### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

# Permit No. 20042/PSD-TX-842

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>Emissi</u>	on Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
H-101	Charge Heater (180 MMBtu/hr Heat 63.10	CO t Input)	6.30 NO <sub>x</sub>	27.60 14.40
		$PM_{10}$ $SO_{2}$ (7) $VOC$ (5) $H_{2}S$	2.10 34.15 0.72 0.09	9.20 25.32 3.15 0.07
K-101	Gas Turbine Start-up Bypass Stack (6)	$0$ $CO$ $NO_x$ $SO_2(7)$ $VOC$	96.6 99.8 0.18 30.3	7.25 7.49 <0.01 2.27
U-101	Dehydrogenation Heat Recovery Unit	t CO NH3 NO $_{x}$ PM $_{10}$ VOC H $_{2}$ S SO $_{2}$	50.0 5.50 68.4 0.10 27.50 0.09 34.15	113.80 24.10 159.80 0.64 62.60 0.07 25.0
U-5001	Steam Boiler (35 MMBtu/hr Heat 12.26	CO Input)  PM <sub>10</sub> SO <sub>2</sub> VOC	1.23 NO <sub>x</sub> 0.47 0.02 0.20	5.39 2.80 2.06 0.09 0.88

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Emission *	Source	Air Contaminant	<u>Emissi</u>	on Rates
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
U-5004 Repl.	Replacement Steam Boiler CO (154 MMBtu/hr Heat Input) 40.47		5.39 NO <sub>x</sub>	23.61 9.24
		$PM_{10}$ $SO_2$ $VOC$	0.75 0.09 0.25	3.28 0.39 1.12
U-5041	Cooling Towers (4)	VOC	0.60	2.63
B-5031	Flare	CO NO <sub>x</sub>	0.09 0.12	0.39 0.53
TK-5026A	Storage Tank	MTBE	0.50	1.68
TK-5026B	Storage Tank	MTBE	0.50	1.68
F-101,201,	Fugitives (4) 403-406	VOC	2.80	12.23

- (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) CO carbon monoxide

NH3 - ammonia

 $NO_x$  - total oxides of nitrogen

 $PM_{10}$  - particulate matter less than 10 microns

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

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

MTBE - methyl-tertiary-butyl-ether

VOC - volatile organic compounds as defined in General Rule 101.1

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Includes products of fuel combustion and flash gas.

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## AIR CONTAMINANTS DATA

Emission *	Source	Air Contamin	ant <u>Er</u>	<u> 115510r</u>	<u>n Kates</u>		
Point No. (1)	Name (2)	Name (3)	11	o/hr	<u>TPY</u>		
(6) Startup bypass vent for 150 hours per calendar year. (7) The $SO_2$ emissions shall comply with Special Condition No. 23.							
* Emission rates are based on and the facilities are limited by the following maximum operating schedule:							
Hrs/day	Days/week	Weeks/year	or Hrs/yea	ar <u>8</u> .	,760		