# Electric Generating Unit Rule, Chapter 173-406 WAC

[Formerly the Acid Rain Rule]

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**WAC 173-406-010 Purpose of chapter.**

This rule addresses the following air pollutants from "electric generating units."

(1) This rule implements the federal Acid Rain Program covering emissions of sulfur dioxide and nitrogen oxides. Washington State is implementing the federal Acid Rain Program by adopting the federal rules by reference.

(2) This rule governs mercury emissions from coal-burning electric generating units. This rule also fulfills the requirements under 40 CFR 60.24(h) that the state adopt emission standards and compliance schedules to attain and maintain Washington's annual mercury emission budget from electric generating units.

## Part A: Adoption by reference

**WAC 173-406-020 Adoption by reference.**

The following provisions of the code of federal regulations, as they exist on July 1, 2006 and edited by the proposed revisions in the December 22, 2006 Federal Register, pages 77121-77147, are adopted by reference:

(1) 40 CFR Part 60, Subpart HHHH (Emission Guidelines and Compliance Times for Coal-fired Electric Steam Generating Units) with the following exceptions:

(a) The following sections are adopted by reference until midnight, December 31, 2012:

(A) 40 CFR 60.4101;
(B) 40 CFR 60.4106(c) and (d);
(C) 40 CFR 60.4107 – 60.4108;

(D) 40 CFR 60.4101;
(E) 40 CFR 60.4106(c) and (d);
(F) 40 CFR 60.4107 – 60.4108;
(G) 40 CFR 60.4151 – 60.4152;
(H) 40 CFR 60.4154 – 40 CFR 60.4155; and
(I) 40 CFR 60.4175 – 60.4176.

(b) The following sections are not adopted by reference:
(A) 40 CFR 60.4104;
(B) 40 CFR 60.4105;
(C) 40 CFR 60.4140;
(D) 40 CFR 60.4141;
(E) 40 CFR 60.4142;
(F) 40 CFR 60.4153;
(G) 40 CFR 60.4156;
(H) 40 CFR 60.4161; and
(I) 40 CFR 60.4162.

| | | |
|---|---|---|
| (2) | 40 CFR Part 72 | Permits Regulation |
| (3) | 40 CFR Part 73 | Sulfur Dioxide Allowance System |
| (4) | 40 CFR Part 74 | Sulfur Dioxide Opt-Ins |
| (5) | 40 CFR Part 75 | Continuous Emission Monitoring |
| (6) | 40 CFR Part 76 | Acid Rain Nitrogen Oxides Emission Reduction Program |
| (7) | 40 CFR Part 77 | Excess Emissions |
| (8) | 40 CFR Part 78 | Appeal Procedures |

Federal rules are available electronically on the internet through the U.S. Government Printing Office website at http://www.gpoaccess.gov/cfr/index.html.

## Part B: Control of Mercury Emissions from Coal-Fired Electric Generating Units

**WAC 173-406-030 Purpose of Part B.**

(1) The purpose of this subpart is to control mercury emissions from coal-burning electric generating units in Washington. This subpart also ensures that mercury emissions will not exceed Washington's annual electric-generating unit mercury budget emissions established by EPA in 40 CFR 60.24(h).

(2) Coal-burning electric generating units are known as "mercury budget sources" in this rule. Ecology, local air authorities, and EFSEC (Energy Facility Site Evaluation Council) regulate mercury budget sources in Washington.
(a) Ecology and local air authorities issue permits for the existing plant and new plants smaller than 350 megawatts.
(b) EFSEC issues a permit called a site certification for new plants larger than 350 megawatts.
(c) Ecology will maintain the Washington State Mercury Allowance Program for all permitting authorities and EFSEC.

(d) EFSEC and the local air authorities will coordinate with Ecology to ensure that the statewide mercury budget is not exceeded.

**WAC 173-406-040 Applicability.**

(1) This chapter applies to each stationary source that includes one or more mercury budget units. The following stationary coal-fired boilers and stationary coal-fired combustion turbines are mercury budget units:

(a) A stationary coal-fired boiler or stationary, coal-fired combustion turbine serving at any time since the start-up of the unit's combustion chamber a generator with a nameplate capacity of more than 25 megawatts electric (MWe) and producing electricity for sale.

(b) A cogeneration unit:

i. Serving a generator with a nameplate capacity of more than 25 MW; and

ii. Supplying in any calendar year more than one-third of its potential electric output capacity or 219,000 megawatt hours (MWh), whichever is greater, to any utility power distribution system for sale.

iii. On the day a coal-fired mercury budget unit no longer qualifies as a cogeneration unit, it becomes subject to subsection (1)(a) of this section.

