

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD REPEALING, RENUMBERING  
AND AMENDING, AMENDING, REPEALING AND RECREATING, AND CREATING RULES

The Wisconsin Natural Resources Board adopts an order to **repeal** NR 404.04 (2) (a) 1. and 2.; to **renumber and amend** NR 404.04 (2) (a) (intro.); to **amend** NR 404.04.(2) (a) (title), 404.06 (2), and 484.04; to **repeal and recreate** NR 404.04 (6); and to **create** NR 484.04 (7) and (7m); relating to adopting the National Ambient Air Quality Standards, (NAAQS) for sulfur dioxide, (SO<sub>2</sub>) and nitrogen dioxide, (NO<sub>2</sub>).

**AM-08-11**

**Analysis Prepared by the Department of Natural Resources**

**1. Statute interpreted:** Section 285.11(6), Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.

**2. Statutory authority:** Sections 227.11(2)(a), 285.11(1), and 285.21(1)(a), Stats.

**3. Explanation of agency authority:** Section 227.11(2)(a), Stats. expressly confers rule making authority to an agency. Section 285.11(1) and (6) requires that the Department promulgate rules and establish control strategies in order to prepare and implement the State Implementation Plan for the prevention, abatement and control of air pollution in the state. Section 285.21(1)(a) requires that the Department promulgate by rule ambient air quality standards that are similar to, but not more restrictive than the National Ambient Air Quality Standards (NAAQS).

**4. Related statute or rule:** There are no other statutes or rules directly related to the adoption of the NAAQS for sulfur dioxide (SO<sub>2</sub>), and nitrogen dioxide (NO<sub>2</sub>).

**5. Plain language analysis:** The U.S. Environmental Protection Agency (EPA) is required by the federal Clean Air Act (CAA) to promulgate NAAQS to protect public health (i.e., primary standards) and public welfare (i.e., secondary standards). The Department is required by state law (s. 285.21, Wis. Stats.) to promulgate by rule a similar, but no more restrictive, air quality standard when the U.S. EPA promulgates a new or revised NAAQS.

On February 9, 2010, the U.S. EPA promulgated a 1-hour primary NAAQS for NO<sub>2</sub> at a level of 0.100 parts per million (100 parts per billion) (75 FR 6474). In addition, the U.S. EPA promulgated a 1-hour primary NAAQS for SO<sub>2</sub> at a level of 0.075 parts per million (75 parts per billion) on June 22, 2010 (75 FR 35520). As a result of these federal actions, the Department is proposing to adopt the NO<sub>2</sub> and SO<sub>2</sub> NAAQS into ch. NR 404, Wis. Adm. Code. In addition, the Department is proposing to revise ch. NR 484, Wis. Adm. Code, to include references to applicable U.S. EPA data handling conventions for NO<sub>2</sub> and SO<sub>2</sub>.

**6. Summary of, and comparison with, existing or proposed federal regulation:** The Department is proposing to adopt standards that are identical to the EPA promulgated (2010) federal National Ambient Air Quality Standards for NO<sub>2</sub> and SO<sub>2</sub>. Thus the proposed standards are not more stringent than the federal standards.

**7. Comparison with similar rules in adjacent states (Illinois, Iowa, Michigan and Minnesota):** Since these are federal standards, they apply in all states. The states of Illinois, Michigan, and Iowa have already adopted these revisions to the NAAQS standards for NO<sub>2</sub> and SO<sub>2</sub>. Minnesota is in the process of rule promulgation and expects their rules will be in effect in early 2016.

**8. Summary of factual data and analytical methodologies used and how any related findings support the regulatory approach chosen:** As required by s. 285.21 (1) (a), Stats., Wisconsin must

promulgate ambient air quality standards similar to the NAAQS for the protection of public health and welfare. Because the Department is required by statute to adopt the NAAQS and because the Department is proposing to adopt standards identical to the EPA promulgated NAAQS, it did not develop or use data or analytical methodologies to support the proposed adoption of these standards

**9. Analysis and supporting documents used to determine the effect on small business or in preparation of an economic impact analysis:** Incorporating 1-hour standards for NO<sub>2</sub> and SO<sub>2</sub> into ch. NR 404 may trigger the need to conduct additional dispersion modeling and engineering analysis in reviews for minor construction and operation permits in order to satisfy s. 285.63(1)(b), Wis. Stats. This will increase the amount of time and cost of applying for and receiving these air pollution control permits for both the private sector and the agency. As discussed below, most of these minor construction and operation permits will be for larger businesses. Not very many minor permits are expected to be for small businesses that could potentially be affected by the adoption of the NO<sub>2</sub> and SO<sub>2</sub> NAAQS.

The Department reviewed three years of permit applications and found that small businesses do not often apply for minor source permits (both construction and operation), the department has flexibility in permit rules and procedures that will minimize economic effects on small businesses, and therefore there are only a few small business sources potentially affected by the new NO<sub>2</sub> and SO<sub>2</sub> NAAQS. Furthermore, a solicitation of over 600 businesses and business groups, as well as discussions with the Small Business Advisory Council did not identify any significant number of small businesses as potentially being affected by the proposed rule. Finally, no small businesses commented on the proposed rule or responded to the Department's solicitation for potential impacts of the proposed rule. In summary, the majority of the rule's impacts will be on larger sources and not small businesses.

