



DNR Mercury Emissions Rule

A Tortured Five-Year Journey Comes to a Merciful End, Maybe

Bob Fassbender
The Hamilton Consulting Group

July 14, 2004

© 2004 *The Hamilton Consulting Group*

SYNOPSIS

On June 23, 2004, the Natural Resources Board approved revisions to DNR's controversial rule regulating mercury emissions from the largest utilities in the state. The revised rule was then submitted to the Senate Environment and Natural Resources Committee and the Assembly Natural Resources Committee for legislative review. Although these committees rejected the previous version of the rule that was adopted by the Board on June 25, 2003, they did not object to this compromise package by their July 13, 2004 deadline. With the completion of this legislative review, the projected effective date of the rule is Oct. 1, 2004.

Although the rule primarily targets emissions from the four largest utilities – WE Energies, Alliant Energy, Wisconsin Public Service Corp., and Dairyland Power – organizations that represent utility ratepayers such as Wisconsin Manufacturers & Commerce (WMC) had a keen interest in the rule. In addition to rate impacts, WMC and legislators also had an interest in assuring the revised rule was consistent with provisions in the Jobs Creation Act relating to DNR's authority to promulgate state mandates that are more costly than federal standards. (See Hamilton Consulting Group's [Jobs Act summary](#)) Ultimately, the affected utilities and WMC removed their opposition to the rule upon an agreement that the state rule would give way to the federal standard once promulgated.

The modifications to the June 2003 rule are discussed in [DNR Summary of June 23, 2004, Modifications](#) and [DNR's Background Memo to Board](#) (June 16, 2004). The [Final Rule](#) is also on DNR's web site. Key timelines and related mandates are as follows:

Oct. 1, 2004 (Projected Effective Date) – All new sources emitting 10 lbs/yr mercury subject to BACT.

Jan. 1, 2005 – Major stationary sources (industrial and smaller utilities emitting over 10lbs/yr) to begin calculating annual mercury emissions.

Mar. 15, 2005 – EPA's deadline for its final mercury rule.

Oct. 1, 2005 – Major utilities baseline report due DNR.

Sept. 15, 2006 – DNR's deadline for revising state rule to mirror EPA's final rule. (Assuming EPA finalizes its rule on Mar. 15, 2005)



The following requirements would be superseded by the new state rule that incorporates EPA's standard.

- Jan. 1, 2007 – DNR establishes major utilities baseline.
- Jan. 1, 2008 – Major utilities emissions capped at 2002-04 levels.
- Jan. 1, 2010 – Major utilities emission reduced by 40%.
- Jan. 1, 2015 – Major utilities emission reduced by 75%.

On their face, the provisions that require DNR to reconcile its rule with EPA's final rule leave little room for debate; but this directive necessarily requires additional rulemaking. Additional disputes over how much flexibility DNR has to impose state-only requirements could arise at that point. These currently unforeseen questions can only be answered once EPA finalizes its rule and DNR starts the next phase of mercury regulation in Wisconsin. So, we're at five years and counting to the final resolution of how Wisconsin will regulate mercury emissions.

I. BACKGROUND

DNR's effort to promulgate a mercury rule has a long history. The contentious nature of DNR's initiative resulted in a tortured five-year journey ending in a compromise that will ultimately require DNR to take an off-ramp to the federal mercury rule once that initiative is finalized. Along the way, the effort helped spawn various new legal hurdles to DNR's authority to impose regulatory mandates that exceed federal requirements. In the final analysis, this was one battle of attrition that cost DNR, particularly its Air Bureau, substantially more than it cost the regulated community.

The initiative was spearheaded in 1999 by then DNR Sec. George Meyer who continues to champion the cause as the head of the Wisconsin Wildlife Federation. From the start, DNR and environmental groups successfully leveraged escalating mercury [fish advisories](#) to garner support for mercury reduction mandates among conservation and fishing groups, resulting in broad public backing for the initiative. Industry countered that a state rule would make Wisconsin a regulatory island, impose a \$1 billion burden on state electric ratepayers, and add a substantial cost of doing business in Wisconsin not imposed on industries in other states. The rule eventually made its way to the Legislature in late 2003, just as the state's elected officials were attempting to pass regulatory reform to help the state's ailing manufacturing sector.

