# Clearinghouse Rule 13-089

## ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD AMENDING AND CREATING RULES

The statement of scope for this rule, SS 050-13, was approved by the Governor on May 1, 2013, published in Register No. 689, on May 14, 2013, and approved by the Natural Resources Board on June 26, 2013.

The Wisconsin Natural Resources Board proposes an order to **amend** NR 446.12 (1), 446.13 (1), 446.14 (1) (a), (b), and (c) 1., 446.17 (1) (intro.), and 446.185 (1) (b); and to **create** NR 446.17 (1) (Note) relating to the control of mercury emitted by coal-fired electric generating units.

## AM-19-13

## Analysis Prepared by the Department of Natural Resources

**1. Statutes interpreted:** Sections 227.11 (2) (a), 285.11 (9), *Wis. Stats.* 

**2. Statutory authority:** Sections 227.11 (2) (a), 285.11 (9), *Wis. Stats.* 

**3. Explanation of agency authority:** Wisconsin statute s. 227.11 (2) (a) authorizes the Department to promulgate rules interpreting the provisions of any statutes enforced or administered by it. Wisconsin statute s. 285.11 (9) authorizes the Department to prepare and adopt minimum standards for the control of mercury emissions.

**4. Related statutes or rules:** This proposed rulemaking affects control of mercury emissions as required under subchs. II and III of ch. NR 446, *Wis. Adm. Code*. These rules were established in 2008 under authority of s. 285.11 (9), *Wis. Stats.*, which in turn refers to requirements under s. 285.27 (2) (b), *Wis. Stats.* The latter statute allows promulgation of state emissions limitations for hazardous pollutants only if there is a finding that control of emissions is needed to protect human health and welfare. A health and welfare finding was made for the 2008 mercury rulemaking process.

Wisconsin statute s. 285.27 (2) (d) specifies that sources of hazardous air pollutants are exempt from state rule requirements when emissions are regulated by federal rules promulgated under section 112 of the Clean Air Act (CAA). This means that electric generating utilities (EGUs) will be exempt from requirements under subchs. II and III of ch. NR 446, *Wis. Adm. Code*, when their mercury emissions are regulated under the federal Mercury and Air Toxics Standards (MATS) and Industrial, Commercial and Institutional (ICI) Boiler rules.

**5. Plain language analysis:** Mercury emitted by coal-fired EGUs is regulated by the state under subchs. II and III of ch. NR 446, *Wis. Adm. Code.* This administrative code is commonly referred to as the "state mercury rule" with subchapter II referred to as phase 1 and subchapter III as phase 2. The action proposed in this Board Order will delay the initial compliance date for emission reductions required under phase 2 of the state mercury rule until April 16, 2016.

Under phase 2 of the original state mercury rule, 31 EGUs are required to achieve 90 percent control of mercury by January 1, 2015. Currently, these EGUs are subject to a 40 percent control requirement under phase 1 of the state mercury rule. Phase 2 of the state mercury rule will also require four smaller EGUs not affected under phase 1 to begin operating best available control technology (BACT) by January 1, 2015.

The same coal-fired EGUs subject to the state mercury rule will also be subject to mercury emission limits under one of two recently promulgated federal rules: the MATS rule or the ICI Boiler rule. EGUs subject to the MATS rule must demonstrate compliance by April 16, 2015. The EGUs subject to the ICI Boiler rule must demonstrate compliance by January 31, 2016. However, individual EGUs may request a one-year extension to any federal rule regulating hazardous air pollutant emissions as allowed under section 112 of the CAA.

Under the current schedule of compliance dates, EGUs will be subject to phase 2 of the state rule three and a half months before compliance is required under the MATS rule and thirteen months before compliance is required under the ICI Boiler rule. However, according to s. 285.27 (2) (d), *Wis. Stats.*, EGUs will be exempt from state mercury rule requirements when mercury emissions are regulated under the federal rules. Therefore, under the current compliance schedules, EGUs would comply with phase 2 of the state mercury rule for only a short period of time.

The Department has concluded that requiring compliance with phase 2 of the state mercury rule for a short period of time is not warranted for a number of reasons. First, state law directs that mercury emissions will be regulated in the long-term by any promulgated federal requirement. Second, the Department believes that meeting requirements of both the state and federal rules adds complexity, cost, and compliance burden for the affected EGUs. Lastly, with the federal rules becoming effective on April 16, 2015 and January 31, 2016, and the state rule no longer applicable after those dates, delaying the state mercury rule requirements will not result in higher levels of mercury emissions compared to implementing only the state rule.

Therefore, the Department is proposing to delay the compliance date for phase 2 of the state mercury rule from January 1, 2015 to April 16, 2016. The Department is proposing this date to accommodate individual EGUs subject to the MATS rule that may require a one-year extension. It is the Department's opinion that EGUs affected by the ICI Boiler rule will not request a one-year extension and therefore will not require the compliance date for phase 2 of the state mercury rule to be one year after the ICI Boiler rule's compliance date.

