# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION STANDARDS AND REGULATIONS CHAPTER 14 EMISSION TRADING PROGRAM REGULATIONS

### Section 1. Introduction to emission trading programs.

(a) Chapter 14 establishes requirements for trading programs authorized under Wyoming Statute 35-11-214. Section 2 implements the Western Backstop (WEB) Sulfur Dioxide Trading Program provisions in accordance with the federal Regional Haze Rule, 40 CFR §51.309. Section 3 establishes consistent recordkeeping and reporting requirements for stationary sources in Wyoming to determine whether sulfur dioxide emissions remain below the sulfur dioxide milestones established in the state implementation plan for regional haze. Section 4 incorporates provisions of a national mercury (Hg) trading program, established under section 111 of the Clean Air Act (CAA) and 40 CFR part 60, Subpart HHHH. Section 4 also establishes a Wyoming-specific Hg allowance allocation methodology that dovetails with the national trading program.

# Section 4. Mercury budget trading program.

- (a) The State of Wyoming incorporates by reference Subpart HHHH, Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units of part 60 of Title 40 of the Code of Federal Regulations as revised on May 18, 2005, excluding sections §60.4104, §60.4140, §60.4141 and §60.4142.
- (b) Applicability. The following units in the State of Wyoming shall be Hg Budget units, and any source that includes one or more such units shall be a Hg Budget source, subject to the requirements of this section:
- (i) Except as provided in paragraph (b)(ii) of this section, a unit serving at any time, since the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.
- (ii) For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to paragraph (b)(i) of this section starting on the day on which the unit first no longer qualifies as a cogeneration unit.

Draft 6/2/06

(c) **Definitions.** The terms used in this section shall have the meanings set forth in 40 CFR §60.4102 and §60.4103.

## (d) Hg Allowance Allocations.

(i) State of Wyoming Trading Budgets. The State of Wyoming trading budgets for annual allocations of Hg allowances for the control periods in 2010 through 2017 and in 2018 and thereafter are 0.952 and 0.376 tons, respectively.

## (ii) Timing Requirements for Hg Allowance Allocations.

- \* (A) By October 31, 2006, the Air Quality Division shall submit to the EPA Administrator the Hg allowance allocations, in a format prescribed by the EPA Administrator and in accordance with (d)(iii)(A) and (B) of this section, for the control periods in 2010, 2011, 2012, 2013 and 2014.
- \* (B) (I) By October 31, 2011, and October 31 every fifth year thereafter, the Air Quality Division shall submit to the EPA Administrator the Hg allowance allocations, in a format prescribed by the EPA Administrator and in accordance with (d)(iii)(A) and (B) of this section, for five consecutive control periods beginning in the fourth year after the year of the applicable deadline for submission under this paragraph (e.g., allowance allocations submitted to EPA on October 31, 2011 would apply to the control periods in 2015, 2016, 2017, 2018 and 2019).
- (II) If the Air Quality Division fails to submit to the EPA Administrator the Hg allowance allocations in accordance with paragraph (d)(ii)(B)(I) of this section, the EPA Administrator shall assume that the allocations of Hg allowances for the applicable control period are the same as for the control period that immediately precedes the applicable control period, except that, if the applicable control period is in 2018, the EPA Administrator shall assume that the allocations equal the allocations for the control period in 2017, multiplied by the amount of ounces (i.e., tons multiplied by 32,000 ounces/ton) of Hg emissions in the applicable State of Wyoming trading budget under (d)(i) for 2018 and thereafter and divided by such amount of ounces of Hg emissions for 2010 through 2017.
- (C) (I) By October 31, 2010 and October 31 of each year thereafter, the Air Quality Division shall submit to the EPA Administrator the Hg allowance allocations, in a format prescribed by the EPA Administrator and in accordance with (d)(iii)(A), (C), and (D), for the control period in the year of the applicable deadline for submission under this paragraph.
- (II) If the Air Quality Division fails to submit to the EPA Administrator the Hg allowance allocations in accordance with paragraph (d)(ii)(C)(I) of this section, the EPA Administrator shall assume that the allocations of Hg allowances for the applicable control period are the same as for the control period that immediately precedes the applicable control period, except that, if the applicable control period is in