DNR Launches Initiative with Mercury White Paper

In 1999, DNR convened a Mercury Stakeholders Group. There was little consensus from the group, but DNR nevertheless published its [Mercury White Paper](#) in August 1999 that called for a mercury cap, trading, banking and offset program that would achieve a 20 percent reduction in air emissions by 2005, a 35 percent reduction by 2010 and a 50 percent reduction by 2015. DNR also proposed a statewide Total Maximum Daily Load for atmospheric deposition of mercury to Wisconsin water bodies. While the report had no immediate regulatory effect, it served as a launching point for future efforts.

Board Grants Environmental Group's Petition for Mercury Rules

On May 18, 2000, environmental, fishing and conservation groups filed a [petition](#) with the Natural Resources Board requesting a rule to create "a comprehensive program in the DNR for addressing mercury in the environment." The petition called for 90 percent reductions by 2015 (later amended to 2010) from utilities and other sources; interim reductions of at least 25 percent by 2006; and, a cap on 1999 emissions levels from all existing sources. Given the legal requirement to act on the petition (reject or accept), the stage was set for DNR's rulemaking effort.



At the Dec. 6, 2000 meeting of the Natural Resources Board, [DNR staff recommended](#) that the Board grant the petition and direct staff to develop proposed mercury rules. After public testimony, the Board approved DNR's recommendations by unanimous vote. DNR's related [press release](#) touted what they called "a historic move expected to influence national policy." (This dubious rationale behind the rule – to influence national policy – remains a point of contention with the regulated community.)

Draft Rule calls for 90 Percent Reductions

On June 6, 2001, DNR released its [draft mercury rule](#). The mercury reductions proposed for "major utilities" (those emitting mercury at 100 lbs/year system-wide) were 30 percent (Year 5), 50 percent (Year 10), and 90 percent (Year 15). Mercury emission caps would be set for other sources. (See [DNR mercury rule fact sheet](#) and [DNR Background Memo to Board](#), June 5, 2001.) The Natural Resources Board authorized the draft rule for hearings at its June 2001 meeting.

Five public hearings were held during September and October 2001. Public comments received at the hearings and during the comment period were extensive. DNR also held state-wide informational meetings in the fall of 2001. In addition, to stem criticism over the lack of input on the draft rule from the regulated industries, DNR formed two advisory committees to help further develop the draft rule – one to focus on technical issues ([Technical Advisory Group](#)), the other to address policy issues ([Citizen Advisory Committee](#)). Despite numerous meetings, the Citizen Advisory Committee, much like the 1999 Mercury Stakeholders Group, failed to reach any consensus. (See [Mercury Citizen Advisory Committee Final Report](#), September 23, 2002.) The effect, however, was to further delay the rule for another year.

"Final" Rule Derailed as it Undergoes Legislative Scrutiny

In June 2003, DNR staff presented its [revised "final" mercury rule](#) to the Natural Resources Board for adoption. They outlined their revisions in a [May 21, 2003 memo](#) to the Board. The revised reduction schedule for major electric utilities was an initial reduction of 40 percent by Jan. 1, 2010, with a final 80 percent reduction by Jan. 1, 2015. Another significant change eliminated the cap on sources emitting more than 10 pounds of mercury per year. These changes did little to stem the opposition by the utilities and certain ratepayer groups such as WMC. (See [WMC](#) position.) Regardless, the Board approved the final rule, triggering the legislative review process.

On Aug. 13, 2003, the Senate Committee on Environment and Natural Resources and Assembly Committee on Natural Resources held a joint hearing on the rule. The all day hearing included testimony from numerous utility, business and environmental organizations. Industry comments focused on two requested changes. They asked the committees to request DNR modify the rule to provide an exemption for sources subject to pending federal mercury emission limitations. In addition, they requested that the second, 80 percent reduction mandate be dropped and replaced with an evaluation on whether further reductions are warranted. (See [WMC](#) and [Wisconsin Utility Association](#) testimony.)

Later that month, both committees voted to send DNR's mercury rule back to the Department. Committee chairs [expressed concerns](#) that targeting only four in-state utilities was not the best solution to the state's mercury problems in light of significant contributions from out-of-state sources. The committees [requested](#) "unspecified" modifications, which in effect indefinitely stays legislative review deadlines until DNR resubmits the rule. The ball was now back in DNR's court.

