

**Wisconsin Department of Natural Resources
Natural Resources Board Agenda Item**

SUBJECT:

Request that the Board adopt AM-15-14, proposed rules affecting chapters NR 172, 400, 404, 405, 420, 425, 439, 484, and 494 related to consistency with Federal rules and repeal of obsolete rules.

FOR: January, 2016 Board meeting

PRESENTER'S NAME AND TITLE: Kristin Hart, Chief, Air Permit and Stationary Source Modeling Section

SUMMARY:

Changes to rules implementing major source air pollution control construction permitting are proposed and are necessary to assure consistency with corresponding U.S. EPA regulations. In addition, repeal is proposed for obsolete rules requiring the control of vapors resulting from vehicle refueling activity at gasoline stations (Stage 2 Vapor Recovery).

The proposed changes to rules addressing consistency with U.S. EPA regulations include:

- Explicitly naming oxides of nitrogen (NOx) as a precursor to ozone.
- Adopting U.S. EPA increment concentrations for particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}).
- Including PM_{2.5} in certain definitions.
- Changing the significant monitoring concentration for PM_{2.5} to 0.
- Updating the definition of volatile organic compounds (VOC) to exclude certain chemicals determined by EPA to have negligible photochemical reactivity in forming ground level ozone.

The proposed repeal of obsolete rules includes:

- Repeal of ch. NR 172 covering grants previously provided by the Department to assistance gasoline station owners with the installation of Stage 2 Vapor Recovery equipment.
- Repeal of s. NR 420.045 and related rules implementing the Stage 2 Vapor Recovery requirements.

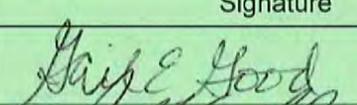
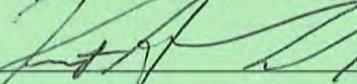
The proposed rule changes are not expected to be controversial. Some concern was raised in the response to the solicitation for information on the economic impacts of the rule, that adopting the PM_{2.5} increment could be costly to some sources. While adoption of the PM_{2.5} increment will require some additional analysis the Department does not anticipate that this additional analysis will cause noticeable delays in permit issuance times and therefore, will not result in any significant impact to the affected businesses.

The board last acted on this rule on January 28, 2015, approving the scope statement and authorizing hearings. The rule is not expected to have a negative economic impact on small business.

RECOMMENDATION: That the Board adopt AM-15-14.

LIST OF ATTACHED MATERIALS (check all that are applicable):

- | | |
|---|---|
| <input checked="" type="checkbox"/> Background memo | <input type="checkbox"/> Attachments to background memo |
| <input checked="" type="checkbox"/> Fiscal estimate and economic impact analysis (EIA) form | <input type="checkbox"/> Environmental assessment or impact statement |
| <input type="checkbox"/> Response summary | <input checked="" type="checkbox"/> Board order/rule |

Approved by	Signature	Date
Gail Good, Air Program Director		12.18.2015
Patrick Stevens, Environmental Management Division Administrator		12/19/15
Cathy Stepp, Secretary		1/6/15

cc: Board Liaison - AD/8

Kendra Fisher - LS/8

Department rule officer - LS/8

DATE: December 18, 2015

TO: All Members of the Natural Resources Board

FROM: Cathy Stepp, Secretary

SUBJECT: Background memo on request for Board adoption of Order AM-15-14, proposed rules affecting chapters NR 172, 400, 404, 405, 420, 425, 439, 484, and 494, relating to consistency with Federal rules and repeal of obsolete rules.

1. Why is the rule being proposed?

This rule package contains changes that are necessary to resolve several U.S. EPA deficiency notices on our state implementation plan. (*see* Finding of Failure to Submit a PSD State Implementation Plan Revision for PM_{2.5}, published at 79 Fed. Reg. 46703 (August 11, 2014); Disapproval of Infrastructure SIP With Respect to Oxides of Nitrogen as a Precursor to Ozone Provisions for the 2006 PM_{2.5} NAAQS, published at 80 Fed. Reg. 76637 (December 10, 2015)). The Department is also required to promulgate the PM_{2.5} increment section of this rule by no later than March 31, 2017 under the May 21, 2015 Stipulation and Order for Judgment for *Midwest Environmental Defense Center, Inc. v Wisconsin Department of Natural Resources*, Dane County Case No. 14-CV-3366.

