

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 84289, PSD1125, and N75

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**
<b><u>PLANT SCENARIO A - SIEMENS TURBINES</u></b>				
CTG-1	Turbine Stack	CO	19.24	536.39
		CO (4)	3184.50	---
		NO <sub>x</sub>	21.65	105.31
		NO <sub>x</sub> (4)	220.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	11.10	43.07
		SO <sub>2</sub>	37.69	13.52
		VOC (5)	4.75	65.79
		VOC (4)	306.90	---
		H <sub>2</sub> SO <sub>4</sub>	3.77	1.37
		NH <sub>3</sub>	26.42	103.42
CTG-2	Turbine Stack	CO	19.24	536.39
		CO (4)	3184.50	---
		NO <sub>x</sub>	21.65	105.31
		NO <sub>x</sub> (4)	220.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	11.10	43.07
		SO <sub>2</sub>	37.69	13.52
		VOC (5)	4.75	65.79
		VOC (4)	306.90	---
		H <sub>2</sub> SO <sub>4</sub>	3.77	1.37
		NH <sub>3</sub>	26.42	103.42

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CTG-3	Turbine Stack	CO	19.24	536.39
		CO (4)	3184.50	---
		NO <sub>x</sub>	21.65	105.31
		NO <sub>x</sub> (4)	220.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	11.10	43.07
		SO <sub>2</sub>	37.69	13.52
		VOC (5)	4.75	65.79
		VOC (4)	306.90	---
		H <sub>2</sub> SO <sub>4</sub>	3.77	1.37
		NH <sub>3</sub>	26.42	103.42
CTG-4	Turbine Stack	CO	19.24	536.39
		CO (4)	3184.50	---
		NO <sub>x</sub>	21.65	105.31
		NO <sub>x</sub> (4)	220.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	11.10	43.07
		SO <sub>2</sub>	37.69	13.52
		VOC (5)	4.75	65.79
		VOC (4)	306.90	---
		H <sub>2</sub> SO <sub>4</sub>	3.77	1.37
		NH <sub>3</sub>	26.42	103.42

**PLANT SCENARIO B - GE TURBINES**

CTG-1	Turbine Stack	CO	15.72	180.34
		CO (4)	2280.00	---
		NO <sub>x</sub>	18.80	86.73
		NO <sub>x</sub> (4)	216.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	19.80	86.72
		SO <sub>2</sub>	33.69	12.11
		VOC (6)	4.75	20.19
		VOC (4)	129.72	---
		H <sub>2</sub> SO <sub>4</sub>	3.37	1.23
		NH <sub>3</sub>	23.17	92.16

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
CTG-2	Turbine Stack	CO	15.72	180.34
		CO (4)	2280.00	---
		NO <sub>x</sub>	18.80	86.73
		NO <sub>x</sub> (4)	216.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	19.80	86.72
		SO <sub>2</sub>	33.69	12.11
		VOC (6)	4.75	20.19
		VOC (4)	129.72	---
		H <sub>2</sub> SO <sub>4</sub>	3.37	1.23
		NH <sub>3</sub>	23.17	92.16
CTG-3	Turbine Stack	CO	15.72	180.34
		CO (4)	2280.00	---
		NO <sub>x</sub>	18.80	86.73
		NO <sub>x</sub> (4)	216.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	19.80	86.72
		SO <sub>2</sub>	33.69	12.11
		VOC (6)	4.75	20.19
		VOC (4)	129.72	---
		H <sub>2</sub> SO <sub>4</sub>	3.37	1.23
		NH <sub>3</sub>	23.17	92.16
CTG-4	Turbine Stack	CO	15.72	180.34
		CO (4)	2280.00	---
		NO <sub>x</sub>	18.80	86.73
		NO <sub>x</sub> (4)	216.00	---
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	19.80	86.72
		SO <sub>2</sub>	33.69	12.11
		VOC (6)	4.75	20.19
		VOC (4)	129.72	---
		H <sub>2</sub> SO <sub>4</sub>	3.37	1.23
		NH <sub>3</sub>	23.17	92.16

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
AUX-1	Auxiliary Boiler	CO	3.69	16.16
		NO <sub>x</sub>	0.45	1.97
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.32	1.40
		SO <sub>2</sub>	0.03	0.13
		VOC (6)	0.25	1.10
AUX-2	Auxiliary Boiler	CO	3.69	16.16
		NO <sub>x</sub>	0.45	1.97
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	0.32	1.40
		SO <sub>2</sub>	0.03	0.13
		VOC (6)	0.25	1.10

### COMMON EQUIPMENT

CTWR-1	Cooling Tower	PM/PM <sub>10</sub>	1.28	5.61
CTWR-2	Cooling Tower	PM/PM <sub>10</sub>	1.28	5.61
ENG-1	Diesel-Fired Emergency Generator Engine	CO	14.75	3.69
		NO <sub>x</sub>	26.61	6.65
		PM/PM <sub>10</sub>	1.88	0.47
		SO <sub>2</sub>	0.33	0.08
		VOC	1.89	0.47
ENG-2	Diesel-Fired Emergency Firewater Engine	CO	1.67	0.42
		NO <sub>x</sub>	1.54	0.39
		PM/PM <sub>10</sub>	0.55	0.14
		SO <sub>2</sub>	0.51	0.13
		VOC	0.63	0.16
TK-ENG1	ENG-1 Fuel Tank	VOC	0.14	0.01
TK-ENG2	ENG-2 Fuel Tank	VOC	0.01	0.01
OWSEP	API Separator	VOC	0.01	<0.01

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FUG-1	Site Fugitives (7)	VOC	0.04	0.16
		NH <sub>3</sub>	0.31	1.38
LOR-1	Lube Oil Reservoir Vapor Extractor Vent (CTG1)	VOC	<0.01	0.01
LOR-2	Lube Oil Reservoir Vapor Extractor Vent (CTG2)	VOC	<0.01	0.01
LOR-3	Lube Oil Reservoir Vapor Extractor Vent (CTG3)	VOC	<0.01	0.01
LOR-4	Lube Oil Reservoir Vapor Extractor Vent (CTG4)	VOC	<0.01	0.01
LOR-5	Lube Oil Reservoir Vapor Extractor Vent (STG1)	VOC	<0.01	0.01
LOR-6	Lube Oil Reservoir Vapor Extractor Vent (STG2)	VOC	<0.01	0.01
LOR-7	Lube Oil Reservoir Vapor Extractor Vent (STG3)	VOC	<0.01	0.01
LOR-8	Lube Oil Reservoir Vapor Extractor Vent (STG4)	VOC	<0.01	0.01

- (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 - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>
  - PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter

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

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

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

NH<sub>3</sub> - ammonia

HAP - hazardous air pollutant as listed in §112(b) of the Federal Clean Air Act of Title 40 Code of Federal Regulations Part 63, Subpart C

- (4) Emission limits during startup, shutdown events, and reduced load events. Startup, shutdown, and reduced load emissions are included in annual TPY emissions.
- (5) This limit includes 53.74 tpy of HAPs combined from all of the turbines in this scenario.
- (6) This limit includes 14.83 tpy of HAPs combined from all of the turbines and auxiliary boilers in this scenario.
- (7) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

\* 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

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

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