(c) An integrated gasification-combined cycle (IGCC) electric utility steam generating unit that burns a synthetic gas derived from coal in a combined-cycle gas turbine. An IGCC that does not use any coal in production of the synthetic gas is not subject to this rule.

**WAC 173-406-050 Definitions.**

The definitions in 40 CFR 60.4102 apply throughout WAC 173-406-030 through -160. Some of those definitions are included here, in addition to state-specific definitions, to assist in understanding this rule.

(1) "Administrator" means the Administrator of the Environmental Protection Agency.

(2) "Allowance" means the same as "mercury allowance."

(3) "Boiler" means an enclosed fossil- or other-fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(4) "Buyer" means a mercury budget source owner that acquires tradable units from either 1) a mercury budget source owned by another entity, or 2) a mercury budget source owned by the same company that is operating under a different Air Operating Permit.

(5) "Coal-burning electric generating unit" means a unit that is subject to the mercury budget trading program under 40 CFR 60.4104.

(6) "Coal-fired" means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year.

(7) "Combustion turbine" means: (1) An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and (2) If the enclosed device under paragraph (1) of this definition is combined cycle, any associated duct burner, heat recovery steam generator, and steam turbine

(8) "Commence commercial operation" means, with regard to a mercury budget unit:

(a) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in 40 CFR 60.4105 (retired unit exemption).

(i) For a unit that is a mercury budget unit under 40 CFR 60.4104 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (1) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit that is a mercury budget unit under 40 CFR 60.4104 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (1) of this definition and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(b) Notwithstanding paragraph (1) of this definition and except as provided in 40 CFR 60.4105, for a unit that is not a mercury budget unit under 40 CFR 60.4104 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (1) of this definition, the unit's date for commencement of commercial operation shall be the date on which the unit becomes a mercury budget unit under 40 CFR 60.4104.

(i) For a unit with a date for commencement of commercial operation as defined in paragraph (2) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the unit's date of commencement of commercial operation of the unit, which shall continue to be treated as the same unit.

(ii) For a unit with a date for commencement of commercial operation as defined in paragraph (2) of this definition and that is subsequently replaced by a unit at the same source (*e.g.*, repowered), such date shall remain the replaced unit's date of commencement of commercial operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (1) or (2) of this definition as appropriate.

(9) "Compliance account" means a mercury allowance tracking system account, established by EPA for a mercury budget source under 40 CFR 60.4150 through 60.4157, in which any mercury allowance allocations for the mercury budget source are recorded and in which are held any mercury allowances available for use for a control period in order to meet the source's mercury budget emissions limitation.

(10) "Ecology" in Chapter 173-406 WAC means the Washington State Department of Ecology. It does not mean any other entity.

(11) "Electric generating unit" or EGU means:

(1) Except as provided in paragraph (2) of this definition, a stationary, coal-fired boiler or stationary, coal-fired combustion turbine in the State serving at any time, since the start-up of a unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatts electric (MW) producing electricity for sale.

(2) 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 in the State serving at any time a generator with nameplate capacity of more than 25 MW 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 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 (1) of this definition starting on the day on which the unit first no longer qualifies as a cogeneration unit.

(12) "Existing mercury budget unit or source" means a unit subject to this rule operating on or before January 1, 2007.

(13) "General account allowances" means mercury allowances located in the Ecology general account that is part of the mercury allowance tracking system account established by EPA under 40 CFR 60.4150 through 4157.

(14) "Integrated gasification-combined cycle electric utility steam generating unit" or IGCC means a coal-fired electric utility steam generating unit that burns a synthetic gas derived from coal in a combined-cycle gas turbine. No coal is directly burned in the unit during operation.

(15) "Mercury allowance" means one ounce of mercury emissions for a calendar year. A mercury allowance is a limited authorization to emit one ounce of mercury according to the In-state trading program. Fractional ounces are rounded to the nearest whole ounce.

(16) "Mercury Emission Tradable Unit Transfer Form" means the form specified by Ecology for recording transfer of tradable units.

(17) "Mercury budget source" means a coal burning electric generating unit that includes one or more mercury budget units.

(18) "Mercury budget unit" (also known as **"**Coal-burning electric generating units") means a unit that is subject to the mercury budget trading program under 40 CFR 60.4104.

(19) "New mercury budget unit or source" means a unit or source subject to this rule who received a permit to operate after January 1, 2007.

(20) "Permitting authority" means an established air pollution control agency or the Energy Facility Site Evaluation Council with jurisdiction over the source.

(21) "Seller" means a mercury budget source owner that transfers a portion of its tradable units to a different mercury budget unit owner or different mercury budget unit.

(22) "Tradable unit" means limited authorization issued by the permitting authority to emit one (1.0) ounce of mercury during a specified calendar year. Fractional ounces are rounded to the nearest whole ounce.