In summary, this rule change will achieve the following objectives:

- Allows EGUs to comply with only the federal rules and not phase 2 of the state mercury rule at this time, thus simplifying administrative requirements, compliance planning and installation of equipment which will avoid undue cost.
- Maintains the existing state mercury rule requirement for 40 percent mercury control, as provided under subch. II of ch. NR 446, *Wis. Adm. Code*, until the affected EGUs regulate mercury emissions in accordance with the federal standards.
- Maintains state mercury rule phase 2 emission standards, under subch. III of ch. NR 446, *Wis. Adm. Code*, in the event that the federal rules are delayed or rescinded. Maintaining the state mercury rule in a backup position will ensure that the state health and welfare finding requiring mercury control is fulfilled within a practical time-frame.
- Accommodates EGUs that may require a one-year extension to the MATS rule compliance date of April 16, 2015 as allowed under section 112 of the CAA. As stated above, it is the Department's opinion that EGUs will not require an extension for meeting requirements of the ICI Boiler rule. Therefore the compliance date in this rulemaking is only extended to April 16, 2016 in order to address a possible extension that may be requested by EGUs affected by the MATS rule.

Information and analysis supporting this rule change are provided in the report "Wisconsin's State Mercury Air Emission Rule". This report was presented to the Natural Resources Board on May 22, 2013. At that time, the Board approved the report's recommendation to extend the compliance date for meeting requirements under subch. III of ch. NR 446, *Wis. Adm. Code* to April 16, 2016.

**6.** Summary and comparison with existing and proposed federal regulations: As discussed in Item 5 of this Board Order, mercury emitted by 35 coal-fired boilers will be regulated under phase 2 of the state mercury rule beginning January 1, 2015. Mercury emission standards will apply to these same EGUs under either the federal MATS beginning on April 16, 2015 or the ICI Boiler rule beginning on January 31, 2016. The resulting control and mercury emission levels anticipated under either the state or federal rules are summarized in the following table. Emissions are presented through 2021 in order to show the effects of delayed implementation of mercury reductions under the state mercury rule multi-pollutant compliance option. A detailed comparison of the state and federal rules is presented in the report provided to the Natural Resources Board on May 22, 2013. The information in the table shows that the state and federal rules are expected to achieve comparable mercury emission reductions.

| Year | State Rule Compliance |                                  | Federal Rule Compliance |                                  |
|------|-----------------------|----------------------------------|-------------------------|----------------------------------|
|      | Percent Control       | Remaining Hg<br>Emissions (lbs.) | Percent Control         | Remaining Hg<br>Emissions (lbs.) |
| 2015 | 83 - 87%              | 550 - 743                        | 84 - 86%                | 584 - 663                        |
| 2016 | 83 - 87%              | 550 - 743                        | 87 – 89%                | 446 - 558                        |
| 2021 | 89 - 92%              | 345 - 449                        | 87 - 89%                | 446 - 558                        |

Note: Percent control is measured from the baseline uncontrolled emissions of 4,275 pounds per year as determined under s. NR 446.06, *Wis. Adm. Code.* The baseline uncontrolled emissions are the average of uncontrolled emissions for 2002, 2003, and 2004.

**7. Comparison of similar rules in adjacent states:** The federal MATS and ICI Boiler rules will affect EGUs in adjacent states in the same manner as EGUs in Wisconsin. Like Wisconsin, some of these states also have existing state mercury emission standards in place. These states are responding in a variety of ways, as summarized in the following table.

| State     | Existing<br>State Hg<br>Rule (Y/N) | Response to Federal MATS   |  |
|-----------|------------------------------------|--|--|
| Illinois  | Yes                                | Have not considered state response to federal MATS in detail.<br>Expect that sources will need to meet both state and federal regulations. |  |
| Michigan  | Yes                                | Revising the state rule to be consistent with MATS.  |  |
| Minnesota | Yes                                | Adopting federal MATS rule. Will also require compliance with more stringent state rule.   |  |
| Iowa      | No                                 | No action at this time. Waiting for EPA's response to reconsideration of the MATS rule.  |  |

**8. Summary of factual data and analytical methodologies:** The Department reviewed all applicable state statutes and administrative code. The Department determined that affected EGUs will be exempt from state mercury rule requirements when mercury emissions are regulated under federal rules. This exemption from state requirements is provided under s. 285.27 (2) (d), *Wis. Stats.* 

The Department evaluated mercury emission control levels and remaining emissions that are expected under full implementation of either the state mercury rule or the two federal rules. The Department determined that the current compliance date of the state mercury rule may result in undue compliance burden and cost even though mercury emissions, in the long-term, will be regulated under the current federal MATS and ICI Boiler rules. Therefore, the Department evaluated options to transition regulation of mercury emissions from under the state mercury rule to the federal rules in a manner consistent with the applicable statutes. The factual data and methodologies used to evaluate the state and federal mercury rule requirements are documented in the report presented to the Natural Resources Board on May 22, 2013 which can be accessed from the May 22, 2013 agenda on the Natural Resource Board's website.

