

Report From Agency

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

The Wisconsin Natural Resources Board adopts 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) and 285.27 (2) (b), Wis. Stats.
- 2. Statutory authority:** Sections 227.11 (2) (a) and 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. Wisconsin statute 285.27 (2) (b) requires that a finding be made that the control of mercury emissions is needed to protect human health and welfare before an emission limitation can be promulgated by the Department.
- 4. Related statutes or rules:** This proposed rulemaking affects state mercury emission control requirements for coal-fired EGUs 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. This statute in turn refers s. 285.27 (2) (b), which requires a finding that control of mercury emissions is needed to protect human health and welfare before an emission limitation can be promulgated by the Department. A health and welfare finding was made in accordance with s. 285.27 (2) (b), Wis. Stats., as part of the 2008 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 emission standards promulgated under section 112 of the Clean Air Act (CAA).

- 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”. Currently under the state mercury rule, coal-fired EGUs are currently subject to a 40 percent control requirement. Beginning on January 1, 2015, coal-fired EGUs will have to meet a second, more stringent state rule control requirement. The action proposed in this Board Order will extend the initial compliance date for this second control requirement from January 1, 2015 to April 16, 2016.

The same coal-fired EGUs subject to the state mercury rule will also be subject to mercury emission standards under one of two federal rules: the mercury and air toxics standards (MATS) rule or the industrial, commercial and institutional (ICI) boiler rule. EGUs subject to the MATS rule must demonstrate compliance by April 16, 2015 and those subject to the ICI boiler rule must demonstrate compliance beginning on January 31, 2016.

According to the current rule schedules, compliance with the second, more stringent state rule

requirement begins three and a half months before the MATS rule emission standards and thirteen months before the ICI boiler rule emission standards become applicable. This means that, pursuant to s. 285.27 (2) (d), Wis. Stats., EGUs will be subject to the second, more stringent state rule requirement for only a short period of time, from January 1, 2015 until compliance begins under each federal rule.

The Department has concluded that, with the federal rules in place, requiring EGUs to comply with the second, more stringent state mercury rule requirement for a short period is unnecessary and unwarranted for a number of reasons. First, as discussed, state law directs that Wisconsin EGUs will be exempt from state requirements and that their mercury emissions will be regulated, in the long-term, by the federal rules. Second, the Department believes that meeting both the second state rule requirement and the federal rule requirements within a short period of time will increase complexity, cost, and compliance burden for the affected EGUs. Lastly, allowing EGUs to meet a federal rule without the second state rule requirement becoming applicable does not result in any appreciable difference in emitted mercury compared to emission levels that would occur if the federal rules were not implemented and the state rules are fully implemented. This comparison of emission levels is presented in Item 6 of this analysis.

For these reasons, the Department is proposing to extend the compliance date for second state rule requirement from January 1, 2015 to April 16, 2016. In this way, EGUs will only become subject to the second state rule requirement if the federal rules are delayed past April 16, 2016. The Department is proposing this new compliance date to be one year after the federal MATS rule compliance date. Most EGUs will comply with the MATS rule on April 16, 2015, however, several EGUs have requested an extension to the MATS compliance date as allowed under the Clean Air Act. This extension is allowed in order to accommodate the installation of controls, retiring or repowering the EGU, or to ensure electric reliability. Such an extension may be granted for up to one year. Without allowing for the full period, EGUs receiving an extension to the federal requirements will still be subject to the second state rule requirement. This situation is not consistent with the intent of the proposed rule change and therefore the new compliance date of April 16, 2016 is proposed. For EGUs subject to the ICI boiler rule, the Department has no information suggesting that extensions beyond April 16, 2016 may be needed.

Information and a comparison of mercury emission levels 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 from January 1, 2015 to April 16, 2016 for the second, more stringent state rule mercury control requirement.

6. Summary and comparison with existing and proposed federal regulations: A detailed comparison of mercury emission levels that may result under the state and federal rule requirements was presented to the Natural Resources Board on May 22, 2013 in the report titled “Wisconsin’s State Mercury Air Emission Rule”. This comparison, summarized in the following table, showed that mercury emission levels resulting if the current state mercury rule were fully implemented (State Rule Compliance) is estimated to range from 550 to 743 pounds in 2015. In comparison, if EGUs continue to meet the state mercury rule 40 percent control requirement until the MATS and ICI boiler rule requirements become applicable (Federal Rule Compliance), the resulting mercury emissions are estimated to range from 584 to 663 pounds in 2015. In this latter case, EGUs are not subject to the second state mercury rule requirement as is being proposed by this rule change. Based on this analysis, there is no appreciable difference in emission levels in 2015 between a case where only the state rule applies and the case where EGUs transition directly from 40 percent control under the state rule to meeting the federal rule emission standards.

Emissions through 2021 are presented in the table in order to show mercury emission levels through full implementation of the rules. This information shows that the state and federal rules would be expected to achieve comparable mercury emission reductions over these timeframes.

Year	State Rule Compliance		Federal Rule Compliance	
	Percent Control	Remaining Hg Emissions (lbs.)	Percent Control	Remaining Hg 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 State Hg Rule (Y/N)	Response to Federal MATS
Illinois	Yes	Have not considered state response to federal MATS in detail. 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 emission standards. 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 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. Pursuant to 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:

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

NR 446.12 (1) Beginning ~~January 1, 2015~~ April 16, 2016, an owner or operator of a small coal-fired 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~~ April 16, 2016, 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_x, beginning ~~January 1, 2015~~ April 16, 2016, 0.07 pounds per mmBtu of heat input.

(b) For SO₂, beginning ~~January 1, 2015~~ April 16, 2016, 0.10 pounds per mmBtu of heat input.

(c) 1. Beginning ~~January 1, 2015~~ April 16, 2016 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.) ~~Beginning~~ By July 1, 2017, the owner or 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. On or before March 1, 2015 2018, and on or before March 1 of every calendar 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 calendar 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 ~~2015 2016~~ to ~~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 ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on January 22, 2014.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Cathy Stepp, Secretary

(SEAL)