

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 48437

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, sources, and related activities. 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	
			lbs/hour (4)	TPY (5)
SA-S5A	Circulating Fluidized Bed Boiler 5A Stack	NO <sub>x</sub>	296	1,296
		Sulfur Dioxide (6)	592	2,593
		Sulfur Dioxide (7)	444	1,945
		Carbon Monoxide	296	1,296
		PM/PM <sub>10</sub> (filterable)	44.4	194
		VOC	15.1	66
		Hydrogen Chloride	0.66	1.0
		Hydrogen Fluoride	0.78	1.0
		Sulfuric Acid	6.2	27
		Ammonia	15.9	55
		Antimony	0.0061	0.026
		Arsenic	0.077	0.33
		Barium	1.4	2.0
		Beryllium	0.016	0.018
		Cadmium	0.0024	0.0078
		Chromium	0.12	0.44
		Cobalt	0.034	0.15
		Copper	0.19	0.82
		Lead	0.085	0.34
		Manganese	1.6	1.5

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		Mercury	0.033	0.093
		Nickel	0.13	0.41
		Selenium	0.12	0.50
		Vanadium	0.33	1.10
SA-S5B	Circulating Fluidized Bed Boiler 5B Stack	NO <sub>x</sub>	296	1,296
		Sulfur Dioxide (6)	592	2,593
		Sulfur Dioxide (7)	444	1,945
		Carbon Monoxide	296	1,296
		PM/PM <sub>10</sub> (filterable)	44.4	194
		VOC	15.1	66
		Hydrogen Chloride	0.66	1.0
		Hydrogen Fluoride	0.78	1.0
		Sulfuric Acid	6.2	27
		Ammonia	15.9	55
		Antimony	0.0061	0.026
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		Nickel	0.13	0.41
		Selenium	0.12	0.50
		Vanadium	0.33	1.10
SA5NH4OHTV	Unit 5 Aqueous Ammonia Storage Tank	Ammonia	5.07	0.48
SA5SSV	Sorbent Silo Filter Vent (8)	PM/PM <sub>10</sub>	0.19	0.01
SA5LS5AV	Hydrated Lime Silo 5A Filter Vent (8)	PM/PM <sub>10</sub>	0.38	0.14
SA5LS5BV	Hydrated Lime Silo 5B Filter Vent (8)	PM/PM <sub>10</sub>	0.38	0.14

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source name. For fugitive sources, use an area name or fugitive source name.
- (3) NO<sub>x</sub> - total oxides of nitrogen, expressed as nitrogen dioxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (30 TAC § 101.1)  
PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>  
PM<sub>10</sub> - particulate matter 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.
- (4) For pollutants which are not required by this permit to be monitored with a continuous emissions monitor system (CEMS), compliance with the hourly emission limits is based on a three-hour average of stack tests. For pollutants which are required by this permit to be monitored with a CEMS, compliance with the hourly emission limits is based on a 30-day rolling average of the hourly CEMS data, including startup and shutdown emissions. With the first amendment, alteration or renewal of this permit following two years of operation with a certified CEMS, the holder of this permit shall submit hourly emission data from the CEMS which will be considered in establishing new hourly limits for the monitored pollutants based on a one-hour average.
- (5) Compliance with annual emission limits is based on a rolling 12-month period. Annual emissions of trace elements (antimony, arsenic, barium, beryllium, cadmium, chloride, chromium, cobalt, copper, fluoride, lead, manganese, mercury, nickel, selenium, and vanadium) are based on average concentration measurements in the lignite, whereas hourly emissions are based on maximum concentrations in the lignite. Compliance with the annual trace element emission limits may be established if the initial demonstration of compliance testing of trace element emissions supports the removal efficiencies represented in the permit application and trace element concentrations in the lignite remain consistent with representations in the permit application.
- (6) Before March 31, 2010.
- (7) After March 31, 2010.
- (8) Emissions are authorized by 30 TAC §§ 116.602 and § 116.617, Registration No. 83346, dated December 27, 2007, and are not incorporated into this permit.

\*CFB annual emissions are based on 8,760 hours per year operation at maximum firing rate (2,960 MMBtu/hr).

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Date: July 20, 2012