2. Summary of the rule.

The objective of this rule is twofold; to address changes needed to maintain consistency with U.S. Environmental Protection Agency (EPA) regulations and to repeal obsolete rule provisions.

The portion of the rule addressing consistency with EPA rules includes the following:

- explicitly names oxides of nitrogen (NO_x) as a precursor to ozone,
- adopts federal increment concentrations for particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}),
- includes PM_{2.5} in certain definitions in ch. NR 405,
- changes the significant monitoring concentration for PM_{2.5} to 0 and
- updates the definition of Volatile Organic Compounds (VOC's) to exclude certain chemicals with negligible photochemical reactivity.

The portion of the rule that repeals obsolete rules includes:

- repeal of ch. NR 172 covering grants for installation of state 2 vapor recovery, and
- repeal of s. NR 420.045 and related rules concerning implementation of stage 2 vapor recovery.

Stage 2 vapor recovery rules required gasoline vapor recovery equipment to be installed at gas stations in Southeastern Wisconsin. The EPA authorized states to remove these rules from state implementation plans because, since 1998 model year, cars have contained on-board vapor recovery systems. The stage 2 vapor recovery equipment has been shown to interfere with the operation of on-board systems. The proposed rule also contains the repeal of the now obsolete NR 172 which authorized the Department to implement a grant program to assist gas station owners with the installation of stage 2 vapor recovery equipment.

3. How does this proposal affect existing policy?

This rule fulfills existing department policy to assure consistency of the major source air permit program with EPA regulations. Other portions of this rule do not affect air program policy.

4. Hearing Synopsis and Comment Summary.

A notice of public hearings on the proposed rule was published on October 5, 2015. A hearing was held on November 5, 2015. No one attended the public hearing. The public comment period closed on November 12, 2015.

A comment was received from U.S. Environmental Protection Agency (EPA) Region V staff pointing out a typo in one of the chemicals being excluded from the list of VOC's. No other comments from the public were received.

The Legislative Council Rules Clearinghouse recommended changes related to clarity, grammar, punctuation and use of plain language. All recommended changes were accepted and appropriate changes made, except for a question raised concerning whether the phrase "24 hour average," should be retained in the significant monitoring concentration for PM_{2.5} in s. NR 405.07(8)(a)3m. Since the EPA regulation, in 40 CFR 51.166, does not include the phrase, the Department did not retain the phrase in order to maintain consistency and thereby avoid any potential confusion.

5. Has Board dealt with these issues before?

Yes, the board approved the scope statement and authorized hearings on January 28, 2015.

6. Who will be impacted by the proposed rule? How?

The proposed rule could potentially impact several different types of business. The portion of the rule that is being proposed to assure consistency with EPA rules applies mostly to major sources of air pollution that are being constructed or undergoing modification. However, the state implements the major source construction permit program according to EPA rules immediately upon their promulgation in federal law and so, facilities undergoing major new source review should see no effect from this rule.

Another portion of the rule includes adding chemicals to the list of those excluded from being considered a volatile organic compound (VOC). These chemicals are used predominantly by manufacturers of refrigerants and refrigeration equipment, hot water heaters, and waste heat recovery equipment, manufactures of aerosol propellants, blowing agents for insulating foams, and fire suppressants, and in the manufacture of pigments used in water-based coatings, additives in metalworking fluids and in food contact paper, neutralizers in personal care products, and intermediates in chemical synthesis. EPA excluded these chemicals from their regulatory definition of VOC because they have very low photochemical reactivity and therefore, do not participate in ground level ozone formation. Adopting this rule into state law will clarify requirements and remove these chemicals from being regulated as a VOC.

The portion of the rule that proposes to repeal regulations concerning stage 2 vapor recovery at gas stations and the stage 2 vapor recovery grant rule, affects the owners and operators of gas stations in Southeastern Wisconsin. Beginning with 1998 model year vehicles, EPA began requiring auto manufacturers to equip new vehicles with on-board gasoline vapor recovery systems. Stage 2 vapor recovery at the gas pump became obsolete as these rules were implemented. Since the on-board vapor recovery systems serve the same purpose as the stage 2 vapor recovery equipment at the gas stations, the EPA authorized states to remove stage 2 vapor recovery rules from their ozone state implementation plans (SIP) making the rules covering stage 2 vapor recovery and the stage 2 vapor recovery grant rule obsolete.