(23) "Tradable unit bank" means the Washington State bank established by Ecology for recording mercury allocations, and deductions and transfers of tradable units.

## Program for 2010

EPA proposed a federal rule on December 22, 2006, that will establish requirements for coal-burning electric utility units in a state that did not adopt its own rules by November 17, 2006. 40 CFR Part 62, Subpart LLL, when adopted, will apply to mercury budget sources in Washington that were operating in 2007. Adoption of the final rule is expected before December 2007. Refer to pages 77127 – 77146 of the proposed rule: http://www.epa.gov/fedrgstr/EPA-AIR/2006/December/Day-22/a21573.pdf.

## Program for 2011 and 2012

**WAC 173-406-060 Washington mercury allowance allocation for calendar years 2011 and 2012.**

(1) For the years 2010, 2011, and 2012, mercury budget sources in Washington State will participate in the national mercury allowance market operated by the EPA Clean Air Market Division.

(2) For the years 2010, 2011, and 2012, the Washington State mercury emission budget is 6336 allowances per year (396 pounds).

(3) Each year the mercury emission budget in (2) of this section is distributed as follows:

70% of state budget

(a) Compliance account held by mercury budget sources operating before January 1, 2007 [TransAlta Centralia Generation LLC for units BW21 and BW22]: 4435 mercury allowances per year (277.2 pounds).

(b) General account held by Ecology: 1901 mercury allowances per year (118.8 pounds). The general account contains the following sub-accounts:

5% of state budget

(i) New source account: 317 mercury allowances per year (19.8 pounds) is designated for use by new mercury budget sources.

(A) Any mercury allowances remaining in this account after Ecology has distributed them according to WAC 173-407-080(1)(b) will be moved to the supplemental account in (4)(b)(ii) of this section for redistribution during the same period.

(B) If there are no requests for use of the new source account by the February 1st deadline, the full new source account will be transferred to the supplemental account for the previous calendar year.

25% of state budget

(ii) Supplemental account: 1584 mercury allowances per year (99 pounds) is designated for use by mercury budget sources whose actual emissions exceed their allowance.

(c) Ecology will retire all unallocated mercury allowances after each allowance distribution under WAC 174-406-080(1). Undistributed allowances will not be available for distribution in any future distribution period or in any other state or federal allowance market.

**Deleted:** There will be no banking of un-distributed allowances.

**WAC 173-406-070 Requesting a mercury allowance during 2011 and 2012.**

(1) Mercury allowances from the general account in WAC 173-406-060(4)(b) are available for distribution to an existing or new mercury budget source.

(2) A request for mercury allowances from both the new unit account and the supplement account may be combined in one application.

(3) Requesting an allowance.
   (a) The mercury budget source must request the allowance which must meet each of the following:
      (i) The request must include a copy of the electronic quarterly report required to be submitted to EPA under 40 CFR 75.84(f) for the fourth quarter of the year;

      (ii) The request must comply with one or both of the following, as applicable:
         (A) A request for an allowance from the new source account must not exceed the actual mercury emissions as reported to EPA or the available allowance in the new source account, whichever is less; and/or
         (B) A request for an allowance from the supplemental account must not exceed the actual mercury emissions as reported to EPA or the available allowances in the supplemental account, whichever is less; and

      (iii) Ecology must receive the request on or before February 1 of the year following the calendar year for which the mercury allowance is requested.

   (b) During the calendar years 2010, 2011, and 2012, a new mercury budget source may request a mercury allowance from the new source account beginning with its first year of operation.

**WAC 173-406-080 Allocating a mercury allowance during 2011 and 2012.**

(1) Within 5 business days of receiving a request for an allowance or by February 10 of the distribution year, Ecology must review the request and transfer the requested allowances to the mercury budget source's compliance account according to 40 CFR 60.4160 if the request satisfies each of these requirements:

   (a) The request meets the requirements of WAC 173-406-070(3).

   (b) Distributing allowances from the new source account.
      (i) If the sum of all mercury allowance requests is equal to or less than 317 ounces (19.8 pounds), Ecology will transfer the requested allowances from the new source account to the compliance account for each mercury budget source equal to the number of ounces requested.
      (ii) If the sum of all mercury allowance requests is greater than 317 ounces (19.8 pounds), Ecology will distribute the ounces starting with the permit or site certification agreement with the oldest issuance date. The resulting allowances will be transferred from the new source account to the compliance account for each mercury budget source.

   (c) Distributing allowances from the supplemental account.
   For each mercury budget source that was allocated mercury allowances in an amount less than that of their total actual emissions for the control period, Ecology will transfer allowances from the state general account to the compliance account of the mercury budget source in priority of the date of permit issuance.

(d) The total number of general account allowances Ecology allocates and transfers to all mercury budget sources in each control period must not exceed 1901 ounces per year (118.8 pounds per year).