With regard to the impact of the proposed rules on Wisconsin businesses as a whole, an economic impact analysis and fiscal estimate has been completed. A public hearing on the rule (which included the Department's economic impact assessment) was held on May 21, 2015.

The Department received written comments via email on Board Order AM-08-11 from two entities, the Wisconsin Paper Council and Wisconsin Manufacturers & Commerce. Both commenters acknowledge the Department must incorporate these National Ambient Air Quality Standards (NAAQS) into the state administrative code, while raising concerns about how these standards will be implemented through the air permit process. Specifically, both commenters are concerned that adopting these NAAQS would require additional air dispersion modeling and engineering analyses as a condition for receiving air permits. They specifically note numerous technical and practical concerns with conducting such modeling in support of these standards.

The Department appreciates these comments and agrees that if these NAAQS were implemented as was done historically several practical and technical concerns would arise. Specifically, the Department agrees that modeling is not the only method available to demonstrate that a particular source will not "cause or exacerbate" a violation of these NAAQS when a source is applying for an air permit. The Department believes it has flexibility under law to implement the NAAQS through its permitting process in ways other than modeling, and commits to exploring with affected parties how to use this flexibility to identify technically-sound alternatives to modeling when implementing these NAAQS.

**10. Effect on small business:** As stated above, it is anticipated that very few, if any, small businesses will be affected by this rule. If a small business were to be affected, the private consultant time for technical analysis is expected to raise permit application costs for these small business sources. The compliance costs associated with mitigation and control measures will vary from case-to-case, but the Department's Economic Impact Analysis (EIA) did not find any evidence that a significant number of small businesses would be subject to large compliance costs as a result of adopting this rule. This rule does not change or impose new recordkeeping or reporting requirements on small businesses or change any schedules or deadlines for compliance reporting.

**11. Agency contact person:** Jeff Myers, WDNR, P.O. Box 7921, Madison, WI 53707-7921; (608) 266-2879; (608) 267-0560 (fax); jeff.myers@wisconsin.gov

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SECTION 1. NR 404.04 (2) (a) (title) is amended to read:

NR 404.04 (2) (a) (title) *Primary ~~standards~~ standard*.

SECTION 2. NR 404.04 (2) (a) (intro.) is renumbered NR 404.04 (2) (a) and amended to read:

NR 404.04 (2) (a) The primary ~~standards~~ standard for sulfur oxides, measured as sulfur dioxide, ~~are:~~ is 0.075 ppm -- maximum 1-hour concentration. The 1-hour primary standard is met at an ambient air quality monitoring site when the 3-year average of the annual (99<sup>th</sup> percentile) of the daily maximum 1-hour average concentrations is less than or equal to 0.075 ppm, as determined by the methodology of 40 CFR part 50, Appendix T, incorporated by reference in s. NR 484.04 (7m).

SECTION 3. NR 404.04 (2) (a) 1. and 2. are repealed.

SECTION 4. NR 404.04 (6) is repealed and recreated to read:

NR 404.04 (6) NITROGEN DIOXIDE. (a) *Primary standards*. The primary standards for nitrogen dioxide are:

1. 0.053 ppm -- primary annual average concentration. The primary annual standard is met when the annual average concentration in a calendar year is less than or equal to 0.053 ppm, as determined by the methodology of 40 CFR part 50, Appendix S, incorporated by reference in s. NR 484.04 (7).

2. 0.100 ppm -- primary 1-hour average concentration. The primary 1-hour standard is met when the 3-year average of the annual 98<sup>th</sup> percentile of the daily maximum 1-hour average concentration is less than or equal to 0.100 ppm, as determined by the methodology of 40 CFR part 50, Appendix S, incorporated by reference in s. NR 484.04 (7).

(b) *Secondary Standard*. The secondary standard for nitrogen dioxide is 0.053 ppm. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal

to 0.053 ppm, rounded to three decimal places. Fractional parts equal to or greater than 0.0005 ppm shall be rounded up. To demonstrate attainment, an annual mean shall be based upon hourly data that are at least 75% complete or upon data derived from manual methods that are at least 75% complete for the scheduled sampling days in each calendar quarter.

SECTION 5. NR 404.06 (2) is amended to read:

NR 404.06 (2) REFERENCE METHODS. Ambient air quality monitoring which utilizes a reference monitoring method shall use monitoring methods which conform to the federal reference methods which are specified in 40 CFR part 50, Appendices A to ~~N~~ I, incorporated by reference in s. NR 484.04 (2), or which have been so designated by the department.

SECTION 6. NR 484.04 is amended to read:

NR 484.04 **Code of federal regulations appendices.** The appendices to federal regulations in effect on ~~March 1, 2006~~ the effective date of this section ... [LRB insert date] listed in the first column of Table 2 are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 or code of federal regulations appendix method listed in the third column of Table 2. Since some of these materials are incorporated by reference for another appendix of the code of federal regulations and the other appendix is also incorporated by reference in this section, the materials listed in this section which are incorporated by reference for the other appendix are hereby also incorporated by reference and made a part of this chapter.

SECTION 7. NR 484.04 (7) and (7m) are created to read:

NR 484.04

(7)	40 CFR part 50 Appendix S	Interpretation of the National Ambient Air Quality Standards for Nitrogen Dioxide	NR 404.04 (6) (a)
(7m)	40 CFR part 50 Appendix T	Interpretation of the National Ambient Air Quality Standards for Sulfur Dioxide	NR 404.04 (2) (a)

SECTION 8. 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 9. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on August 12, 2015.