7. Soliciting public input on economic impact analysis.

An analysis of the economic impacts of this proposed rule was prepared after information was obtained through a request concerning potential economic impacts of the proposed rule. The request for information was sent to all air permit holders in the state, representatives of local units of government, representatives of business, and the Air Management Study Group which includes members from environmental advocacy groups, environmental consultants, environmental law attorneys, utilities, and representatives of large and small businesses.

The Department received eleven responses to the request for information on economic impacts. Nine of the responses indicated that the proposed rule would have no economic impact or wrote in support of the new rules as positive to business. Two responders indicated that implementation of PM2.5 increment would have a negative economic impact on their businesses if the Department requires testing to determine PM2.5 emissions in order to ascertain compliance with increment. The Department continues to believe that impacts of adopting the PM2.5 increment will be minimal to businesses because the Department has proposed a new approach for determining whether a new project will comply with PM2.5 increment. This new approach treats PM2.5 as a regional pollutant and does not rely on emissions data from individual businesses.

8. Environmental Analysis.

The promulgation of permanent administrative rules under ch. 227, Wis. Stats., is considered an equivalent analysis action under s. NR 150.20 (2) (a) 23., Wis. Adm. Code, and does not require additional environmental analysis under ch. NR 150, Wis. Adm. Code, because under emergency rule EmR1517 in effect through March 5, 2016 and published in the current Wisconsin Register, a detailed environmental analysis and public disclosure are conducted as part of the Department programmatic procedure.

9. Small Business Analysis.

The changes proposed in this rule addressing consistency with EPA rules are not expected to have an adverse economic impact on small businesses. Small businesses are usually not major sources for purposes of the major source air pollution control construction permit program (PSD program) because they tend not to have large amounts of emissions. Since the Department is already implementing the PSD program, as required by U.S. EPA, the consistency changes being proposed in this rule will not have any additional economic impacts.

The adoption of the PM2.5 increment may require additional analysis by the Department during the air construction permit review for some small businesses constructing or expanding in certain parts of the state. The Department does not anticipate that this additional analysis will cause noticeable delays in permit issuance times and therefore, will not result in any significant impact to the affected small businesses.

The portion of the rule that proposes to exclude certain compounds from the definition of volatile organic compounds (VOC) to make the rule consistent with the definition in federal regulations will provide clarity to businesses in how to calculate and report VOC emissions and on the applicability of regulations.

The proposed repeal of the stage 2 vapor recovery program and related implementing rules will clarify applicable requirements for the affected small businesses and is not expected to have an adverse impact on them. This rule is expected to positively impact owners and operators of gas stations in Southeastern Wisconsin, most of which are considered small businesses. This rule repeals outdated rule language making the regulations easier to understand.

ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

1. Type of Estimate and Analysis

Original Updated Corrected

2. Administrative Rule Chapter, Title and Number

Chapters NR 172, 400, 404, 405, 420, 425, 439, 484, and 494.

3. Subject

Proposed rules related to consistency with U. S. Environmental Protection Agency air pollution regulations and repeal of obsolete rules.

4. Fund Sources Affected

GPR FED PRO PRS SEG SEG-S

5. Chapter 20, Stats. Appropriations Affected

NA

6. Fiscal Effect of Implementing the Rule

No Fiscal Effect Increase Existing Revenues Increase Costs
 Indeterminate Decrease Existing Revenues Could Absorb Within Agency's Budget
 Decrease Cost

7. The Rule Will Impact the Following (Check All That Apply)

State's Economy Specific Businesses/Sectors
 Local Government Units Public Utility Rate Payers
 Small Businesses (if checked, complete Attachment A)

8. Would Implementation and Compliance Costs Be Greater Than \$20 million?

Yes No

9. Policy Problem Addressed by the Rule

The objective of this rulemaking is twofold; to address changes needed to maintain consistency with U.S. Environmental Protection Agency (EPA) regulations and to repeal obsolete rule provisions.

The Department is the approved authority in the state to implement and enforce many of the federal regulations under the Clean Air Act. This authority is based on a State Implementation Plan submitted to and approved by U.S. EPA. In order to maintain a sufficient State Implementation Plan, the proposed changes to chs. NR 404 and 405 addressed by this rule package are required by U.S. EPA.

10. Summary of the businesses, business sectors, associations representing business, local governmental units, and individuals that may be affected by the proposed rule that were contacted for comments.