(2) Ecology must electronically notify each mercury budget source concurrently with notifying EPA of the decision in (1) of this section.

(3) Ecology will submit the mercury allowance allocated under WAC 173-406-060(4)(a) for the control periods 2011 and 2012 to EPA by December 1, 2008.

(4) Ecology must post the following on its web page and notify the public of:
(a) Requests for mercury allowance allocations and accompanying decisions;
(b) Amount of unused mercury allowances; and
(c) Cumulative ounces of mercury emitted in quarterly emissions monitoring report submitted to EPA; and
(d) Mercury allowances allocated under WAC 173-406-060(4)(a).

(5) A mercury budget unit that ceases operation prior to January 1, 2013, loses its mercury allowance for all years following the year in which operation is terminated. Any mercury allowances lost by such a mercury budget unit will be returned to the account from which it was distributed and will be available for distribution to any mercury budget unit qualifying for distribution.

**Deleted:** retires during calendar years 2010, 2011, or 2012

**Deleted:** on January 1, 2013.

(6) Construction extension request. In addition to applicable existing requirements, a request for extension of an air quality permit or site certification agreement that includes a mercury allowance issued under this section must include the following:
(a) The mercury budget source must demonstrate that it is reasonable to expect that construction will commence during the extension period; and
(b) The permitting authority review must determine that is reasonable to expect the source will commence construction, as it is defined in Chapter 173-400 WAC, within the timeline provided in the request.

**Comment [t1]:** This needs clarification, if mercury budget allocations are given in the Air Operating Permit (per your discussion), as the plant would have started operations to get the Air Operating Permit, because an allocation can't be given if a plant is not operating (how can you make a request?). Or are you going to reserve allocations in SCAs (which is implied throughout the text)? What about proposed units smaller than the EFSEC threshold, in what air quality permit would they get an allocation? Perhaps SCA and air quality permits should be defined in WAC-173-406-050, and how permits issued will reserve allocations so that a new plant will have some certainty on how much of an allowance they will receive. You might want to include language on who should be first in line for allocations if there is a construction extension request, and make this section less subject to what is "reasonable."

## Program for 2013 and Beyond

**WAC 173-406-090 Washington mercury emission budget for calendar year 2013 and beyond.**

(1) Beginning January 1, 2013, Washington State will not participate in the national mercury trading market operated by the EPA Clean Air Market Division. (http://www.epa.gov/airmarkets/)

(2) Mercury allowances for mercury budget sources in Washington State:
(a) Beginning on January 1, 2013, the state mercury emissions budget is limited to the larger of:
(i) 2240 ounces per year (140 pounds); or

(ii) The total amount of mercury allowances distributed to all mercury budget sources in a permit or site certification agreement issued by December 31, 2012, not to exceed 2496 ounces per year.

Deleted: 256

(b) EXCEPT: For each calendar year 2013 through 2016, an additional 3200 ounces per year (200 pounds) of mercury allowances are available for distribution under WAC 173-406-130(2).

**WAC 173-406-110 Distributing mercury allowances for calendar year 2013 and beyond.**

(1) Starting January 1, 2013, mercury allowances in WAC 173-406-090(2)(a) are distributed as follows:

(a) Mercury allowances for each year will be distributed to each mercury budget source based on the following:

(i) Allowances will be calculated using the lower of results from (A) or (B), as applicable:

(A) Mercury budget units in operation in 2007:

Mercury allowances per year = A x B x C x D x E

When

A = Net megawatt rating of mercury budget source (MW)
B = 8760 hours per year
C = 1 Gigawatt/1000 Megawatt
D = 16 ounces/1 pound
E = Emission standard in WAC 173-406-120(1) (pound/GW-hour)

(B) Mercury budget units permitted after January 1, 2007:

Mercury allowances per year = A x B x C x D x F

When

A = Net megawatt rating of mercury budget source (MW)
B = 8760 hours per year
C = 1 Gigawatt/1000 Megawatt
D = 16 ounces/1 pound
F = Emission standard determined by Best Available Control Technology established in the permit or site certification agreement for a new mercury budget source in pound per Gigawatt-hour (lb/GW-h) or the emission standard in WAC 173-406-120(1), whichever is lower.

(ii) Priority for distribution must be based on the date the air quality permit or site certification was issued, beginning with the source with the oldest issued permit and working forward from that date;

(iii) Mercury allowances distributed to all mercury budget source in Washington State must not exceed the applicable amount in WAC 173-406-090(2)(a) or (2)(b) on an annual basis.