Draft 6/2/06

2018, the EPA Administrator shall assume that the allocations equal the allocations for the control period in 2017, multiplied by the amount of ounces (i.e., tons multiplied by 32,000 ounces/ton) of Hg emissions in the applicable State of Wyoming trading budget under (d)(i) for 2018 and thereafter and divided by such amount of ounces of Hg emissions for 2010 through 2017 and except that any Hg Budget unit that would otherwise be allocated Hg allowances under (d)(iii)(A) and (B), as well as under (d)(iii)(A), (C), and (D), for the applicable control period shall be assumed to be allocated no Hg allowances under (d)(iii)(A), (C), and (D) for the applicable control period.

## (iii) Hg Allowance Allocations.

(A) (I) The baseline heat input (in MMBtu) used with respect to Hg allowance allocations under paragraph (d)(iii)(B) of this section for each Hg Budget unit shall be:

(1.) For units commencing operation before January 1, 2001, the average of the three highest amounts of the unit's adjusted control period heat input for 2000 through 2004, with the adjusted control period heat input for each year calculated as the sum of the following:

a. Any portion of the unit's control period heat input for the year that results from the unit's combustion of lignite, multiplied by 3.0;

b. Any portion of the unit's control period heat input for the year that results from the unit's combustion of subbituminous coal, multiplied by 1.25; and

c. Any portion of the unit's control period heat input for the year that is not covered by paragraph (d)(iii)(A)(I)(1.)a. or b. of this section, multiplied by 1.0.

(2.) For units commencing operation on or after January 1, 2001 and operating each calendar year during a period of 5 or more consecutive calendar years, the average of the 3 highest amounts of the unit's total converted control period heat input over the first such 5 years.

(II) (1.) A unit's control period heat input for a calendar year under paragraphs (d)(iii)(A)(I)(1.) of this section, and a unit's total ounces of Hg emissions during a calendar year under paragraph (d)(iii)(C)(III) of this section, shall be determined in accordance with 40 CFR part 75, to the extent the unit was otherwise subject to the requirements of 40 CFR part 75 for the year, or shall be based on the best available data reported to the Air Quality Division for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR part 75 for the year. The unit's types and amounts of fuel combusted, under paragraph (d)(iii)(A)(I)(1.) of this

section, shall be based on the best available data reported to the Air Quality Division for the unit.

(2.) A unit's converted control period heat input for a calendar year specified under paragraph (d)(iii)(A)(I)(2.) of this section equals:

a. Except as provided in paragraph (d)(iii)(A)(II)(2.)b. or c. of this section, the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 Btu/kWh and divided by 1,000,000 Btu/MMBtu, provided that if a generator is served by 2 or more units, then the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;

b. For a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and by 1,000,000 Btu/MMBtu; or

c. For a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the control period gross electrical output of the enclosed device comprising the compressor, combustor, and turbine multiplied by 3,413 Btu/kWh, plus the total heat energy (in Btu) of the steam produced by any associated heat recovery steam generator during the control period multiplied by 0.8, and with the sum divided by 1,000,000 Btu/MMBtu.

\* (B) (I) For each control period in 2010 and thereafter, the Air Quality Division shall allocate to all Hg Budget units in the State of Wyoming that have a baseline heat input (as determined under paragraph (d)(iii)(A) of this section) a total amount of Hg allowances equal to 90 percent for all control periods, of the amount of ounces (i.e., tons multiplied by 32,000 ounces/ton) of Hg emissions in the applicable State of Wyoming trading budget under (d)(i) (except as provided in paragraph (d)(iii)(D) of this section).

(II) The Air Quality Division shall allocate Hg allowances to each Hg Budget unit under paragraph (d)(iii)(B)(I) of this section in an amount determined by multiplying the total amount of Hg allowances allocated under paragraph (d)(iii)(B)(I) of this section by the ratio of the baseline heat input of such Hg Budget unit to the total amount of baseline heat input of all such Hg Budget units in the State of Wyoming and rounding to the nearest whole allowance as appropriate.

