26.11.27 Clean Power Regulations

Authority: Environment Article, §§ 1-101, 1-404, 2-101--2-103, 2-301--2-303, 10-102 and 10-103, Annotated Code of Maryland

.01 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms defined.

(1) "12-month rolling average emission rate" means an emission rate determined by calculating:

(a) For each hour that the unit is operating, an arithmetic average of all hourly emission rates for each operating day of a given calendar month to obtain a monthly average;

(b) The arithmetic monthly average as determined in Section B(1)(a) of this regulation and the monthly average for the previous 11 calendar months to determine the 12-month rolling average emission rate; and

(c) A new 12-month rolling average emission rate at the conclusion of each new calendar month.

(2) "Ozone season" means the period beginning on May 1 of any given year and ending September 30 of that same year.

(3) “System” as used in this chapter, means two or more electric generating units subject to this chapter that are owned, operated or controlled by the same person.

.02 Applicability and Exemptions.

A. This chapter applies to the following fossil-fuel fired electric generating units:

(1) Brandon Shores Units 1 and 2;

(2) C.P. Crane Units 1 and 2;

(3) Chalk Point Units 1 and 2;

(4) Dickerson Units 1, 2 and 3;

(5) H.A. Wagner Units 2 and 3; and

(6) Morgantown Units 1 and 2.

B. Compliance with this chapter may not be achieved by using, tendering, or otherwise acquiring sulfur dioxide (SO_2), NO_x or mercury allowances under any state or federal emission trading program.

.03 General Requirements.

A. An electric generating unit subject to this chapter shall comply with the emission limitations for NO_x, SO_2 and mercury as provided in this regulation.

B. NO_x Emission Limitations.

(1) Except as provided in Section E of this regulation, commencing on January 1, 2009, Ozone Season and annual NO_x emissions from each affected electric generating unit may not exceed the following number of tons:

Affected Unit	**Ozone Season NO_x Tonnage Limitation**	**Annual NO_x Tonnage Limitation**
Brandon Shores Unit 1	1,390 tons	2,989 tons
Brandon Shores Unit 2	1,478 tons	3,119 tons
C.P. Crane Unit 1	352 tons	849 tons
C.P. Crane Unit 2	392 tons	913 tons
Chalk Point Unit 1	623 tons	1,445 tons
Chalk Point Unit 2	670 tons	1,515 tons
Dickerson Unit 1	317 tons	686 tons
Dickerson Unit 2	339 tons	751 tons
Dickerson Unit 3	320 tons	713 tons
H.A. Wagner Unit 2	284 tons	687 tons
H.A. Wagner Unit 3	594 tons	1,381 tons
Morgantown Unit 1	1,073 tons	2,593 tons
Morgantown Unit 2	1,068 tons	2,575 tons
Total	**8,900 tons**	**20,216 tons**

(2) Except as provided in Section E of this regulation, if, after reviewing 2009 Ozone Season data from air monitoring stations located in Maryland, the Department determines that ozone levels in Maryland exceed the levels required to meet the National Ambient Air Quality Standard for ozone, commencing on January 1, 2012, Ozone Season and annual NO_x

emissions from each affected electric generating unit may not exceed the following number of tons:

Affected Unit	**Ozone Season NO_x Tonnage Limitation**	**Annual NO_x Tonnage Limitation**
Brandon Shores Unit 1	1,145 tons	2,465 tons
Brandon Shores Unit 2	1,218 tons	2,572 tons
C.P. Crane Unit 1	290 tons	700 tons
C.P. Crane Unit 2	323 tons	752 tons
Chalk Point Unit 1	513 tons	1,191 tons
Chalk Point Unit 2	552 tons	1,249 tons
Dickerson Unit 1	262 tons	566 tons
Dickerson Unit 2	280 tons	620 tons
Dickerson Unit 3	264 tons	587 tons
H.A. Wagner Unit 2	234 tons	566 tons
H.A. Wagner Unit 3	490 tons	1,138 tons
Morgantown Unit 1	885 tons	2,138 tons
Morgantown Unit 2	881 tons	2,123 tons
Total	**7,337 tons**	**16,667 tons**

C. SO_2 Emission Limitations.

(1) Except as provided in Section E of this regulation, commencing on January 1, 2010, annual SO_2 emissions from each affected electric generating unit may not exceed the following number of tons:

Affected Unit	Annual SO_2 Tonnage Limitation
Brandon Shores Unit 1	7,337 tons
Brandon Shores Unit 2	7,656 tons
C.P. Crane Unit 1	2,085 tons
C.P. Crane Unit 2	2,240 tons
Chalk Point Unit 1	3,546 tons
Chalk Point Unit 2	3,718 tons
Dickerson Unit 1	1,684 tons
Dickerson Unit 2	1,844 tons
Dickerson Unit 3	1,749 tons
H.A. Wagner Unit 2	1,686 tons
H.A. Wagner Unit 3	3,388 tons
Morgantown Unit 1	6,366 tons
Morgantown Unit 2	6,321 tons
Total	**49,620 tons**

(2) Except as provided in Section E of this regulation, if, after reviewing 2009 data from air monitoring stations located in Maryland, the Department determines that fine particulate matter levels in Maryland exceed the levels required to meet the National Ambient Air Quality Standard for fine particulate matter, commencing on January 1, 2014, annual SO_2

emissions from each affected electric generating unit may not exceed the following number of tons:

Affected Unit	**Annual SO_2 Tonnage Limitation**
Brandon Shores Unit 1	5,506 tons
Brandon Shores Unit 2	5,745 tons
C.P. Crane Unit 1	1,564 tons
C.P. Crane Unit 2	1,681 tons
Chalk Point Unit 1	2,661 tons
Chalk Point Unit 2	2,790 tons
Dickerson Unit 1	1,264 tons
Dickerson Unit 2	1,384 tons
Dickerson Unit 3	1,312 tons
H.A. Wagner Unit 2	1,265 tons
H.A. Wagner Unit 3	2,543 tons
Morgantown Unit 1	4,777 tons
Morgantown Unit 2	4,743 tons
Total	**37,235 tons**

D. Mercury Emission Limitations.

(1) Not later than January 1, 2010, each electric generating unit subject to this chapter shall meet a 12-month rolling average emission rate of not more than 23 ounces of mercury per trillion Btu heat input or meet a 12-month rolling average removal efficiency for mercury of at least 75 percent; and

(2) Not later than January 1, 2013, each electric generating unit subject to this chapter shall meet a 12-month rolling average emission rate of not more than 12 ounces of mercury per trillion Btu heat input or meet a 12-month rolling average removal efficiency for mercury of at least 90 percent.

(3) The mercury removal efficiency required in Section D (1) and (2) of this regulation shall be calculated in accordance with Regulation .05 of this chapter.

E. System-wide Averaging.

Compliance with the emissions limitations in Sections B through D of this regulation may be achieved:

(1) For NO_x or SO_2, by demonstrating that the total number of tons emitted from all units in a System does not exceed the sum of the tonnage limitations for all electric generating units in the System.

(2) For mercury, by demonstrating that the average system-wide 12-month rolling average emission rate or removal efficiency, as applicable, calculated in accordance with Section F of this regulation and Regulation .05 of this chapter, is less than or equal to the emission limitation required by Section D of this regulation.

(3) If the ownership, operation and control of an electric generating unit that is included in a system-wide average is transferred to a different person, the transferred unit shall meet the applicable emission standards in Sections B through D of this regulation.

F. A system-wide average shall:

(1) Be based only upon emissions from units in Maryland that are subject to the emission limitations in Sections B through D of this regulation; and

(2) Where applicable, be calculated as the arithmetic average of the sum of the heat input weighted average over the applicable time period for each unit that is included in the system.

G. The Department may, in its discretion, revise the NO_x and SO_2 tonnage allocations for one or more electric generating units as provided in Sections B and C of this regulation, provided that any such revision may not change the total Ozone Season or total annual NO_x or SO_2 tonnage limitations for all electric generating units subject to this chapter.

.04 Monitoring and Reporting Requirements.

A. Compliance with the emission limitations in this chapter shall be demonstrated with a continuous emission monitoring system that is installed, calibrated, operated and certified in accordance with 40 CFR Part 75 or other method approved by the U.S. Environmental Protection Agency.

B. In addition to the requirements of any applicable Part 70 Permit, a person subject to this chapter shall maintain records demonstrating compliance with the emission limitations in this chapter in accordance with the Department's Technical Memorandum 90-01.

.05 Determining the Mercury Removal Efficiency for Fossil-Fuel Fired Electric Generating Units.

A. The procedures of §§ B through D of this regulation shall be used to demonstrate compliance with the 12-month rolling average removal efficiency required for mercury by regulation .03D of this chapter.

B. Determining Mercury Concentrations in Coal and Flue Gas for Each Affected Electric Generating Unit.

(1) A person subject to this regulation shall, at least once each quarter during the period from January 1, 2007 through June 30, 2008:

(a) Determine the mercury content of the coal utilized by each affected unit using a test method approved by the Department; and

(b) Conduct a stack test to determine the mercury concentration in the flue gas upstream of any pollution control device.

(2) The mercury concentration in the flue gas shall be reported as ounces of mercury per trillion Btu heat input.

(3) Stack testing and collection of coal samples to determine the mercury content in coal shall be performed on the same day(s).

(4) Stack testing shall be performed using a test protocol approved by the Department. The test protocol shall be submitted to the Department at least 45 days prior to commencement of testing.

(5) The results of tests to determine the mercury content of coal and mercury concentration in the flue gas shall be reported to the Department upon receipt.

C. Determining an Uncontrolled Mercury Content Flue Gas Baseline.

The uncontrolled mercury baseline concentration in the flue gas of each electric generating unit subject to this chapter shall be determined as the arithmetic average of the quarterly stack tests required by Section B of this regulation, and shall be expressed as ounces per trillion Btu heat input.

D. Determining Compliance with the required Mercury Removal Efficiency.

Each affected electric generating unit shall meet a mercury emission rate, expressed as ounces per trillion Btu and calculated as a 12-month rolling average in accordance with Regulation .01B(1) of this chapter, which, in 2010, is no more than 25%, and in

2013 is no more than 10%, of the uncontrolled mercury baseline concentration established pursuant to Section C of this regulation.

.06 Penalties.

A person who violates the requirements of this chapter shall be subject to penalties as provided in §§ 2-604, 2-609.1, 2-610 and 2-610.1 of the Environment Article. For the purpose of calculating penalties under this chapter, each one-half ounce of mercury and each ton of NO_x or SO_2 emitted in excess of the applicable emission limitation shall be deemed a separate violation.

.KENDL P. PHILBRICK
Secretary of the Environment