***Example 1: Plant operating in 2007***

Assume this is the existing pulverized coal plant so the emission standards in WAC 173-406-120(1)(a) apply. In this example, the plant gets 98 .4 lbs/yr of the available 156 lbs, leaving 57.6 pounds available for use by other plants. **The plant would get 1574 mercury allowances each year.**

$$\begin{array}{ccccccccccc} \mathbf{A} & \mathbf{x} & \mathbf{B} & \mathbf{x} & \mathbf{C} & \mathbf{x} & \mathbf{D} & \mathbf{x} & \mathbf{E} & = & \text{Mercury emissions} \\ \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \\ 1404 \text{ MW} & \times & \dfrac{8760 \text{ hour}}{\text{year}} & \times & \dfrac{1 \text{ GW}}{1000 \text{ MW}} & \times & \dfrac{16 \text{ ounces}}{1 \text{ pound}} & \times & \dfrac{0.0080 \text{ pound}}{\text{GW-h}} & = & \dfrac{1574 \text{ ounces}}{\text{year}} \end{array}$$

***Example 2: Plant issued a permit after January 1, 2007***

Assume this is a new, non-pulverized coal plant with BACT in the permit that is higher than the lb/GWh in WAC 173-406-120(1)(b) so the state rule applies. In this case, the non-pulverized coal plant would get 35.5 lbs/yr of the available 57.6 lbs, leaving 22.1 pounds available for use by other plants. **The plant would get 601 mercury allowances each year.**

$$\begin{array}{ccccccccccc} \mathbf{A} & \mathbf{x} & \mathbf{B} & \mathbf{x} & \mathbf{C} & \mathbf{x} & \mathbf{D} & \mathbf{x} & \mathbf{E} & = & \text{Mercury emissions} \\ \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \\ 650 \text{ MW} & \times & \dfrac{8760 \text{ hour}}{\text{year}} & \times & \dfrac{1 \text{ GW}}{1000 \text{ MW}} & \times & \dfrac{16 \text{ ounces}}{1 \text{ pound}} & \times & \dfrac{0.0066 \text{ pound}}{\text{GW-h}} & = & \dfrac{601 \text{ ounces}}{\text{year}} \end{array}$$

**Comment [t2]:** We are proposing that everyone have the same limit of 0.0080 lbs/GW-h. If that change is accepted the calculations would need to be revised.

***Example 3: Plant issued a permit after January 1, 2007 and after the plant in example 2***

Assume the 3rd plant is a new, non-pulverized coal plant with BACT in the permit that is more stringent than the lb/GW-h in WAC 173-406-120(1)(b). In this case, the hypothetical BACT limitation of 0.0043 lb/GW-h would apply. The non-pulverized coal plant is eligible for 25.25 lbs/yr; however, it will get 22.1 lbs/yr because that is all that is available from our pool. The plant would need to take a limit on its emissions to get a permit and/or it could purchase additional tradable units from one of the other 2 mercury budget sources. **The plant would get 404 mercury allowances each year.**

$$\begin{array}{ccccccccccc} \text{A} & \text{x} & \text{B} & \text{x} & \text{C} & \text{x} & \text{D} & \text{x} & \text{F} & = & \text{Mercury emissions} \\ \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \\ 670 \text{ MW} & \times & \dfrac{8760 \text{ hour}}{\text{year}} & \times & \dfrac{1 \text{ GW}}{1000 \text{ MW}} & \times & \dfrac{16 \text{ ounces}}{\text{pound}} & \times & \dfrac{0.0043 \text{ pound}}{\text{GW-h}} & = & \dfrac{404 \text{ ounces}}{\text{year}} \end{array}$$

(b) In determining how to distribute mercury allowances, ounces other than a whole number must be rounded to the nearest whole ounce. For example 5.1 through 5.5 ounces is rounded to 5 ounces; while 5.6 through 5.9 ounces is rounded to 6 ounces.

(c) By January 1, 2011, Ecology will determine the mercury allowance allocation for all permitted mercury budget sources and notify the sources.

(d) Ecology will track the mercury allowances distribution and available portion of the annual mercury budget allocation. Mercury allowance allocations are valid for one calendar year. This information will be posted on the Ecology internet site and the public notified.

(2) Additional mercury allowances for calendar years 2013 through 2016.

(a) Mercury allowances in WAC 173-406-090(2)(b) for calendar year 2013 are distributed to a mercury budget source that notifies the permitting authority and

Ecology by December 1, 2013, that WAC 173-404-130(1)(a), (b), and (c) were triggered.

(b) During calendar years 2014 through 2016, up to 3200 ounces per year (200 pounds) of mercury allowances are available for distribution following the procedures in WAC 173-406-130.

(3) Construction extension request. In addition to applicable existing requirements, a request for extension of an air quality permit or site certification agreement that includes a mercury allowance issued under this section must include the following:

(c) The mercury budget source must demonstrate that it is reasonable to expect that construction will commence during the extension period; and

(d) The permitting authority review must determine that is reasonable to expect the source will commence construction, as it is defined in Chapter 173-400 WAC, within the timeline provided in the request.

