

Comments and DNR Responses Natural Resources Board Order AM-05-21

August 9, 2023

This document presents a summary of public comments received on proposed rules affecting chapters NR 400, 428, and 484, Wis. Adm. Code, related to revisions to nitrogen compound emissions regulations.

OVERVIEW

Rule Objective

Nitrogen oxides (NO_x) react with volatile organic compounds in the presence of sunlight to form ground-level ozone, a pollutant regulated under the federal Clean Air Act (CAA) due to its adverse impacts on human health and the environment. Emissions sources of NO_x located in areas with high levels of ozone are subject to more stringent controls under the CAA. Chapter NR 428, Wis. Adm. Code, regulates the emissions of NO_x from certain stationary sources located in certain areas with a history of high ozone, including the counties of Kenosha, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha. Since the rule chapter was last revised in 2007, the department has identified several implementation issues associated with ch. NR 428, Wis. Adm. Code, and is proposing revisions to ensure clear and consistent implementation of this rule.

Public Outreach/Input Opportunities

Informational Meeting – An informational meeting was held on May 31, 2022, to describe the ch. NR 428, Wis. Adm. Code, revisions the department was considering and gather input from stakeholders. The informational session was held in Milwaukee, WI, and over Zoom and was attended by 23 members of the public.

Economic Impact Analysis - A public comment period on the draft economic impact analysis (EIA) was held from February 20, 2023, to March 13, 2023. The department notified the following entities of the opportunity to comment at the beginning of the solicitation period: facilities that may potentially be affected by the proposed revisions, the Small Business Environmental Council, the American Council of Engineering Companies of Wisconsin, the League of Wisconsin Municipalities, the Wisconsin Counties Associations, Wisconsin Manufacturers and Commerce, the Wisconsin Paper Council, and Clean Wisconsin. The Air Management Advisory Group, which includes stakeholders representing academia, utilities, and large and small businesses, was also notified of the opportunity to comment. The department did not receive any comments on the EIA.

Small Business Environmental Council Meeting – The department attended a meeting of the Small Business Environmental Council on May 19, 2023, to provide information on the proposed rule changes under Board Order AM-05-21. The Small Business Environmental Council did not provide any comments.

Public Hearing and Comment - A public comment period on the draft rule occurred from May 2, 2023, to June 7, 2023, and a virtual public hearing was held on May 31, 2023. The department notified the group of stakeholders identified under the EIA section of the opportunity to comment on the proposed rule. Three members of the public attended the hearing on the draft rule; none of the attendees provided verbal comments. One of the attendees registered in support of the proposed rule. The two other attendees did not register a position, either in support of or against the proposed rule. The department received written comments from WEC Energy Group in support of the rule and from Sierra Club in opposition to the rule.

The U.S. Environmental Protection Agency (EPA) provided the department suggested changes to the draft rule language, which the department is documenting here.

LEGISLATIVE COUNCIL RULES CLEARINGHOUSE (23-017)

The Legislative Council Rules Clearinghouse submitted comments on form, style and placement; adequacy of references; and clarity, grammar and punctuation. Changes to the proposed rule were made to address all recommendations by the Legislative Council Rules Clearinghouse, except for those discussed below.

1. *Comment 2.c.(1) recommends that the sub. (2) Alternative Criteria language under s. NR 428.055 be added as a subunit of sub. (1) Alternative Authority if the items in sub. (2) are requirements under sub. (1). The comment recommends that the same should be done for sub. (3) Procedures for Issuance of Alternatives, sub. (4) Revocation and Modification of Alternatives, and sub. (5) Effective Date of Alternatives if they are requirements of sub. (1).*

DNR Response – The department did not make the recommended changes to subs. (1) to (5) of s. NR 428.055 because the items are not requirements under sub. (1). Each serve a distinct purpose and do not represent or contain requirements for the other subsections.

2. *Comment 2.c.(2) questions why technological and economic infeasibility language is addressed in both sub. (1) Alternative Authority and sub. (2) Alternative Criteria language under s. NR 428.055.*

DNR Response – The department is retaining the technological and economic infeasibility language under s. NR 428.055 (1) and (2) because the two subsections serve separate purposes. Subsection (1) establishes the department’s authority to issue site-specific emission limit alternatives in instances where requirements under s. NR 428.04 or 428.05 are technologically or economically infeasible. Subsection (2) (c) specifies the criteria that a source must meet to demonstrate that applicable requirements from which variance is sought are technologically or economically infeasible.

3. *Comment 2.c.(5) questions why EPA approval is needed before an alternative emission limit can be revoked and recommends removing revocation language under s. NR 428.055 (5) if EPA approval is not needed.*

DNR Response – The department is retaining the revocation language under s. NR 428.055 (5) because once alternative emissions limits are approved into the State Implementation Plan (SIP) by EPA, they are made federally enforceable. Any revision to the SIP, including removal of the alternative emissions limits, shall also be approved by EPA in accordance with section 110(l) of the Clean Air Act.