**9.** Analysis and supporting documents used to determine effect on small business or in preparation of an economic impact analysis: One goal of the proposed rule change is to avoid undue regulatory cost. In accordance with s. 227.137, *Wis. Stats.*, the Department solicited information and advice from affected sources and stakeholders concerning the economic impacts of the proposed rule. The Department received comments from three affected utilities that supported the conclusion that the rule change will reduce compliance burden and cost. This information was considered in preparing the fiscal estimate and economic impact analysis.

**10. Effect on small business:** The proposed rule will only affect electric utilities generating electricity and will not affect small businesses.

## **11. Agency Contact:**

Tom Karman Regional Pollutants and Mobile Source Section Wisconsin Department of Natural Resources 608-264-8856 Thomas.Karman@Wisconsin.gov

**12.** Place where comments are to be submitted and deadline for submission. Written comments may be submitted at the public hearing, by regular mail, fax, or email to:

Tom Karman Bureau of Air Management Wisconsin Department of Natural Resources 101 South Webster Street Madison, WI 53707-7921 Fax: 608-267-0560 E-mail: Thomas.Karman@Wisconsin.gov

Written comments may also be submitted to the Department using the Wisconsin Administrative Rules Internet Website at <u>https://health.wisconsin.gov/admrules/public/Rmo?nRmoId=14923</u>. The deadline for submitting written comments is November 14, 2013.

A public hearing to allow for oral comment will be held on November 12, 2013 at 10:00 am, in the Natural Resource State Office Building, Room 713, 101 South Webster St., Madison, WI.

SECTION 1. NR 446.12 (1) is amended to read:

NR 446.12 (1) Beginning January 1, 2015 <u>April 16, 2016</u>, an owner or operator of a small coalfired EGU shall limit mercury emissions to a level that is determined by the department to be best available control technology.

#### SECTION 2. NR 446.13 (1) is amended to read:

NR 446.13 (1) Beginning January 1, 2015 <u>April 16, 2016</u>, an owner or operator of a large or a small coal-fired EGU designated by the department to meet the emission limitation in this subsection under s. NR 446.17 (2) (b) shall achieve a minimum of 90% mercury emission reduction as measured from the mercury content of fuel combusted or limit mercury emissions annually to 0.0080 pounds per gigawatt-hour (lbs/GWh) of electricity produced.

## SECTION 3. NR 446.14 (1) (a), (b), and (c) 1. are amended to read:

NR 446.14 (1) (a) For NO<sub>x</sub>, beginning January 1, 2015 <u>April 16, 2016</u>, 0.07 pounds per mmBtu of heat input.

(b) For SO<sub>2</sub>, beginning January 1, 2015 April 16, 2016, 0.10 pounds per mmBtu of heat input.

(c) 1. Beginning January 1, 2015 <u>April 16, 2016</u> and to December 31, 2017, a 70% mercury emission reduction as measured from the mercury content of fuel combusted or 0.0190 pounds per gigawatt-hour (lbs/GWh).

### SECTION 4. NR 446.17 (1) (intro.) is amended to read:

NR 446.17 (1) ANNUAL COMPLIANCE REPORT. (intro.) <u>By July 1, 2017, the owner or</u> operator of a coal-fired EGU subject to this subchapter shall prepare and submit a compliance report for the initial period of April 16, 2016 to April 15, 2017. <u>Beginning</u> On or before March 1, <del>2015</del> 2018, and on or before March 1 of every <u>calendar</u> year thereafter, the owner or operator of a coal-fired EGU subject to this subchapter shall prepare and submit a compliance report for the previous <u>calendar</u> year. The report shall include all of the following:

#### SECTION 5. NR 446.17 (1) (Note) is created to read:

NR 446.17 (Note) The compliance periods and compliance report due dates are specified in order to allow for 12 month emission averaging periods in complying with large EGU emission limitations, and in complying with small EGU emission limitation if appropriate. The initial compliance report due by July 1, 2017 will demonstrate compliance for the period of April 16, 2016 to April 15, 2017. The second

compliance report will be due on March 1, 2018 and will demonstrate compliance for the period of January 1, 2017 to December 31, 2017. All subsequent reports will be due on March 1 of each year and will demonstrate compliance for the previous calendar year.

## SECTION 6. NR 446.185 (1) (b) is amended to read:

NR 446.185 (1) (b) Baseline mercury emissions shall be determined and used for calculating annual allowable mercury emissions for 5-year periods beginning with the period of  $\frac{2015}{2016}$  to  $\frac{2019}{2020}$ . Baseline mercury emissions shall be determined every 5 years and used to calculate annual allowable mercury emissions for the subsequent 5-year period.

SECTION 7. EFFECTIVE DATE. This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22 (2) (intro.), Stats

SECTION 8. BOARD ADPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on \_\_\_\_\_\_.

Dated at Madison, Wisconsin \_\_\_\_\_\_.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Ву \_\_\_

Cathy Stepp, Secretary

(SEAL)