**Comment [t3]:** See comment page 8.

(2) Penalty provision. If, as of midnight on each December 31, a mercury budget unit has emitted more mercury emissions than the amount distributed under (1) and (2) of this section, as appropriate, taking into account any reductions or increases from actions under WAC 173-406-150, then the permitting authority and Ecology will deduct two times the number of ounces of the unit's excess emissions from its annual mercury allowances allocation for the following calendar year. This action will be posted on the Ecology public notice web page.

### WAC 173-406-120 Emission standards for a mercury budget unit.

(1) Beginning January 1, 2013, allowances for a mercury budget unit will be based on:

**Deleted:** must comply with one of the following emission standards on a rolling 12-month basis:

(a) 0.008 pounds of mercury per gigawatt hour gross electrical output for a mercury budget units permitted prior to January 1, 2007; or

**Deleted:** pulverized coal power plant

(b) The Best Available Control Technology emission rate established in the permit for a new mercury budget source permitted after January 1, 2007, but not greater than 0.008 pounds of mercury per gigawatt hour gross electrical output.

**Deleted:** 0.0066 pounds of mercury for all other power plants

(c) Exceptions are listed in WAC 173-406-130.

(2) Compliance with (1) of this section must be demonstrated beginning on January 1, 2014 for a mercury budget source existing on January 1, 2007.

**Deleted:** 6

(3) To decrease the likelihood that any mercury budget unit will exceed its annual allowance, sources shall maintain records of their rolling 12-month cumulative emissions. The initial rolling 12-month period for which records shall be maintained for a new mercury budget source begins on the date of the initial performance test for the mercury emission standard under 40 CFR 60.45a. The continuous emission monitoring systems required by 40 CFR 60.4170 through 60.4176 for mercury emissions from the mercury budget unit must be certified prior to this date.

**Deleted:** compliance with the emission standard of subsection (1) of this section

**Deleted:** Thereafter, compliance must be demonstrated on a rolling-12 month basis in terms of calendar months.

(4) Mercury reduction plan.

(a) By January 1, 2011, the owner or operator of an existing mercury budget source must submit a report to the permitting authority describing how it will establish appropriate monitoring, recordkeeping, reporting, operational requirements and other conditions as necessary to ensure compliance with the mercury emission limit in (1) of this section. The report must include the following elements, at a minimum:

(i) A mercury control plan projected to achieve compliance with the emission limit;
(ii) Technology or any other mercury control practices proposed to be used to achieve compliance; and
(iii) A schedule for implementing the selected control technology, including major milestones;
(iv) Installation and operation requirements; and
(v) Work practice standards for the selected technology.

(b) Construction of the required control technology may not begin until the permitting authority has issued a regulatory order.

(c) Ecology must post notice of this report on its internet site.

(5) Compliance with (1) of this section and WAC 173-406-130 must be determined using procedures in 40 CFR 60.50a(h).

(6) The owner or operator of a mercury budget source subject to this rule must measure, record, and report the mercury in the exhaust gases following the requirements and procedures in 40 CFR 60.4170 – 60.4176, and 40 CFR Part 75, Subpart I.

**WAC 173-406-130 Temporary alternate standard for calendar years 2013 through 2016.**

(1) A mercury budget source existing before January 1, 2001 may apply for a compliance order containing an alternate emission standard if the control technology fails to meet the emission standard in WAC 173-406-120(1). The source will not be subject to a compliance action for failing to meet the emission requirement of WAC 173-406-090(2)(a) if the source submits the request and meets all of the following conditions:

(a) The owner or operator of the mercury budget source properly implemented the mercury control plan approved under WAC 173-406-120(4);

(b) The mercury control technology failed under normal operation to meet the emission standard in WAC 173-406-120(1);

(c) The owner or operator has maintained the mercury budget source, including all associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing mercury emissions;

(d) The owner or operator notified the permitting authority and Ecology of the failure to comply with WAC 173-406-120(1) within 30 days of submitting quarterly reports required to be submitted to EPA under 40 CFR 75.84(f);

(e) By June 1, 2014, the owner or operator files an request with the permitting authority for a compliance order that includes at a minimum:

(i) A compliance schedule providing for compliance with the emission standard as soon as practicable, but no later than January 1, 2017;

(ii) A revised mercury emissions plan; and
(iii) Other information necessary to support the request.

(2) The permitting authority may issue a compliance order in response to a request submitted under subsection (1)(e) of this section only if it determines that the control strategy submitted by the owner or operator will achieve the emission standard in WAC 173-406-120(1). The compliance order must, at a minimum, include the following terms:

(a) An emission limit in pounds per gigawatt hour (GWh) that the monitoring data for the mercury budget unit indicate can be achieved with controls and practices in place on the date the revision is issued. The emission limit established expires no later than January 1, 2017.