Mercury Hiatus as Legislature Advances Regulatory Reform

As Wisconsin continued to struggle with its manufacturing recession during the fall of 2003, the Legislature and the governor were single minded in their focus on economic development and improving Wisconsin's business climate. The linchpin piece of regulatory reform legislation that preoccupied them was the *Jobs Creation Act of 2003*, which was ultimately signed into law by Gov. Doyle on Jan. 22, 2004 as [2003 Wis. Act 118](#). (See Hamilton Consulting Group [Jobs Act Summary](#).) During the development of this legislation, including extensive negotiations involving parties to the



mercury debate, DNR's mercury rule was placed on the back burner. But the rule created a major undercurrent that had a significant effect on the final regulatory reform bill.

Rather than asserting that Wisconsin should mirror the federal air toxics program, industry successfully argued that the Legislature should provide more direction on the factors DNR should consider when expanding its program beyond the federal code. In one of the more significant policy changes under the Act, DNR must now provide compelling proof that the state standard is needed in the form of public health risk assessment, a test DNR would be hard pressed to pass for the mercury rule. However, the Administration successfully advanced a provision in the Act assuring that the health risk assessment provisions were prospective only, and not applicable to the pending mercury rule.

Compromise Relates to How and When DNR Promulgates Rule Comparable to EPA's

With the passage of the Jobs Creation Act and the completion of the 2003-04 Legislative Session in March of 2004, interested parties once again turned to the mercury rule. The Doyle Administration made it clear that a state mercury rule would be resubmitted for final legislative action. DNR set its deadline as the June 23, 2004 Natural Resources Board meeting. And on May 28, 2004, committee chairs Rep. Johnsrud and Sen. Kedzie provided DNR a [request for specific changes](#) to the rule.

The legislator's position now mirrored prior industry positions on the need for an off-ramp for sources subject to the EPA rule and the elimination of the 80 percent reduction requirement. However, DNR's initial draft changes included moving the 80 percent reduction target to 75 percent, with no other meaningful changes proposed. Reconciling the state and federal mercury rules, the key issue to committee chairs Johnsrud and Kedzie, as well as the utilities and WMC, was relegated to a note in the rule that stated at some undefined time DNR would adopt a similar standard. This last sticking point was finally addressed through more precise rule provisions, discussed below, that require DNR to adopt a comparable standard no later than 18 months after the promulgation of a federal emission standard.

The Rule's Collision with State Energy Policy Leads to New Law

One important aside of the mercury debate in Wisconsin relates to state energy policies and DNR's perceived attempt to dictate fuel mix (natural gas over coal) with their 90 percent reduction proposal. The Public Service Commission (PSC) opened a docket (05-EI-130) to investigate the "Potential Impact on the State's Generation Supply Portfolio Due to Pending Wisconsin Department of Natural Resources Mercury Emissions Rules." At a Sept. 21, 2001 meeting, all three Commissioners voted to send a "strong and firm" letter to the DNR stating their concerns over the DNR's proposed mercury rules. The PSC also received numerous comments by interested parties concerned over the rate implication of the DNR proposal.

In addition, on June 20, 2001, then Governor Scott McCallum released his State of Wisconsin 2001 Energy Policy. The policy document included a series of specific recommendations, including a directive that DNR, Wisconsin Public Service Commission (PSC), and the Department of Administration (DOA) jointly study the effects of proposed mercury regulations on the existing coal-produced electric generation capacity. From a broader perspective, the governor also recommended that the PSC assess proposed state agency rules to determine their impact on the state's energy policies. If the impact is significant, the PSC was to prepare and provide an energy impact statement to the proposing agency. This recommendation was contained in the governor's budget in the form of a statutory directive that ultimately failed. However, subsequent legislation during the 2003-04 Legislative Session was passed and signed into law.

