### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## Permit Numbers 45642, PSD-TX-979M1, and N-036M1

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	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
Turbine and Duct B	urner (Hourly Limits)			
ST-1	CTG1 and HRSG1 (Westinghouse 501F Turbine with 725 MMBtu/hr Duct Burner)	$NO_x$	24.3	
		vith CO	291.8	
		PM <sub>10</sub> (4)	33.9	
		VOC `	35.7	
		$SO_2$	31.9	
		$NH_3$	25.2	
	ŀ	H <sub>2</sub> SO <sub>4</sub> 4.89		
		$(NH_4)_2SO_4$	6.59	
ST-2	CTG2 and HRSG2 (Westinghouse 501F Turbine with 725 MMBtu/hr Duct Burner)	NO <sub>x</sub>	24.3	
		vith CO	291.8	
		PM <sub>10</sub> (4)	33.9	
		VOC	35.7	
		$SO_2$	31.9	
		$NH_3$	25.2	
	ŀ	H <sub>2</sub> SO <sub>4</sub> 4.89		
		$(NH_4)_2SO_4$	6.59	
ST-3	CTG3 and HRSG3 (Westinghouse 501F Turbine with 725 MMBtu/hr Duct Burner) H <sub>2</sub> Se	NO <sub>x</sub>	24.3	
		vith CO	291.8	
		PM <sub>10</sub> (4)	33.9	
		VOC `	35.7	
		$SO_2$	31.9	
		$NH_3$	25.2	
		H <sub>2</sub> SO <sub>4</sub> 4.89		
		$(NH_4)_2SO_4$	6.59	

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	<u>Emissio</u>	n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>
ST-4	CTG4 and HRSG4 (Westinghouse 501F Turbine w 725 MMBtu/hr Duct Burner)	PM <sub>10</sub> (4) VOC SO <sub>2</sub> NH <sub>3</sub>	24.3 291.8 33.9 35.7 31.9 25.2	   
	H	(NH.)-SO.	 6.59	
		$(NH_4)_2SO_4$	0.59	
ST-5	CTG5 and HRSG5 (Westinghouse 180MW Turbine with 725 MMBtu/hr Duct Burner)	) PM <sub>10</sub> (4)	24.3 291.8 35.4	 
		VOC	35.7	
	H₂S	SO <sub>2</sub> NH <sub>3</sub> I <sub>2</sub> SO <sub>4</sub> 6.03	39.4 25.2	
		(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	8.13	
ST-6	CTG6 and HRSG6 (Westinghouse 180MW Turbine 725 MMBtu/hr Duct Burner)	$NO_x$ with CO $PM_{10}$ (4) $VOC$ $SO_2$ $NH_3$ $1_2SO_4$ 6.03	24.3 291.8 35.4 35.7 39.4 25.2	   
	11	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	8.13	
Turbines and Duct Burners (Combined Annual Limits)				
ST-1, ST-2, ST-3, ST-4 ST-5, ST-6	CTG1, 2, 3, 4, 5, 6 and HRSG 1, 2, 3, 4, 5, and 6	$NO_x^{**}$ $CO^{**}$ $PM_{10}^{**}$ (4) $VOC^{**}$ $SO_2$ $NH_3$ $H_2SO_4$ $(NH_4)_2SO_4$	   	469.0 2806.4 566.2 92.4 40.6 512.1 6.21 8.36
CWT	Cooling Tower	PM <sub>10</sub>	5.26	18.40

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### AIR CONTAMINANTS DATA

Emission	Source Air Contaminant		Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
PIPEFUG	Piping Fugitives	VOC NH₃	0.34 0.79	1.48 3.45
LUBEFUG	Turbine Lubrication Fugitives	VOC	0.044	0.193

- (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 area name or fugitive source name.
- (3) NO<sub>x</sub> total oxides of nitrogen

CO - carbon monoxide

PM<sub>10</sub> - particulate matter (PM) equal to or less than 10 microns in diameter. This includes both front and back half collected. This also includes (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> emissions.

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

SO<sub>2</sub> - sulfur dioxide NH<sub>3</sub> - ammonia

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid mist (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> - ammonium sulfate

- (4) The PM/PM<sub>10</sub> values include (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> emissions.
- \* The maximum lb/hr  $NO_x$  emission rate is based upon a rolling three-hour average concentration. The lb/hr  $NO_x$  emission rate listed above represents a maximum three-hour average lb/hr emission rate.
- \*\* The  $NO_x$ , CO, and  $PM_{10}$  emissions regulated under PSD-TX-979 permit authorization.

The  $NO_x$  emissions from ST-1, ST-2, ST-3, ST-4, ST-5, and ST-6 and VOC emissions from ST-1, ST-2, ST-3, and ST-4 regulated under N-036 permit authorization.

	ate	
$ \boldsymbol{\square}$	aic	