The Department anticipates that some portions of the proposed rule could potentially impact any air permit holder in the state. Other entities that may have an interest in the economic impacts of the proposed rule include organizations that represent business in the state including the Small Business Environmental Council, the Printing Council, the Wisconsin Transportation Builders Association, Wisconsin Manufacturers and Commerce, the Wisconsin Paper Council, and the American Council of Engineering Companies of Wisconsin. The Public Service Commission of Wisconsin and organizations representing local units of government including the League of Wisconsin Municipalities and the Wisconsin Counties Association may also have an interest. In addition, the Wisconsin the Air Management Study Group, the Air Program's stakeholder working group, may be interested in the economic impacts of this proposed rule. This group includes members representing Clean Wisconsin, Sierra Club, environmental law attorneys, utilities, and representatives of large and small businesses. The Department contacted all these entities, and others, for information on the economic impacts of the proposed rule changes.

11. Identify the local governmental units that participated in the development of this EIA.

No local governmental units asked to participate in, or did participate, in preparation of the final economic impact analysis.

12. Summary of Rule's Economic and Fiscal Impact on Specific Businesses, Business Sectors, Public Utility Rate Payers, Local Governmental Units and the State's Economy as a Whole (Include Implementation and Compliance Costs Expected to be

ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

Incurred)

Fiscal Impacts on the Department's Air Management Program

The Department does not anticipate that this proposed rule will have a fiscal impact on the Air Management Program or any other DNR programs.

Economic Impacts on Private Sector Businesses

Sections 3 through 10 and 12 of the board order for AM-15-14 propose rules to adopt the federally established ambient air increment for PM_{2.5}. The Department expects that this proposed rule change will have no economic impact for most private sector businesses. An ambient air increment is the maximum increase in the concentration of a pollutant above a base line amount that is allowed to occur. Significant deterioration in air quality is said to occur when the amount of new pollution would exceed the applicable ambient air increment. It is important to note that the National Ambient Air Quality Standard for a pollutant may not be exceeded even where the increase in the concentration of the pollutant is lower than the ambient air increment. The Department may not issue a permit and a business may not begin the construction project until the Department determines that the emissions from the construction project will not cause or exacerbate a violation of an ambient air standard or increment. The Department does not expect that adopting the federally established ambient air increment for PM_{2.5} will have a significant effect on the approvability of construction permits in Wisconsin, and therefore should not have an economic impact on private sector businesses. PM_{2.5} is not emitted directly from most industrial operations. High temperature operations such as fuel burning, engine testing, and metal melting, may emit PM_{2.5} directly. When reviewing minor source construction permit applications for these types of sources, the Department has taken a weight of evidence approach and demonstrated that potential direct emitters of PM_{2.5} have not caused or exacerbated a violation of an ambient air quality standard or the ambient air increment and have therefore not required individual source modeling analyses to make this determination. The Department does not anticipate that a business would have to make design changes or purchase emission control equipment for PM_{2.5} as a result of the proposal to adopt the federal PM_{2.5} ambient air increments.

The Department began including PM_{2.5} increment analyses in major source air construction permit reviews (PSD permits) when U.S. EPA first adopted the new increment. Applications for major source construction permits in affected areas, must include an increment analysis which requires knowledge of emissions of the affected pollutant from nearby minor sources. Because of the Department's decision to no longer use individual source dispersion modeling to evaluate increment at minor sources, there may be a slight increase in the time required to prepare a major source application to include information on PM_{2.5} from those nearby minor sources. However, the Department believes this workload would be slight because, aside from combustion units whose emissions are easily estimated, very few sources directly emit PM_{2.5}.

Sections 14 and 15 of the board order for AM-15-14, the portion of the rule that removes the significant monitoring concentration for PM_{2.5}, will not result in any change to the method of reviewing air permits in Wisconsin, and therefore is not anticipated to have any economic impact. One requirement for major source construction permit applicants is to provide an estimate of pre-construction air quality, including up to one-year of site specific ambient air monitoring data. The significant monitoring concentration was originally established in federal law to allow a dispersion modeling analysis to be used to demonstrate that the potential increase of ground level pollutant concentration is small enough that site specific pre-construction monitoring is not required. The U. S. EPA removed the significant monitoring concentration for PM_{2.5} from its rules and the Department now is proposing this change to maintain consistency with federal law. Removal of the significant monitoring concentration will not have an effect on major source construction

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Fiscal Estimate & Economic Impact Analysis

permit applicants as Wisconsin maintains a wide spread, federally compliant network of PM_{2.5} ambient monitors that are used to assess pre-construction air quality for major source construction permit applicants in all parts of the state.