(b) A requirement that the mercury emissions may not exceed the mercury allowances allocated to the mercury budget source through WAC 173-406-110(1) and up to an additional 3200 ounces per year (200 pounds) from WAC 173-406-090(3)(b).

(c) A schedule for installation, with intermediate benchmark dates, as appropriate;

(d) The earliest date by which compliance with WAC 173-406-120(1) must be achieved; and

(e) A requirement that emissions for the twelve calendar months beginning with the expiration date established under (2)(d) of this section, and each subsequent twelve month period, must meet the limit in WAC 173-406-110(1).

**WAC 173-406-140 Compliance with Washington State mercury emission budget beginning January 1, 2013.**

(1) Beginning January 1, 2013, mercury allowances available for mercury budget units are calculated according to WAC 173-406-110(1).

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(2) To ensure that Washington State's annual mercury emission budget and each individual mercury budget unit's allowances are not exceeded each calendar year from 2013 forward, the owner or operator of each mercury budget unit must:
(a) Evaluate the rolling 12-month total mercury emissions from each unit and compare that to the mercury allowances distributed by WAC 173-406-110(1)(a) for the calendar year for the source.

(b) If, as of midnight, December 31st, the source is above its annual mercury allowances from WAC 173-406-110(1)(a), then the owner or operator of the unit must:
(i) Immediately reduce the mercury emissions from the mercury budget unit by an amount equal to the amount of excess emissions so that the rolling 12-month total at the end of January is in compliance with the amount established in WAC 173-406-110(1)(a); and
(ii) Deduct two times the number of ounces of the unit's excess emissions from its annual mercury allowances allocated for the following calendar year.

**Deleted:** <#>In any calendar month, if the rolling 12-month total is more than 90% of its yearly mercury allowances distributed under WAC 173-406-110(1), the owner or operator of the mercury budget unit must take actions necessary to ensure the individual unit's mercury allowances is not exceeded by December 31st of that year. Such actions may include:¶
<#>Reduction in operations in the succeeding months adequate to ensure compliance;¶
<#>Temporary action necessary to increase the effectiveness of the mercury control system;¶
<#>Purchase trading units from another mercury budget source; and/or¶
<#>Other actions necessary to ensure the limit is met for the 12-month period ending on midnight December 31st.¶

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**WAC 173-4-6-150 In-state trading of mercury allowances.**

(1) Scope of Trading program

(a) Participation in the trading program is limited to mercury budget units located in the State of Washington.

(b) A new mercury budget unit that has not yet commenced commercial operation may not sell any tradable units.

(c) The first year Washington mercury budget sources may transfer a tradable unit is calendar year 2013.

(d) Transfer of a trading unit can only occur during the calendar year they are allocated. A transaction that occurs each year over multiple years will take place by December 31 of each calendar year.

(e) A tradable unit does not constitute a property right.

(f) A transfer or deduction of a tradable unit to or from a mercury budget unit's account is incorporated automatically in its air operating permit.

(2) Responsibilities of Ecology as "Banker"

(a) The trading program banker is the Department of Ecology Air Quality Program.

(b) Ecology must notify EFSEC regarding the tradable unit transfer between EFSEC certificate holders and non-EFSEC certificate holders.

(c) Ecology shall notify the applicable permitting authority regarding tradable unit transfer between mercury budget sources under their jurisdiction.

(d) Recording mercury tradable unit allocation transfers.

(i) Within 5 calendar days of receipt of a notification, Ecology will notify each party in an allocation transfer that Ecology received the allocation transfer notification.

(ii) Ecology will take not process a request for a transfer until the Mercury Emission Tradable Unit Transfer Forms from both the seller and the buyer have been submitted.

(iii) Ecology will ensure that the seller has a tradable unit allocation that is equal to or greater than the amount of allocation to be transferred.

(iv) If Ecology finds that the seller does not have an adequate allocation in the bank to cover the quantity that is to be transferred, Ecology will deny the transfer.

(v) Within 30 calendar days of receipt of notification from both the buyer and seller, Ecology will record the tradable unit transfer for each party to the transfer.

(vi) The transfer will be recorded on the agency web site and the public notified.

(vii) The public site will include the quantity of tradable unit transferred and the names of both the seller and the buyer.

(e) Denied transfer request: Within 10 business day of receipt of a transfer request that does not meet the requirements of this section, Ecology must notify the mercury account representative of both accounts subject to the transfer of:
   (i) A decision not to record the transfer, and
   (ii) The reasons the request was denied.

