump No. 1 (9)	СО	1.10	0.10
	(100 hours per rolling	$NO_x$	5.20	0.30
	12 months)	$PM_{10}$	0.50	0.01
	,	$SO_2$	0.50	0.01
		VOC	0.20	0.01
45	Fire Water Pump No. 2 (9)	СО	1.10	0.10
	(100 hours per rolling	$NO_x$	5.20	0.30
	12 months)	$PM_{10}$	0.50	0.01
	,	SO <sub>2</sub>	0.50	0.01
		VOC	0.20	0.01
48	800-hp Caterpillar G399TAA	СО	5.30	23.20
	Engine (5) (8)	NO <sub>x</sub>	5.30	23.20
	211g1110 (0) (0)	$PM_{10}$	0.10	0.30
		SO <sub>2</sub>	0.01	0.01
		VOC	0.71	3.10
49	800-hp Caterpillar G399TAA	СО	5.30	23.20
43	Engine (5) (7)	NO <sub>x</sub>	0.88	3.86
	Lingine (5) (7)		0.12	0.50
		$PM_{10}$		
		SO <sub>2</sub>	0.01	0.01
		VOC	0.14	0.60
F0	000 by Cotorellor C200TAA	60	F 20	22.20
50	800-hp Caterpillar G399TAA	CO	5.30	23.20
	Engine (5) (7)	$NO_x$	0.88	3.86

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission lb/hr	Rates * TPY**
r ollit No. (1)	Name (2)	PM <sub>10</sub> SO <sub>2</sub> VOC	0.12 0.01 0.14	0.50 0.01 0.60
51	800-hp Caterpillar G399TAA Engine (5) (7)	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	5.30 0.88 0.12 0.01 0.14	23.20 3.86 0.50 0.01 0.60
52A	800-hp Caterpillar G399TAA Engine (5) (7)	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	5.30 0.88 0.12 0.01 0.14	23.20 3.86 0.50 0.01 0.60
57	1,478-hp Waukesha L-7042G Engine	$\begin{array}{cc} GL & CO \\ NO_{X} \\ PM_{10} \\ SO_{2} \\ VOC \end{array}$	9.77 6.51 0.12 0.01 2.29	42.78 28.51 0.50 0.01 10.00
58A	800-hp Superior 8G-825 Compressor Engine	$CO$ $NO_{x}$ $PM_{10}$ $SO_{2}$ $VOC$	3.53 0.88 0.14 0.01 1.76	15.43 3.86 0.60 0.02 7.73
64	H-301 Regen. Gas Heater	$CO$ $NO_x$ $PM_{10}$ $SO_2$ $VOC$	0.92 1.10 0.10 0.01 0.10	4.00 4.80 0.40 0.01 0.30
65	M4 Inlet Glycol Reconc. Heat	rer CO NO <sub>x</sub> PM <sub>10</sub>	0.16 0.20 0.03	0.70 0.80 0.10

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Air Contaminant	Emission	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
		$SO_2$	0.01	0.01
		VOC	0.01	0.01
66	Routine Process Flare	СО	109.40	17.20
		H₂S	0.01	0.01
		$NO_x$	54.80	8.50
		$SO_2$	0.48	0.07
		VOC	218.00	33.20
70	Unit 4 Swing Amine Vent	VOC	2.54	11.10
73VNT	Plant 1 Amine Unit Regenerator Vent	VOC	2.54	11.12
74VNT	Plant 2 Amine Unit Regenerator Vent	VOC	2.80	12.20
75VNT	Plant 3 Amine Unit Regenerator Vent	VOC	2.65	11.60
C-5A	4,333-hp Solar Centaur	СО	5.00	21.70
	T-4700 (10)	$NO_x$	6.80	29.70
	, ,	PM <sub>10</sub>	0.30	1.30
		$SO_2$	0.03	0.10
		VOC	1.44	6.30
C-5B	4,333-hp Solar Centaur	СО	5.00	21.70
	T-4700 (10)	$NO_x$	6.80	29.70
	,	$PM_{10}$	0.30	1.30
		$SO_2$	0.03	0.10
		VOC	1.44	6.30
C-6A	1,400-hp Waukesha	СО	9.26	40.56
	7044 ĠSI (10)	$NO_x$	1.54	6.76
	` '	$PM_{10}$	0.23	1.00
		SO <sub>2</sub>	0.03	0.10

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Air Contaminant	<b>Emission</b>	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
		VOC	3.09	13.52
C-6B	1,400-hp Waukesha	СО	9.26	40.56
	7044 GSI (10)	$NO_x$	1.54	6.76
		$PM_{10}$	0.23	1.00
		SO <sub>2</sub>	0.03	0.10
		VOC	3.09	13.52
G-101	1,160-hp Waukesha	СО	7.67	33.6
	7042 GSI (10)	$NO_x$	1.28	5.60
		$PM_{10}$	0.16	0.70
		$SO_2$	0.03	0.10
		VOC	2.56	11.20
G-102	1,160-hp Waukesha	СО	7.67	33.6
	7042 GSI (10)	$NO_x$	1.28	5.60
	,	$PM_{10}$	0.16	0.70
		$SO_2$	0.03	0.10
		VOC	2.56	11.20
G-103	1,160-hp Waukesha	СО	7.67	33.6
	7042 GSI (10)	$NO_x$	1.28	5.60
		$PM_{10}$	0.16	0.70
		$SO_2$	0.03	0.10
		VOC	2.56	11.20
G-104	1,160-hp Waukesha	СО	7.67	33.6
	7042 GSI (10)	$NO_x$	1.28	5.60
	• •	$PM_{10}$	0.16	0.70
		$SO_2$	0.03	0.10
		VOC	2.56	11.20
P5-VNT	Plant 5 Amine Still Vent	VOC	1.23	5.40
TK-33	New Oil Storage Tank	VOC	0.01	0.02
TK-34	Used Oil Storage Tank	VOC	0.01	0.01

#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	<b>Emission</b>	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY**
FUG	Plant Process Fugitives (4)	VOC	18.90	82.79

- (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 an area name or fugitive source name.
- (3) CO carbon monoxide
  - NO<sub>x</sub> total oxides of nitrogen
  - PM<sub>10</sub> particulate matter (PM) equal to or less than 10 microns
  - SO<sub>2</sub> sulfur dioxide
  - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1.
  - 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.
- (5) These sources are included in Permit Number PSDTX432M2.
- (6) This pollutant is subject to Permit Number PSDTX206M1.
- (7) Equipped with catalytic converter.
- (8) Clean burn engine.
- (9) These Engines (EPNs 44 and 45) shall only be run for a maximum of 104 hours per year.
- (10) Equipped with non-selective catalytic converter and air-fuel ratio controller.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Day	s/week 52	Weeks/year
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\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated <u>August 18, 2011</u>