Sections 11 and 13 and 16 of the board order is the portion of the rule that specifically names oxides of nitrogen (NO_x) as a precursor to ozone. Because the Department recognizes NO_x as an ozone precursor under current rules and considers NO_x emissions when reviewing federally required permits, the proposed rules do not constitute a change in Department policy or procedures and therefore the proposed rules will not have any economic impact.

Section 1 of the board order for AM-15-14, the portion of the rule that proposes to amend the definition of volatile organic compounds (VOCs) to exclude additional substances, will align the state and federal definitions of VOC. Coating, painting, printing and other types of businesses that use organic compounds will no longer be required to count the listed substances as VOCs. This proposed change will not have a negative economic impact and may, in fact, have an economic benefit to businesses that emit VOCs, including being able to qualify for construction and operation permit exemptions or to show the business qualifies for coverage under a general or registration permit.

Sections 17 through 24 of the board order for AM-15-14 involve repealing the stage 2 vapor recovery regulations and related grant rules in ch. NR 172 for gas stations in Southeastern Wisconsin. These changes will not have any economic impact on businesses in Wisconsin because the state has not been implementing the rule since 2012, as required under s. 285.31, Wis. Stats. The U.S. EPA authorized states to remove these rules from state implementation plans, which Wisconsin did in 2013. Grant funding for removal of Stage 2 Vapor Recovery systems was available through the end of the 2 year budget cycle ending on June 30, 2015. This proposed rule is simply the last stage of cleaning up these now obsolete requirements.

Economic Impacts on local governments and public entities

The Department does not anticipate that local governments and public entities will be economically impacted by the implementation of the proposed rules.

13. Benefits of Implementing the Rule and Alternative(s) to Implementing the Rule

This rule change was undertaken to align state regulations with Clean Air Act regulations. The Department is the approved authority in the state to implement Clean Air Act permit programs and Department rules must be consistent with U.S. EPA regulations to maintain that authority. If the state does not make the proposed rule changes, the U. S. EPA may potentially disapprove portions of the state's permit program and could take over review and issuance of permits. The Department believes that it is better equipped at this time than U.S. EPA to efficiently and effectively issue quality air permits in the state without causing undue delays to business needs. This is a significant benefit of adopting these proposed rule changes.

14. Long Range Implications of Implementing the Rule

The Department does not anticipate any long term fiscal or economic implications to implementing the rule.

15. Compare With Approaches Being Used by Federal Government

All of the changes being proposed in this rule are necessary to align state rules with federal regulations.

16. Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota)

Illinois and Minnesota are direct delegated states, implementing the federal program immediately after federal rules are effective, and are not implementing their programs through a State Implementation Plan (SIP) as Wisconsin does. Iowa and Michigan, similar to Wisconsin, are SIP approved states, so they are also implementing a federal program, but through their own state rules. It is the goal of SIP-approved states to implement federal programs in accordance with the regulations set out in federal code. This proposed rule implements changes needed to align with federal regulations and,

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thus, result in rules similar to those in neighboring states.

17. Contact Name

Kristin Hart

18. Contact Phone Number

608/266-6876

This document can be made available in alternate formats to individuals with disabilities upon request.

ADMINISTRATIVE RULES
Fiscal Estimate & Economic Impact Analysis

ATTACHMENT A

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1. Summary of Rule's Economic and Fiscal Impact on Small Businesses (Separately for each Small Business Sector, Include Implementation and Compliance Costs Expected to be Incurred)

The proposed rule is expected to have no impact for many businesses and it may create, for small businesses that regularly emit VOCs such as printers, coaters, spray painting operations, and autobody repair shops, an economic benefit. Because emissions of certain compounds will no longer be considered VOC emissions, small business emitting these compounds may be able to qualify for construction and operation permit exemptions or may become eligible for coverage under a more streamlined permit option such as a general or registration permit.

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2. Summary of the data sources used to measure the Rule's impact on Small Businesses

Because the Department does not expect a negative economic impact on small businesses, no data sources were examined for this analysis.

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3. Did the agency consider the following methods to reduce the impact of the Rule on Small Businesses?