[2003 Wis. Act 277](#) (SB 113) became effective on May 1, 2004, and requires PSC to conduct an energy impact report on a rule upon the request of certain legislators. The report shall include an evaluation and related findings and conclusions on the probable impact of the proposed rule on the cost or reliability of electricity generation, transmission, or distribution of fuels used in generating electricity. As with many provisions in the Jobs Creation Act, the basic premise of Act 277 was supported by industry as a response to DNR's mercury initiative. While the Act 277 provisions relating



to energy impact reports are inapplicable to the current mercury proposal, any future excursions by DNR into the state's energy policy arena could well trigger a formal energy impact report by the PSC.

II. RELATION TO FEDERAL MERCURY RULES

As noted above, the critical modification to the June 2003 rule that was adopted by the Board on June 23, 2004 relates to how DNR intends to reconcile its rule with the pending EPA mercury rule. These provisions reflect statutory parameters DNR must follow once a federal standard is established. The statutes also have limitations on DNR's authority to promulgate hazardous air contaminant standards in the absence of a corresponding federal standard. The Jobs Creation Act (Wis. Act 118) has substantially modified the relevant provisions affecting DNR's authority to promulgate a state standard.

New Rule Provisions Requiring Adoption of EPA Requirements

The basis of the compromise on the rule arose out of DNR and the Administration's agreement that DNR would modify its rule to implement the federal rule. The final issue to be resolved was the timing of the state rule implementing the federal rule. The problem was that a delay in the effective date of this follow-up state rule could result in temporary, but still important legal requirements that may be more restrictive or otherwise inconsistent with the federal rule. The agreed upon language sets forth an 18-month deadline for promulgation that can be met by either regular rulemaking (227.10, Wis. Stat.) or by emergency rule (227.24, Wis. Stat.). These key provisions state:

Adoption of federal mercury standard. If a federal emission standard limiting mercury emissions from a major utility is promulgated under section 111 or 112 of the federal clean air act, the department shall adopt a similar standard, including administrative requirements that are consistent with the federal administrative requirements. The standard adopted by the department may not be more restrictive in terms of emission limitations than the federal standard. ***The administrative requirements of the standard adopted by the department relating to baseline calculations, monitoring, recordkeeping and reporting shall be the same as the federal standard.*** No later than 18 months after the promulgation of a federal emission standard limiting mercury emissions from a major utility, the department shall revise this subchapter under the provisions of s. 227.10 [regular rulemaking] or 227.24 [emergency rulemaking], Stats., as appropriate, to comply with the provisions of this section and s. NR 446.06(4). NR 446.029. (Emphasis ours)

Pursuant to s. 285.27 (1)(a) and (2)(a), Wis. Stats., if an emission standard regulating mercury emissions from a major utility is promulgated under section 111 or 112 of the federal clean air act, the department shall promulgate a similar standard, including administrative requirements that are consistent with the federal administrative requirements. ***The department's standard shall have the same mercury emission reductions as the federal standard.*** NR 446.06(4). (Emphasis ours)

There may be some ambiguities relating to the above language that give rise to disputes in the future, but on their face, the provisions appear clear that DNR's rule must have the same mercury emission reduction levels as well as the same administrative requirements relating to baseline calculations, monitoring, record keeping and reporting. If a federal mercury program is promulgated by the court-ordered Mar. 15, 2005 deadline, or any time over the next several years, this exit to the federal requirements should occur well before the initial state reduction mandates kick in. Because of the need for timely conversion to the federal rule, it is expected that industry will urge DNR promulgate its replacement rule under the statutes' emergency rulemaking procedures.



Requirement for Similar, No More Restrictive State Standards

As noted in the above rule provision, the off-ramp to the federal standard is consistent with §§ 285.27 (1)(a) and (2)(a), Wis. Stats. Act 118 tightened these requirements with the following provision:

SECTION 186. 285.27 (1) (a) of the statutes is **amended** to read:

285.27 (1) (a) *Similar to federal standard.* If a standard of performance for new stationary sources is promulgated under section 111 of the federal clean air act, the department shall promulgate by rule a *similar* emission standard, including administrative requirements that are consistent with the federal administrative requirements, but this standard *may not be more restrictive in terms of emission limitations* than the federal standard except as provided under sub. (4).

SECTION 187. 285.27 (2) (a) of the statutes is **amended** to read:

285.27 (2) (a) *Similar to federal standard.* If an emission standard for a hazardous air contaminant is promulgated under section 112 of the federal clean air act, the department shall promulgate by rule a *similar* standard, including administrative requirements that are consistent with the federal administrative requirements, but this standard *may not be more restrictive in terms of emission limitations* than the federal standard except as provided under sub. (4).