(C) For each control period in 2010 and thereafter, the Air Quality Division shall allocate Hg allowances to Hg Budget units in the State of Wyoming that commenced operation on or after January 1, 2001 and do not yet have a baseline heat

input (as determined under paragraph (d)(iii)(A) of this section), in accordance with the following procedures:

\* (I) The Air Quality Division shall establish a separate new unit set-aside for each block of five consecutive control periods. Each new unit set-aside shall be allocated Hg allowances equal to 10 percent for all control periods, of the amount of ounces (i.e., tons multiplied by 32,000 ounces/ton) of Hg emissions in the applicable State of Wyoming trading budget under (d)(i).

(II) The Hg designated representative of such a Hg Budget unit may submit to the Air Quality Division a request, in a format specified by the Air Quality Division, to be allocated Hg allowances, starting with the later of the control period in 2010 or the first control period after the control period in which the Hg Budget unit commences commercial operation and until the first control period for which the unit is allocated Hg allowances under paragraph (d)(iii)(B) of this section. The Hg allowance allocation request must be submitted on or before July 1 of the first control period for which the Hg allowances are requested and after the date on which the Hg Budget unit commences commercial operation.

(III) In a Hg allowance allocation request under paragraph (d)(iii)(C)(II) of this section, the Hg designated representative may request for a control period Hg allowances in an amount not exceeding the Hg Budget unit's total ounces of Hg emissions during the control period immediately before such control period.

(IV) The Air Quality Division shall review each Hg allowance allocation request under paragraph (d)(iii)(C)(II) of this section and shall allocate Hg allowances for each control period pursuant to such request as follows:

(1.) The Air Quality Division shall accept an allowance allocation request only if the request meets, or is adjusted by the Air Quality Division as necessary to meet, the requirements of paragraphs (d)(iii)(C)(II) and (III) of this section.

(2.) On or after July 1 of the control period, the Air Quality Division shall determine the sum of the Hg allowances requested (as adjusted under paragraph (d)(iii)(C)(IV)(1.) of this section) in all allowance allocation requests accepted under paragraph (d)(iii)(C)(IV)(1.) of this section for the control period.

(3.) If the amount of Hg allowances in the new unit set-aside for the control period is greater than or equal to the sum of allowance allocations requested as determined under paragraph (d)(iii)(C)(IV)(2.) of this section, then the Air Quality Division shall allocate the amount of Hg allowances requested (as adjusted under paragraph (d)(iii)(C)(IV)(1.) of this section) to each Hg Budget unit covered by an allowance allocation request accepted under paragraph (d)(iii)(C)(IV)(1.) of this section.

(4.) If the amount of Hg allowances in the new unit set-aside for the control period is less than the sum of allowance allocation requests under paragraph (d)(iii)(C)(IV)(2.) of this section, then the Air Quality Division shall allocate to each Hg Budget unit covered by an allowance allocation request accepted under paragraph (d)(iii)(C)(IV)(1.) of this section the amount of the Hg allowances requested (as adjusted under paragraph (d)(iii)(C)(IV)(1.) of this section), multiplied by the amount of Hg allowances in the new unit set-aside for the control period, divided by the sum of allowance allocations requested as determined under paragraph (d)(iii)(C)(IV)(2.) of this section, and rounded to the nearest whole allowance as appropriate.

(5.) The Air Quality Division shall notify each Hg designated representative that submitted an allowance allocation request of the amount of Hg allowances (if any) allocated for the control period to the Hg Budget unit covered by the request.

\*\* (D) If, after completion of the procedures under paragraph (d)(iii)(C)(IV) of this section for a control period, any unallocated Hg allowances remain in the new unit set-aside for the control period, the Air Quality Division shall allocate to each Hg Budget unit that was allocated Hg allowances under paragraph (d)(iii)(B) of this section an amount of Hg allowances equal to the total amount of such remaining unallocated Hg allowances, multiplied by the unit's allocation under paragraph (d)(iii)(B) of this section, divided by 90 percent for 2010 and thereafter, of the amount of ounces (i.e., tons multiplied by 32,000 ounces/ton) of Hg emissions in the applicable State of Wyoming trading budget under (d)(i), and rounded to the nearest whole allowance as appropriate.