- Less Stringent Compliance or Reporting Requirements
 Less Stringent Schedules or Deadlines for Compliance or Reporting
 Consolidation or Simplification of Reporting Requirements
 Establishment of performance standards in lieu of Design or Operational Standards
 Exemption of Small Businesses from some or all requirements
 Other, describe:

-
4. Describe the methods incorporated into the Rule that will reduce its impact on Small Businesses

No special methods are being incorporated into the rule to reduce impacts. The Department does not believe there will be negative economic impacts to small business.

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5. Describe the Rule's Enforcement Provisions

NA

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6. Did the Agency prepare a Cost Benefit Analysis (if Yes, attach to form)

- Yes No
-

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

The Wisconsin Natural Resources Board proposes an order to **repeal** NR 172, 420.02 (8m), (26), (32), and (38m), 420.045, 425.035, 439.06 (3) (i), 484.05 (4) and (5), and 494.04; to **amend** NR 404.05 (2) (intro.), (3) (intro.), (4) (intro.), 405.02 (3), (21) (a), (21m) (a), (22) (b), (22m) (a) 1. and (b) 1., and (27) (a) 6., 405.07 (8) (a) 3m. and 5. (Note), 420.02 (39), 420.03 (4) (b) 3., and 420.04 (1) (b) 4. and (3) (c) 1.; and to **create** NR 400.02 (162) (a) 53. to 60., 404.05 (2) (am), (3) (am), (4) (am), 405.02 (21m) (c), (22m) (a) 3., 405.07 (8) (a) 3m. (Note) relating to consistency with U.S. Environmental Protection Agency air pollution control regulations and the repeal of obsolete rules, and affecting small business.

AM-15-14

Analysis Prepared by the Department of Natural Resources

1. Statute interpreted:

Sections 285.11 (1) and (6), Stats. The State Implementation Plan developed under s. 285.11(6), Stats., will be revised.

2. Statutory authority:

Sections 285.11 (1), (6), (16), and (17), 285.17 (1) (a), 285.21 (2) and (4), 285.25 (1), and 285.31 (5), Wis. Stats., establish the authority for promulgation of the proposed rules.

3. Explanation of agency authority:

(A) Section 285.11 (1), Wis. Stats., requires that the Department promulgate rules implementing and consistent with ch. 285, Wis. Stats., and thereby establishes authority for the proposed changes to ch. NR 405, Wis. Adm. Code, related to the prevention of significant deterioration permit program as affected by ss. 285.60, 285.61, and 285.63, Wis. Stats. More specific authority for these proposed changes is established as follows:

(1) Section 285.11 (16), Wis. Stats., requires that the Department promulgate rules, consistent with but no more restrictive than the federal Clean Air Act, that specify the amounts of emissions that result in a stationary source being classified as a major source and limit the classification of a major source to specific air contaminants. Section 285.11 (17), Wis. Stats requires the Department to promulgate rules, consistent with the federal Clean Air Act, that modify the meaning of the term "modification" as it relates to specific air contaminants. These statutory provisions support the Department's proposed changes to ch. NR 405, Wis. Adm. Code, to identify nitrogen oxides (NO_x) as a precursor to ozone formation is consistent with federal Clean Air Act requirements regarding what contaminants to consider when determining whether a source is a major source and describe when an increase in a given air contaminant is considered a modification.

(2) Section 285.17 (1) (a), Wis. Stats., requires the Department to classify by rule the level of an air contaminant source that may cause or contribute to air pollution. This statute supports the proposed change to the significant monitoring concentration for PM_{2.5} which is established as a threshold below which major source construction permit applicants are not required to provide pre-construction air quality monitoring data.

(3) Section 285.21 (2) and (4), Wis. Stats., supports the Department's proposed change to establish ambient air increments for PM_{2.5}. These statutory provisions require that the Department promulgate by rule ambient air increments for air contaminants consistent with, and not more restrictive than, those under the federal Clean Air Act for attainment areas. The Department must keep these rules consistent with any modifications to these increments made under the Clean Air Act.

(4) Section 285.25 (1), Wis. Stats., supports the Department's proposed changes to add PM_{2.5} to select definitions in ch. NR 405, Wis. Adm. Code, related to a pollutant's baseline concentration. This statute requires that the Department promulgate rules designating procedures and criteria to determine the

allocation of available air resources in an attainment area. The terms affected are used in these procedures and the proposed inclusion of PM 2.5 in the relevant definitions is necessary and appropriate when the Department determines the allocation of air resources for PM2.5.