4. *Comment 2.d.(1)(d) recommends “ranges” be inserted after “load” or that “load” be changed to “loads” in s. NR 428.08 (2)(g) 4. c.*

DNR Response - The department is not modifying s. NR 428.08 (2) (g) 4. c. “capacity load” language as recommended but did add language to clarify that performance testing is required for the worst-case load range as determined by the testing done under s. NR 428.08 (2) (g) 4. b.

PUBLIC COMMENTS ON DRAFT RULE AND DNR RESPONSE

The following is a summary of comments received and the department's responses.

Comments from WEC Energy Group:

1. *WEC Energy Group supports the department's proposed rule changes to ch. NR 428. WEC Energy Group noted combustion turbine unit dispatch may be impacted by the incorporation of renewable energy generation into its portfolio, as well as by federal greenhouse gas regulations. Together these changes may result in shorter run times between startups and more frequent shutdowns for combustion turbines than under current operation, potentially making it difficult to meet even the revised emission limit proposed under s. NR 428.04 (2)(g) 1. d. WEC Energy Group provided recommendations for setting NO_x emissions limits for such future scenarios.*

DNR Response – The department acknowledges the comment from WEC. The language proposed under s. NR 428.055 provides procedures for obtaining an alternative emission limitation when a demonstration is made that an emission limit is no longer technologically or economically feasible. No change has been made to the proposed rule language based on this comment.

Comments from Sierra Club:

1. *Sierra Club is opposed to the department's proposed revision of the NO_x emission limit under s. NR 428.04 (2)(g) 1. d. for 25 MWe or greater combined cycle turbines from 3 ppm to 9 ppm at 15% oxygen.*
 - a. *Sierra Club commented that the department had not provided an adequate explanation for why it is proposing to modify the emission limit in question since the current limit is achievable during steady state operations for new units, as demonstrated by Best Available Control Technology (BACT) limits set in other states within the last year.*

DNR Response – Section NR 428.04 applies to emission units that were constructed or underwent a major modification *after February 1, 2001*. Furthermore, the s. NR 428.04 emission limits apply at all times including during periods of startup and shutdown, thus it is not appropriate to compare s. NR 428.04 emission limits to steady state BACT limits. As noted on page 2 of the board order, "...the existing limit is not achievable in practice at all times of operation (e.g., during periods of startup or shutdown)." The board order goes on to say that "[b]ecause the proposed emission limit is reflective of current operations, including periods of startup and shutdown, the proposed rule change is not expected to result in an increase in actual emissions." As utilities transition to renewable energy, it has become necessary for some emissions units to startup/shutdown more frequently to ensure base load energy is available. For more explanation on this topic please see the comment submitted by WEC Energy Group above. No change has been made to the proposed rule language based on this comment.

- b. *Sierra Club recommends implementing an emission limit that applies during steady state operations and a separate, secondary limit that applies during periods of startup and shutdown, consistent with BACT determinations.*

DNR Response – No change has been made to the proposed rule language based on this comment. As noted in the department's previous response, it is not appropriate to compare s. NR 428.04 emissions limits with BACT limits. Additionally, EPA does not recommend establishing alternative emissions limits for sources that are capable of meeting their existing emission limitations at all times (88 FR 38448). The proposed rule language under s. NR 428.055 establishes a process for setting alternative site-specific emission limitations in such instances when it is technologically or economically infeasible for a source to meet the existing emission limits, such as during periods of startup and shutdown. The proposed rule language is consistent with EPA recommendations that alternative

emission limits be limited to specific and narrowly defined source categories using specific control strategies (80 FR 33839).

- c. *Sierra Club states the department's reasoning for aligning the NO_x emission limit under s. NR 428.04 with the limit for the same type of emission units under s. NR 428.22 is flawed because s. NR 428.04 is for new sources and s. NR 428.22 is for existing sources.*

DNR Response - The emission limits under s. NR 428.04 apply to emissions units that are constructed or undergo a major modification *after February 1, 2001*. The emissions limits under s. NR 428.22 became effective for *any* emissions unit meeting the applicability criteria *on or after May 1, 2009*. New sources, whether constructed in 2001 or present day, are unable to meet the emission limitation in s. NR 428.04 (2) (g) 1. d. when emissions from startup and shutdown are included. The emission limitation that was developed for existing sources in 2009 considered startup and shutdown emissions and was approved as RACT by EPA. No change has been made to the proposed rule language based on this comment.