So whatever direction EPA goes, section 111 or 112, DNR must promulgate standards that are similar, no more restrictive and that have consistent administrative requirements, regardless of the provisions in the rule. What the rule provides is certainty this will occur, and when, which was important to industry in light of prior disputes with DNR over the meaning of the statutory provisions. For example, at one point, DNR asserted that it would seek an EPA “equivalency” determination for the state rule. Under Clean Air Act section 112(l), EPA may approve state rules or programs in place of certain otherwise applicable section 112 federal rules. These substitute alternative requirements take the form of permit terms and conditions instead of source category regulations. DNR’s position in the past appears to have been that upon such a determination, the state program becomes similar and no more restrictive than the federal standard. While industry would have argued that equivalency and similar, no more restrictive are entirely different standards, the rule provision assures such debate does not occur.

Thus, the agreement reached between industry and DNR arose out the above statutory requirements, with additional clarifications on possible ambiguities. In another example, the requirement for “consistent” administrative requirements poses certain questions over what is deemed consistent. Under the new provision in the rule, consistency, at least with respect to baseline calculations, monitoring, recordkeeping and reporting, means “the same as the federal standard.” In addition, the new provisions that “[t]he department’s standard shall have the same mercury emission reductions as the federal standard” recognizes that adding the state requirement for no more restrictive limitations to the federal law requirement that the state be no less restrictive leaves only one possible outcome; the emission limitations must be “the same.”

New Provisions Relating to DNR’s Authority when No Federal Standard Exists

Since the mercury draft rule was submitted to the legislative council prior to the effective date of the Act 118, the new health risk assessment requirements in Act 118 discussed below do not apply to this mercury rule. DNR must only meet the prior requirement to find the standard is needed to protect public health. In that regard, Wisconsin’s courts have held this is a low threshold (which is the reason industry pushed hard that future findings be supported by the health risk assessment and the other documentation created by Act 118).

It is instructive, however, to note the key provisions in Act 118 relating to DNR’s authority in the absence of EPA standards:



Act 118 SECTION 188. 285.27 (2) (b) of the statutes is renumbered 285.27 (2) (b) (intro.) and **amended** to read:

285.27 (2) (b) *Standard to protect public health or welfare.* (intro.) If an emission standard for a hazardous air contaminant is not promulgated under section 112 of the federal clean air act, the department may promulgate an emission standard for the hazardous air contaminant if the department finds the standard is needed to provide adequate protection for public health or welfare. The department may not make this finding for a hazardous air contaminant unless the finding is supported with written documentation that includes all of the following:

Act 118 SECTION 189. 285.27 (2) (b) 1. to 4. of the statutes are **created** to read:

1. A public health risk assessment that characterizes the types of stationary sources in this state that are known to emit the hazardous air contaminant and the population groups that are potentially at risk from the emissions.
2. An analysis showing that members of population groups are subjected to levels of the hazardous air contaminant that are above recognized environmental health standards or will be subjected to those levels if the department fails to promulgate the proposed emission standard for the hazardous air contaminant.
3. An evaluation of options for managing the risks caused by the hazardous air contaminant considering risks, costs, economic impacts, feasibility, energy, safety, and other relevant factors, and a finding that the chosen compliance alternative reduces risks in the most cost-effective manner practicable.
4. A comparison of the emission standards for hazardous air contaminants in this state to hazardous air contaminant standards in Illinois, Indiana, Michigan, Minnesota, and Ohio.

The above provisions were a key focus for industry for Act 118 in response to DNR's continued revision of its air toxics program adding new, nonfederal substances to the state rule (e.g., DNR's latest revision adds over 100 new nonfederal substances), as well as concerns over the DNR mercury initiative. With respect to mercury, DNR would have had a high hurdle in showing that Wisconsin mercury emissions are above recognized health standards.

