

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 45360 and PSD-TX-977

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 Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
STACK1	CTG-HRSG1 Stack (General Electric 7FA) Normal CT load and HRSG Firing Operations	NO <sub>x</sub> ***	38.31	155.70
		CO ***	63.17	237.86
		VOC	9.30	32.84
		PM <sub>10</sub> ***	19.22	82.78
		SO <sub>2</sub>	15.26	4.85
		NH <sub>3</sub>	19.86	82.55
		(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	2.52	0.80
STACK2	CTG-HRSG2 Stack (General Electric 7FA) Normal CT Load and HRSG Firing Operations	NO <sub>x</sub> ***	38.31	155.70
		CO ***	63.17	237.86
		VOC	9.30	32.84
		PM <sub>10</sub> ***	19.22	82.78
		SO <sub>2</sub>	15.26	4.85
		NH <sub>3</sub>	19.86	82.55
		(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	2.52	0.80
STACK1	CTG-HRSG1 Stack (General Electric 7FA) Routine Shutdown and Startup Operations	NO <sub>x</sub>	637	
		CO	400	
		VOC	9.30	
		PM <sub>10</sub>	19.22	
		SO <sub>2</sub>	15.26	
		NH <sub>3</sub>	19.86	
		(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	2.52	
STACK2	CTG-HRSG2 Stack (General Electric 7FA) Routine Shutdown and Startup Operations	NO <sub>x</sub>	637	
		CO	400	
		VOC	9.30	
		PM <sub>10</sub>	19.22	
		SO <sub>2</sub>	15.26	
		NH <sub>3</sub>	19.86	
		(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	2.52	

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
TOMV1	Turbine Oil Mist Vent (4)	VOC	0.01	0.04
TOMV2	Turbine Oil Mist Vent (4)	VOC	0.01	0.04
TOMV3	Turbine Oil Mist Vent (4)	VOC	0.01	0.02
CT-1	Cooling Tower	PM <sub>10</sub>	0.75	3.29
TANK1	Aqueous Ammonia Tank	NH <sub>3</sub>	<0.01	<0.01
TANK3	Sodium Hypochlorite Storage Tank <0.01		NaOCl	<0.01
TANK3A	Sodium Hypochlorite Storage Tank <0.01		NaOCl	<0.01
TANK5	50 percent Caustic Storage Tank	Caustic	2.17	<0.01
TANK8	Diesel Fuel Storage	VOC	0.06	<0.01
DFWP1	Diesel Fire Water Pump	NO <sub>x</sub>	10.49	0.27
		CO	3.13	0.08
		SO <sub>2</sub>	0.74	0.02
		PM <sub>10</sub> 0.20	0.01	
		VOC	0.13	<0.01
FUG1	Ammonia System (5)	NH <sub>3</sub>	<0.01	0.01
FUG2	Natural Gas Pipeline Fugitives (5) 0.48		VOC	0.11

(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

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

PM<sub>10</sub> - particulate matter (PM) 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.

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

NH<sub>3</sub> - ammonia

(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> - ammonium sulfate

NaOCl - sodium hypochlorite

- (4) Turbine oil mist vent emissions are estimates only based on mist vent eliminator vendor data.
- (5) Fugitive emissions are based on component count and application of appropriate fugitive emission factors.

\* Emission rates are based on a maximum combustion turbine generator (CTG) operating schedule of 8,760 hours per year per CTG, and heat recovery duct burners operating a maximum of 6,462 hours per each Stack (EPNs STACK1 and STACK2).

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

\*\*\* Emissions regulated under PSD-TX-977 permit authorization.

Dated \_\_\_\_\_