

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 80289, PSDTX1082, and PAL 9

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**
CBY41a	Combustion Turbine 41	NO <sub>x</sub>	28.0	93.0
	Combined Cycle Stack	NO <sub>x</sub> (4)	206.0	---
		SO <sub>2</sub>	17.7	11.6
		CO	72.3	284.0
		CO (4)	2890.0	---
		VOC	5.5	10.8
		VOC (4)	48.00	---
		PM <sub>10</sub>	15.5	51.0
		H <sub>2</sub> SO <sub>4</sub>	2.7	1.8
		NH <sub>3</sub>	20.5	80.3
		H <sub>2</sub> CO (6)	0.47	1.8
CBY41b	Combustion Turbine 41	NO <sub>x</sub>	71.0	128.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	206.0	---
		SO <sub>2</sub>	17.7	5.3
		CO	72.3	129.5
		CO (4)	2890.0	---
		VOC	5.5	4.9
		VOC (4)	48.0	---
		PM <sub>10</sub>	15.5	23.3
		H <sub>2</sub> SO <sub>4</sub>	2.7	0.80
		H <sub>2</sub> CO	0.47	0.80
CBY41-LOV	Combustion Turbine 41 Lube Oil Vent	PM <sub>10</sub>	0.05	0.22

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CBY42a	Combustion Turbine 42	NO <sub>x</sub>	28.0	93.0
	Combined Cycle Stack	NO <sub>x</sub> (4)	206.0	---
		SO <sub>2</sub>	17.7	11.6
		CO	72.3	284.0
		CO (4)	2890.0	---
		VOC	5.5	10.8
		VOC (4)	48.0	---
		PM <sub>10</sub>	15.5	51.0
		H <sub>2</sub> SO <sub>4</sub>	2.7	1.8
		NH <sub>3</sub>	20.5	80.3
		H <sub>2</sub> CO (6)	0.47	1.8
CBY42b	Combustion Turbine 42	NO <sub>x</sub>	71.0	128.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	206.0	---
		SO <sub>2</sub>	17.7	5.3
		CO	72.3	129.5
		CO (4)	2890.0	---
		VOC	5.5	4.9
		VOC (4)	48.0	---
		PM <sub>10</sub>	15.5	23.3
		H <sub>2</sub> SO <sub>4</sub>	2.7	0.8
		H <sub>2</sub> CO (6)	0.47	0.8
CBY42-LOV	Combustion Turbine 42 Lube Oil Vent	PM <sub>10</sub>	0.05	0.22
U4ST-LOV	Unit 4 Steam Turbine Lube Oil Vent	PM <sub>10</sub>	0.05	0.22
CBY51	Combustion Turbine 51	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.30

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Unit	Source	Parameter	Value	Unit
CBY51-LOV	Combustion Turbine 51 Lube Oil Vent	CO	25.4	52.7
		CO (4)	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
		PM <sub>10</sub>	0.05	0.22
CBY52	Combustion Turbine 52	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO (4)	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
CBY52-LOV	Combustion Turbine 52 Lube Oil Vent	PM <sub>10</sub>	0.05	0.22
CBY53	Combustion Turbine 53	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0

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CBY53-LOV	Combustion Turbine 53 Lube Oil Vent	NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
		PM <sub>10</sub>	0.05	0.22
CBY54	Combustion Turbine 54	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO (4)	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
CBY54-LOV	Combustion Turbine 54	PM <sub>10</sub>	0.05	0.22
CBY55	Combustion Turbine 55	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO (4)	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
CBY55-LOV	Combustion Turbine 55	PM <sub>10</sub>	0.05	0.22

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CBY56	Lube Oil Vent			
	Combustion Turbine 56	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
CBY56-LOV	Combustion Turbine 56	PM <sub>10</sub>	0.05	0.22
	Lube Oil Vent			
CBY57	Combustion Turbine 57	NO <sub>x</sub>	8.4	17.0
	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO (4)	68.7	---
		VOC	2.6	1.8
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
CBY57-LOV	Combustion Turbine 57	PM <sub>10</sub>	0.05	0.22
	Lube Oil Vent			
CBY58	Combustion Turbine 58	NO <sub>x</sub>	8.4	17.0

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	Simple Cycle Stack	NO <sub>x</sub> (4)	16.3	---
		SO <sub>2</sub>	3.8	1.3
		CO	25.4	52.7
		CO (4)	68.7	---
		VOC	2.6	1.80
		VOC (4)	3.5	---
		PM <sub>10</sub>	10.2	13.9
		H <sub>2</sub> SO <sub>4</sub>	2.9	1.0
		NH <sub>3</sub>	4.3	9.0
		H <sub>2</sub> CO (6)	0.10	0.2
CBY58-LOV	Combustion Turbine 58 Lube Oil Vent	PM <sub>10</sub>	0.05	0.22
BS-GEN	Black Start Generator	NO <sub>x</sub>	11.80	2.95
		CO	0.53	0.13
		PM <sub>10</sub>	0.05	0.01
		VOC	2.54	0.64
		SO <sub>2</sub>	0.38	0.09
C-Tower1	Cooling Tower 1	PM <sub>10</sub>	0.84	3.68
C-Tower 2	Cooling Tower 2	PM <sub>10</sub>	0.14	0.63
C-Tower 3	Cooling Tower 3	PM <sub>10</sub>	0.14	0.63
FUG-NAS	Fugitives: Natural Gas (5)	VOC	0.17	0.74
FUG-SCR	Fugitives: SCR Piping (5)	NH <sub>3</sub>	0.02	0.10
(All Sitewide NO <sub>x</sub> EPNs at RN10082537)	Plantwide Applicability Limit (PAL)	NO <sub>x</sub>	---	2004.92

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- (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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
PM<sub>10</sub> - particulate matter (PM), suspended in the atmosphere, equal to or less than 10 microns in diameter  
CO - carbon monoxide  
H<sub>2</sub>SO<sub>4</sub> - sulfuric acid  
NH<sub>3</sub> - ammonia  
H<sub>2</sub>CO - formaldehyde
  - (4) Emission limits during startup, shutdown, or maintenance operations.
  - (5) Fugitive emissions are an estimate only, and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
  - (6) The formaldehyde emission limits and initial demonstration of compliance become effective upon the EPA either lifting the stay that applies to lean premix gas-fired turbines and diffusion flame gas-fired turbines or taking final action declining to remove these subcategories from the source category list. (See 69 Fed. Reg. 51184 (August 18, 2004), available at: <http://www.epa.gov/ttn/atw/turbine/fr18au04.pdf>).
- \* 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

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

Dated September 29, 2009