Status of EPA's Rule

Wisconsin utilities and other interest groups are closely monitoring EPA's efforts to promulgate a federal mercury standard given Wisconsin statutory and regulatory directives that DNR promulgate a comparable state rule. Similar to Wisconsin's efforts, EPA's road to a final mercury rule has and continues to travel a torturous path. The current target, reflected in a legal settlement agreement with environmental groups, is for the final rule to be promulgated by Mar. 15, 2005. Should EPA hit that target, DNR must have a final rule in place by Sept. 15, 2006, under the provisions in the state rule.

In the [Jan. 30, 2004 Federal Register](#) (102 pages, PDF), EPA proposed the Utility Mercury Reductions Rule for controlling mercury emissions from power plants. (See EPA's [Fact Sheet on Mercury Proposal](#)) In the [Mar. 16, 2004 Federal Register](#) (76 pages, PDF), EPA published a supplemental proposal addressing areas not covered in the Jan. 30 notice. (See EPA's [Fact Sheet on Mercury Supplement](#)) On April 29, 2004, EPA extended the public comment period for the proposed rule by 60 days, to end June 29, 2004.

In a separate but closely related action, EPA proposed the [Interstate Air Quality Rule](#), which focuses on states whose SO₂ and NO_x emissions that EPA believes are significantly contributing to fine particle and ozone pollution problems in other downwind states. (While EPA found that "there are no adequately demonstrated control technologies specifically designed to reduce mercury emissions from coal-fired utilities," they did conclude that "there is available data that indicate controls for reducing emissions of SO₂ and NO_x also are effective, in some cases, at reducing mercury emissions from coal-fired utilities.")



The debate, fueled by partisan presidential politics, continues to rage at the federal level over how fast and far the mercury mandates should go. (See the *Wall Street Journal's* views of the [The Mercury Scare Debate](#).) Wisconsin DNR put forth their views on EPA's proposal in an [April 28, 2004 letter](#) to EPA, followed by a [June 29, 2004 letter](#) touting its newly adopted mercury rule. These comments reflect DNR's position that EPA's proposal is inadequate, and their prior position that the Wisconsin's rule must be more stringent. Unfortunately for DNR, but fortunately for Wisconsin rate-payers, the Legislature was quite clear that Wisconsin will track the federal program.

DNR's comments also reflect areas of disagreements with EPA's approach that may give rise to disputes just how DNR would implement the federal rule through a revised state standard. We expect that DNR will argue that some of the state rule provisions noted below may remain in the new state rule intended to implement the federal standard (e.g., BACT for new sources not covered by EPA's rule). Conversely, we expect that industry will argue that the follow-up state rule should have no provisions that add regulatory costs not incurred by industry in other states. In the final analysis, the Legislature holds the ultimate trump card in this debate; they can merely suspend the current rule until a new rule satisfies their directive that DNR not impose costs on Wisconsin utilities, industry and ratepayers not imposed in other states.

III. MAJOR PROVISIONS

Current and historical documents relating to the development of DNR's mercury rule can be located on DNR's [Mercury Regulation Development](#) web page. The key documents are:

- [June 2004 Final Rule Language](#)
- [DNR Summary of June 23, 2004, Modifications](#)
- [DNR's Background Memo to Board](#) (June 16, 2004)

The important timelines and related requirements are as follows:

- Oct. 1, 2004 (Projected Effective Date) – All new sources emitting 10 lbs/yr mercury subject to BACT.
- Jan. 1, 2005 – Major stationary sources (industrial and smaller utilities emitting over 10lbs/yr) to begin calculating annual mercury emissions.
- Mar. 15, 2005 – EPA's deadline for its final mercury rule.
- Oct. 1, 2005 – Major utilities baseline report due DNR.
- Sept. 15, 2006 – DNR's deadline for revising state rule to mirror EPA's final rule. (Assuming EPA finalizes its rule on Mar. 15, 2005)

The following requirements would be superseded by the new state rule that incorporates EPA's standard.

- Jan. 1, 2007 – DNR establishes major utilities baseline.
- Oct. 1, 2007 – Major utilities 40% emission reduction compliance plans
- Jan. 1, 2008 – Major utilities emissions capped at 2002-04 levels.
- Jan. 1, 2010 – Major utilities emission reduced by 40%.
- Oct. 1, 2011 – Major utilities 75% emission reduction compliance plans
- Jan. 1, 2015 – Major utilities emission reduced by 75%.
- Jan. 1, 2018 – Major utilities emission reduction goal of 80%

Ambient Air Concentrations (NR 446.025)

The rule left unaffected the existing ambient concentration limit, which prohibits any "person" to emit quantity and durations of mercury as to cause the ambient air concentration to exceed 1 u/m³.