2. *Sierra Club is opposed to the department's proposed rule language that would eliminate emission limit and monitoring requirements during certain periods when a secondary fuel is used. Sierra Club commented that the department had not offered justification for why the proposed changes are necessary. Sierra Club also commented that the department's characterization of the proposed change as a "clarification" is not accurate.*

DNR Response – In response to this comment, the department has added language to page two of the board order describing its reasoning for proposing to incorporate the secondary fuel language. It has been the department's practice that emission limits and monitoring requirements do not apply when a source is utilizing secondary fuels under certain circumstances. The proposed exception does not apply to all secondary fuel usage, but rather, only in specified cases such as where the given secondary fuel is used during limited periods of supply interruption or if the secondary fuel use comprises less than one percent of total fuel heat input.

3. *Sierra Club is opposed to the proposed rule language under s. NR 428.055 which would set site-specific NO_x emission limits for facilities for which it is technologically or economically infeasible to meet s. NR 428.04 or 428.05 emission limits. Sierra Club commented that the proposed language "...provides no criteria on which the department must rely in deciding whether to grant an exception" and "gives unbounded discretion in authoring case-specific revisions of NO_x RACT and new source standards to the department." (i.e., a "director's discretion provision). Sierra Club commented that the inclusion of an alternative-site specific emission limit is at odds with EPA's 2010 approval of the source-category-wide NO_x RACT limits under s. NR 428.22.*

DNR Response –The proposed rule language is not a director's discretion provision. Section NR 428.05 (2) sets criteria requirements that a source must meet to request an alternate emission limit, which requires that the "alternative will not delay attainment or prevent maintenance of any ambient air quality standard." Technological and economic feasibility are determined on a case-by-case basis. The proposed rule also requires any proposed alternative and its reasoning to be public noticed and be given an opportunity for public comment under s. NR 428.055 (3) (b). Additionally, under s. NR 428.055 (5), an alternative emission limit would become effective only after approval by EPA into the SIP. The proposed language is not at odds with EPA's definition of RACT. Specifically, "Although EPA has historically recommended source-category-wide presumptive RACT limits, and plans to continue that practice, decisions on RACT may be made on a case-by-case basis, considering the technological and economic circumstances of the individual source." (*General Definition of RACT*, 57 FR 55624). No change has been made to the proposed rule language based on this comment.

4. *Sierra Club commented that DNR did not support the proposed changes to ch. NR 428 with demonstrations that the changes will not interfere with any applicable requirement concerning attainment and reasonable further progress and will not lead to backsliding (42 U.S.C. § 7410(l); 40 CFR Part 51 Appendix V). Sierra Club also commented that ch. NR 428 NO_x emissions regulations are applicable to sources located in environmental justice communities (Milwaukee, Racine, Kenosha, Waukesha).*

DNR Response – It is the department’s regular practice to provide non-interference demonstrations required under CAA Section 110(l) for each of the proposed rule changes when the department submits the final rule to EPA for approval into the Wisconsin SIP. As noted throughout the board order, the proposed rule changes codify the department’s current practices in cases where current administrative rule language is unclear. The proposed changes reflect current facility operations and are not expected to result in an increase in emissions in the affected areas including those areas with environmental justice concerns. No change has been made to the proposed rule language based on this comment.

Comments from EPA:

1. *EPA commented that a section 110(l) demonstration will need to be submitted to modify the emission limit from 3 to 9 ppm_{dv} corrected to 15% oxygen in the Wisconsin SIP. EPA recommended the section 110(l) demonstration include an emissions impact analysis of the sources affected by the emission limit change.*

DNR Response - It is the department’s practice to provide non-interference demonstrations required under CAA Section 110(l) for each of the proposed rule changes when the department submits the final rule to EPA for approval into the Wisconsin SIP. EPA’s process for SIP review and approval provides additional opportunity for public comment. Because the proposed change to the emission limitation reflects current operating practices at affected facilities, no emissions increases will result. No change has been made to the proposed rule language based on this comment.

2. *EPA questioned the basis for allowing exceptions from requirements in cases when a secondary fuel is used only for startup.*

DNR Response – Based on this comment, the department deleted startup language under ss. NR 428.04 (2) (i) 3., 428.05 (2) (f) 3., 428.05 (3) (f) 3., and 428.22 (3) (c).

3. *EPA commented that site-specific emission monitoring methods under ss. NR 428.04 (3) (b) and 428.05 (4) needed to be submitted to EPA for SIP approval in addition to being approved by the department.*

DNR Response – In response to this comment, the department decided to retain the current language under ss. NR 428.04 (3) and 428.05 (4), as the proposed rule language was only intended to simplify and consolidate redundant language. The department may consider revising ss. NR 428.04 (3) (b) and 428.05 (4) during a future rulemaking after fully evaluating the revisions’ potential impacts to the site-specific emission monitoring method approval process.