

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 32881/PSD-TX-875

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

### SIMPLE CYCLE MODE

BYPASS-1	Combustion Turbine 174.2 MW General Electric Frame 142.0	NO <sub>x</sub>	99.0 (308.5)	509.0
		CO	53.2 (95.9)	248.4
		SO <sub>2</sub>	26.7 (96.3)	
		VOC	12.7 (12.9)	55.7
		PM <sub>10</sub> (front-half only)	9.0 (17.5)	42.5
		PM <sub>10</sub> (front and back-half)	18.0 (34.0)	84.6

BYPASS-2	Combustion Turbine 174.2 MW General Electric Frame 142.0	NO <sub>x</sub>	99.0 (308.5)	509.0
		CO	53.2 (95.9)	248.4
		SO <sub>2</sub>	26.7 (96.3)	
		VOC	12.7 (12.9)	55.7
		PM <sub>10</sub> (front-half only)	9.0 (17.5)	42.5
		PM <sub>10</sub> (front and back-half)	18.0 (34.0)	84.6

### COMBINED CYCLE MODE

HRSG-1	Combustion Turbine 174.2 MW General Electric Frame 164.3	NO <sub>x</sub>	132.5 (342.0)	655.8
		CO	96.2 (136.1)	435.7
		SO <sub>2</sub>	31.8 (101.4)	

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## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
	and Heat Recovery Steam Generator 325.0 MMBtu/hr	VOC PM <sub>10</sub> (front-half only)	32.8 (33.0) 13.1 (21.6)	143.7 60.4
		PM <sub>10</sub> (front and back-half)	22.1 (38.1)	102.6
HRSG-2	Combustion Turbine 174.2 MW General Electric Frame 7FA 164.3	NO <sub>x</sub> CO SO <sub>2</sub>	132.5 (342.0) 96.2 (136.1) 31.8 (101.4)	655.8 435.7
	and Heat Recovery Steam Generator 325.0 MMBtu/hr	VOC PM <sub>10</sub> (front-half only)	32.8 (33.0) 13.1 (21.6)	143.7 60.4
		PM <sub>10</sub> (front and back-half)	22.1 (38.1)	102.6

## OTHER EQUIPMENT

TANK-1	Distillate Fuel Oil Storage Tank 0.25 650,000 gallon capacity	VOC	3.27
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- (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) NO<sub>x</sub> - total oxides of nitrogen  
CO - carbon monoxide  
SO<sub>2</sub> - sulfur dioxide  
VOC - volatile organic compounds as defined in General Rule 101.1  
PM<sub>10</sub> - particulate matter less than 10 microns. It shall be assumed that no particulate matter greater than 10 microns in diameter is emitted.
- (4) The allowable emission rates for the heat recovery steam generator duct burners (i.e. the HRSG duct burner contribution to total

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combined-cycle allowables) shall be computed by multiplying the maximum heat input capacity for each unit (325 MMBtu/hr) times the emission factors listed in Special Condition No. 7.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day    7 Days/week    52 Weeks/year or    8,760  
Hrs/year

Hourly emission rate limits are listed for distinct turbine fuel-usage modes: natural gas firing and distillate fuel oil firing (in parentheses). Distillate fuel oil firing is limited to 720 hours per rolling 12-month period.

Annual emission rate limits listed on the table are based on the turbines firing natural gas for 8,040 hours per year and fuel oil for the remainder of the year (720 hours).

Dated \_\_\_\_\_