Major Utilities – Defined (NR 446.02(6m))

The final rule applies to “major utilities,” which are defined as an investor-owned public utility that generates electricity or an electrical cooperative association that emits 100 pounds of mercury *system-wide* (all of its facilities in Wisconsin) for each of the baseline years (2002-04). Four Wisconsin utilities meet that criterion – WE Energies, Alliant Energy, Wisconsin Public Service Corp., and Dairyland Power.

Major Utilities – Reduction Levels and Emissions Cap (NR 446.055, NR 446.06)

The reduction levels for major utilities in the 2001 draft rule were 30 percent (5 years after effective date), 50 percent (10 years), and 90 percent (15 years). The June 2003 revisions to the rule moved to two-phased reductions at set dates; an initial reduction of 40 percent by Jan. 1, 2010, and a final reduction of 80 percent by Jan. 1, 2015. DNR provided an analysis that they claimed supported this mercury emission reduction schedule and levels. (See [An Assessment of Major Utility Mercury Air Emission Control and Costs](#)). The June 2004 final rule again changed the final, 2015 reduction requirement from 80 percent to 75 percent, and included language setting a goal of reducing mercury emissions from major utilities by 80 percent by 2018.

In addition to meeting reduction targets, major utilities emissions are capped beginning on Jan. 1, 2008. This cap is calculated by applying control efficiencies to baseline mercury emissions. Control efficiencies are determined using source performance tests on each unit that must be conducted by Oct. 1, 2005.

The final requirements are:

- Jan. 1, 2008 – Cap on emissions at 2002-04 levels
- Jan. 1, 2010 – 40% emission reduction mandate
- Jan. 1, 2015 – 75% emission reduction mandate
- Jan. 1, 2018 – 80% emission reduction goal

The final rule also provides an exemption from the mercury cap and reduction requirements for units at major utilities that are less than 25 MW. Utilities may elect to use reductions at these smaller units to meet their overall reduction targets. (DNR notes that this option would apply to Dairyland Power Alma Units 1, 2, & 3 and WE Energies County Units 1, 2, & 3.) In addition, emission from a facility may be exempt from the 40/75 percent reduction requirements (not the cap) if emissions from all stationary sources of 25 MW or greater are 25 pounds or less.

Major Utilities – Baselines Calculations (NR 446.03, NR 446.04)

The final rule sets the default emission baseline years for major utilities at 2002, 2003 and 2004. Alternative baseline years can be used if DNR determines 2002-04 are not representative of the source’s “normal operations and maintenance schedule.” The utilities must submit their baseline calculations to DNR by Oct. 1, 2005, with DNR providing notice of its baseline determination to the utilities by Jan. 1, 2007.

The final rule significantly changed the baseline determination approach contained in the initial proposal. Generally, the utilities must take weekly samples of coal that are compiled into a monthly sample, which in turn is analyzed for mercury content. Using a 12-month sampling period, the mercury content for the fuel is determined in accordance with specified methodologies. The baseline is set multiplying this content times the fuel consumption over the baseline years (2002-04). In essence, using fuel content provides credit for any reductions in baseline years due to existing pollution controls. DNR estimated that 15-20 percent of the mercury from coal combustion is currently being captured. Based on this estimate, DNR calculates that to meet the initial mercury reduction of 40 percent, the utilities, on average, need to achieve an additional 20-25 percent mercury reduction by Jan. 1, 2010. Similarly, the final 75 percent reduction requirement would entail an additional 55-60 percent reduction by Jan. 1, 2015.



Major Utilities – Compliance Alternatives (NR 446.07, NR 446.075)

Major utilities may average their mercury emissions across their entire system to demonstrate compliance. Also, major utilities may enter into agreements with each other to trade excess reductions to meet the proposed mercury reduction requirements. Provisions in the draft rule that would have allowed the use of “certified emission reduction credits” generated through a *pollution reduction project* or *mercury-containing products reduction projects* were removed in the final rule.