(B) Section 285.11 (6), Wis. Stats., establishes authority for the proposed change to the definition of volatile organic compounds (VOC), by adding compounds to the list of those excluded from the definition. This statute requires that the Department develop a plan for the prevention, abatement, and control of air pollution. For control of atmospheric ozone, the plan, with limited exceptions, must conform to the federal Clean Air Act. Since VOC are a precursor to ozone, the addition of the proposed compounds to the list of those excluded from the definition ensures that the state definition of VOC conforms to the federal definition.

(C) The proposed repeal of s. NR 420.045, Wis. Adm. Code, along with other rules related to its implementation are consistent with the legislature's mandate under s. 285.31 (5), Wis. Stats., to terminate the further implementation of stage 2 vapor recover equipment requirements.

4. Related statute or rule:

Related to the proposed repeal of s. NR 420.045, the state legislature promulgated s. 285.31 (5), Wis. Stats., effective April 17, 2012, terminating the further implementation of stage 2 vapor recover equipment requirements under s. NR 420.045, Wis. Adm. Code.

5. Plain language analysis:

The Department has two main objectives in proposing these rules; to address changes needed to maintain consistency with U.S. Environmental Protection Agency (EPA) regulations and to repeal obsolete rule provisions.

(A) Consistency.

(1) Chapter NR 405, Wis. Adm. Code, establishes requirements and procedures for reviewing and issuing air pollution control construction permits for any new major stationary source and any major modification to an existing stationary source located in areas designated as in attainment with national ambient air quality standards or as unclassifiable. This permit program is referred to as prevention of significant deterioration or PSD and is based on U.S. EPA regulations in 40 CFR 51.166. The Department is the approved authority in the state to implement and enforce many of the federal regulations under the Clean Air Act. This authority is based on a State Implementation Plan submitted to and approved by U.S. EPA. In order to maintain a sufficient State Implementation Plan, the proposed changes to chs. NR 404 and 405 addressed by this rule package are required.

The Department is proposing changes to maintain consistency with existing U. S. EPA regulations in three areas: a., identifying nitrogen oxides as a precursor to ozone; b., updating requirements concerning particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (PM2.5); and c., amending the definition of volatile organic compound by adding 8 compounds to the list of compounds with negligible photochemical reactivity. These are each described further below:

a. Sections NR 405.02 (21) (a), (22) (b), (27) (a) (6) and 405.07 (8) (a) 5., Wis. Adm. Code, to specifically identify that, in addition to volatile organic compounds, nitrogen oxides (NO_x) are a precursor to ozone formation consistent with U.S. EPA requirements in 40 CFR 51.166 (b) and (i).

b. 1. Section NR 404.05, Wis. Adm. Code, to adopt ambient air increments for PM2.5. Ambient air increments for pollutants with national ambient air quality standards, including PM2.5, are established by the U.S. EPA in 40 CFR 51.166 (c), and

2. Section NR 405.02 (3), (21m), and (22m), Wis. Adm. Code, to include PM2.5 in the definitions of "baseline area", "major source baseline date", and "minor source baseline date", respectively. These terms are defined by the U.S. EPA in 40 CFR 51.166 (b) (14) (i) and (ii) and (15) (i).

3. Section NR 405.07 (8) (a) 3m. to change the significant monitoring concentration for PM2.5 to zero in accordance with *Sierra Club v. EPA*, 706 F.3d 428 (D.C. Cir. 2013).

c. Chapter NR 400, Wis. Adm. Code, establishes definitions for terms commonly used throughout chs. NR 401 to 499, Wis. Adm. Code. A definition for the term 'volatile organic compounds' or 'VOC' is included in s. NR 400.02 (162), Wis. Adm. Code. In the ambient air these compounds can participate in

photochemical reactions to produce ozone, more commonly referred to as smog, and are therefore subject to emission control requirements and may trigger the need to obtain a construction or operation permit. The U.S. EPA has determined that certain organic compounds have negligible photochemical reactivity in the atmosphere and therefore excludes them from the federal definition of VOC in 40 CFR 51.100 (s). To maintain consistency with federal rule, the Department proposes to add these eight compounds to the list of excluded compounds in the state definition. These compounds are:

1. Trans-1,3,3,3-tetrafluoropropene (HFO-1234ze).
2. HCF₂OCF₂H (HFE-134).
3. HCF₂OCF₂OCF₂H (HFE-236cal2).
4. HCF₂OCF₂CF₂OCF₂H (HFE-338pcc13).
5. HCF₂OCF₂OCF₂CF₂OCF₂H (H-Galden 1040X or H-Galden ZT 130 (or 150 or 180).
6. Trans-1-chloro-3,3,3-trifluoroprop-1-ene (Solstice™ 1233zd(E)).
7. 2,3,3,3-tetrafluoropropene (HFO-1234yf).
8. 2-amino-2-methyl-1-propanol (AMP; CAS number 124-68-5).