(f) End of year mercury emission reconciliation.
   (i) Ecology will compare the amounts in the 4th quarter mercury emissions report submitted to EPA by each mercury budget unit under 40 CFR 75.84(f) to the tradable units in their account in tradable unit bank.
   (ii) Ecology will notify the mercury budget unit owner and the permitting authority of the results of the reconciliation within 30 calendar days of receiving the end of year report.

(g) Deductions for excess emissions.
   (i) As of January 1st of each year, if a mercury budget source has more mercury emissions than tradable units in its account for a given calendar year, Ecology must deduct tradable units in an amount equal to two times the number of ounces of the mercury budget unit's excess emissions as required in WAC 173-140(4).
   (ii) Ecology will record the deductions from the mercury budget source account in the agency's internet web site and notify the source of this action.
   (iii) The permitting authority may also enforce noncompliance with permit limitations.

(3) Responsibilities of the mercury budget source owner.
   (a) Ensure that as of midnight December 31 of each calendar year that the mercury budget source's actual emissions (in ounces per year) do not exceed the quantity of tradable units in the Ecology Tradable Unit Bank and as displayed at Ecology's public location.
   (b) Meet the applicable annual emission standard in WAC 173-406-110(1).
   (c) Comply with the recordkeeping, monitoring and reporting requirements in 40 CFR 60.4170 – 60.4176 and 40 CFR Part 75, Subpart I. Quarterly reports required under 40 CFR 75.84(f) to be sent to EPA must also be sent to Ecology and the permitting authority.
   (d) Submit the Mercury Emission Tradable Unit Transfer Form by the December 31st deadline. The form must include the following elements:
      (i) The Company name for both the seller and buyer;
      (ii) ORIS ID Number for both the seller and buyer;
      (iii) Mailing Address for both the seller and buyer;
      (iv) Location of each mercury budget unit and address, if different;
      (v) The serial number of each tradable unit that is in the transferor account and is to be transferred;
      (vi) The name and signature of the mercury authorized account representative of the seller's account and the date signed; and
      (vii) Price per ounce.

**Deleted:** [Ecology is asking for comment on whether to require the price be divulged.]

(4) Transfer of tradable units between mercury budget units.
   (a) Tradable units may be traded freely between mercury budget units located within the boundaries of the State of Washington.
   (b) Tradable units may be traded between mercury budget units permitted by Ecology, a permitting authority, or EFSEC.
   (c) Tradable units may be traded through the mercury designated representative or alternate consistent with the certificate of representation submitted under 40 CFR 60.4112.
   (d) A tradable unit transfer is not complete until Ecology has acknowledged receipt of both allocation transfer notifications as required in WAC 173-406-150(2)(d).

   (e) A tradable unit transfer must be correctly submitted prior to 5 p.m. P.S.T. on the last state working day of the calendar year.

   (f) Notify Ecology of any and all tradable unit transfers.
      (i) The seller must independently notify Ecology.
      (ii) The buyer must independently notify Ecology.
      (iii) Notification must be submitted using the form in Appendix A.
      (iv) The form may be submitted via US Post, courier, or electronically to a location determined by Ecology.
      (v) The transfer is not complete until both the buyer and the seller have submitted notification, and Ecology has acknowledged receipt.

(5) Banking
   Banking of any unused mercury allocation for use in another calendar year is not allowed.

**Deleted: ¶**
<#>Ecology may charge an hourly rate fee to manage the in-state trading program to cover the costs of logging and accounting for emission transactions. [Whether Ecology has authority to charge fees to recoup staff time for managing the bank is in question.]¶

## General Regulations for Air Pollution Sources, Chapter 173-400 WAC

WAC 173-400-112 **Requirements for new sources in nonattainment areas.**

(2) The permitting authority that is reviewing an application to establish a new source in a nonattainment area must issue the order of approval if it determines that the proposed project satisfies each of the following requirements:
…
(j) <u>If the proposed new stationary source or the proposed modification is subject to 40 CFR Part 60, Subpart Da, Standards Of Performance For Electric Utility Steam Generating Units For Which Construction Is Commenced After September 18, 1978, the source must include an evaluation of its ability to acquire an adequate mercury emission allocation under WAC 173-406-110 in order to operate at its intended operating mode as part of its application.</u>

WAC 173-400-113 **Requirements for new sources in attainment or unclassifiable areas.**
The permitting authority that is reviewing an application to establish a new source or modification in an attainment or unclassifiable area must issue an order of approval if it determines that the proposed project satisfies each of the following requirements:
…

(7) If the proposed new stationary source or the proposed modification is subject to 40 CFR Part 60, Subpart Da, Standards Of Performance For Electric Utility Steam Generating Units For Which Construction Is Commenced After September 18, 1978, the source must include an evaluation of its ability to acquire an adequate mercury emission allocation under WAC 173-406-110 in order to operate at its intended operating mode as part of its application.