Various compliance and reporting requirements relate to the emission reduction mandates. (NR 446.08) Several years before the 40/75 percent reduction deadlines (Oct. 1, 2007 and Oct. 1, 2011), utilities must submit compliance plans demonstrating how they will meet the mandates. Beginning on Mar. 1, 2009, the utilities must submit annual compliance certification reports to DNR. Also due on Mar. 1, beginning in 2008, the utilities must submit annual mercury emissions reports for each emissions unit. (NR 446.09) Performance testing of combustion units is also required on a prescribed schedule.

In addition to the trading option, the final rule allows a major utility to create emission reduction credits for actions taken after the effective date of the rule. (NR 446.075) The reductions must be actual, permanent and not legally required by federal/state rule or permit. These credits can be used to meet the utility’s reduction requirements, but can not be traded to another major utility. All unused credits would expire at the end of 2017.

A multi-pollutant reduction option was also included in the final rule. (NR 446.07) Under this option, major utilities may obtain relief from the initial reduction requirement of 40 percent upon DNR’s approval of a multi-pollutant reduction proposal. Those using this alternative may not trade excess reductions relating to the 40 percent target. The rule references Environmental Cooperative Agreements (such as that signed by DNR and WEPCO on Sept. 30, 2002) as a potential basis for a multi-pollutant reduction alternative.

Major Utilities – Variances and Waivers (NR 446.10, NR 446.11)

Utilities can apply for a variance to the reduction mandates (not the cap) upon a demonstration the reductions are technologically or economically infeasible or additional time is needed to complete installation and place into operation control technology. (NR 446.10)

Waivers (NR 446.11) to the cap and the reduction requirements are allowed if DNR, in consultation with the Public Service Commission (PSC), finds one of the following conditions are met:

- A major electrical supply emergency within or outside Wisconsin affects the utility.
- A major fuel supply disruption affects the utility.
- An unanticipated and unavoidable disruption in the operation of a fossil fuel unit at the utility.

Major Stationary Sources – Emission Limits

DNR initially proposed a cap on “major stationary sources,” which are defined as any stationary source that emits 10 pounds or more in each of the baseline years. (NR 446.02 (6e)) DNR estimated that 19 industrial and smaller utilities would have had their emissions capped at baseline levels. These provisions have been eliminated in the final rule. In return, DNR requested industry representatives consider instituting voluntary programs to reduce mercury emissions (e.g., energy efficiency measures).

Major Stationary Sources – Emission Calculations (NR 446.027)

While a major stationary source no longer has a cap or other emission limitation, the rule requires that beginning on Jan. 1, 2005, owners or operators of these sources calculate annual mercury emissions using specified procedures. Emissions from combustion sources are determined by subtracting the mass mercury removed by pollution control equipment from the mass mercury in the fuel. Separate procedures are specified for process units such as chlor-alkali plants.



New Source Requirements – BACT (NR 446.05)

One of the more severe aspects of the initial rule proposal was the construction/modification ban on any new mercury sources over 10 pounds per year unless emissions from the new or modified source are offset at a ratio of 1.5 to 1.0. The final rule replaced this offset provision with a requirement that new or modified sources that emit 10 or more pounds of mercury install best available control technology (BACT). New projects subject to the federal mercury standard promulgated under s. 112 of the Clean Air Act would be exempt from this requirement.

Rule Evaluation Reports (NR 446.12)

By Jan. 1, 2006, 2009, and 2013, DNR will submit a report to the Natural Resources Board and the Legislature that includes an evaluation of the scientific and technology developments relating to controlling mercury emissions, including an assessment and related recommendations on whether the cap and reductions are achievable given these developments. DNR will also include an assessment of the impact of its trading and banking alternatives on locally affected water bodies.

Within six months of the promulgation of an EPA mercury rule or enactment of a federal law targeting mercury reductions (e.g., Clear Skies), DNR will submit a report to the Natural Resources Board and the Legislature that compares the state and federal requirements and makes related recommendations. Industry argued that this so-called “reconciliation report” was insufficient to assure the state adopted a similar, no more restrictive standard. The new provisions in the final rule relating to an off-ramp to the federal requirements, noted above, make this report somewhat superfluous.