(B) Obsolete Rules.

In addition to the changes described above to maintain consistency with U.S. EPA regulations, the Department is also proposing to repeal the stage 2 vapor recovery regulations in s. NR 420.045 and make clean-up changes to associated rules provisions, including the repeal of grant rules in ch. NR 172 for gas stations in Southeastern Wisconsin. Stage 2 vapor recovery equipment captures volatile organic compounds that evaporate into the air when vehicle gasoline tanks are filled and returns the vapors to the underground gasoline storage tank where they condense. Beginning with 1998 model year vehicles, the U.S. EPA began requiring manufactures to equip new vehicles with on-board gasoline vapor recovery systems. These systems serve the same purpose as the stage 2 vapor recovery equipment at gasoline dispensing facilities. The U.S. EPA authorized states to remove stage 2 vapor recovery equipment requirements from their ozone state implementation plan (SIP) which Wisconsin did, effective December 4, 2013.

6. Summary of, and comparison with, existing or proposed federal statutes and regulations:

The Department is proposing changes in ch. NR 405, Wis. Adm. Code, to address changes needed to maintain consistency with U. S. EPA regarding rules for issuing construction permits for any new major stationary source and any major modification to an existing stationary source located in areas designated as in attainment with national ambient air quality standards or as unclassifiable. These changes are needed to conform with federal requirements in three areas: identifying nitrogen oxides as a precursor to ozone consistent with 40 CFR 51.166; updating the ambient air increment and the significant monitoring concentration for PM_{2.5} consistent with 40 CFR 51.166; and adding 8 compounds to the list of compounds with negligible photochemical reactivity consistent with the federal definition of VOC in 40 CFR 51.100 (s)

To address consistency with U. S. EPA regarding nitrogen oxides (NO_x) as a precursor to ozone, the Department is proposing changes to Sections NR 405.02 (21) (a), (22) (b), (27) (a) (6) and 405.07 (8) (a) 5., Wis. Adm. Code, to specifically identify that, in addition to volatile organic compounds, NO_x emissions are a precursor to ozone formation consistent with U.S. EPA requirements in 40 CFR 51.166 (b) and (i).

To address consistency with U.S. EPA regarding particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (PM_{2.5}), the Department is proposing rule changes in three areas:

(A) Section 404.05 to add the Class I, Class II, and Class III increment values to ch. NR 404 as established in 40 CFR 51.166 (c);

(B) Section 405.02 (3), (21m), and (22m), to include PM_{2.5} in the definitions of “baseline area”, “major source baseline date”, and “minor source baseline date”, consistent with federal regulations in 40 CFR 51.166 (b); and

(C) Section 405.07 (8) (a) 3m., to adopt the significant monitoring concentration for PM_{2.5} of zero (0) as required in 40 CFR 51.166 (i) (5) (i) (c);

To address consistency with U. S. EPA regarding the definition of VOC, the Department proposes to add eight compounds to the list of excluded compounds in the state definition in s. NR 400.02 (162), Wis. Adm. Code. This is consistent with the federal definition of VOC in 40 CFR 51.100 (s).

7. Comparison with similar rules in adjacent states (Illinois, Iowa, Michigan and Minnesota):

This proposed rule implements changes needed to assure consistency between state and federal rules and thus, result in rules similar to those in neighboring states. Illinois and Minnesota are direct delegated states, meaning that they are implementing directly the federal program and are not implementing their programs through a State Implementation Plan (SIP), as Wisconsin does. Iowa and Michigan, similar to Wisconsin, are SIP-approved states, so they are implementing the same federal programs, but through their own state rules. It is the goal of SIP-approved states to implement federal programs in accordance with the regulations set out in federal code. This results in similar requirements from state to state.

8. Summary of factual data and analytical methodologies used and how any related findings support the regulatory approach chosen:

Since the Department is proposing rules consistent with federal regulations, making consistency and clarification changes, and repealing rules as directed by the state legislature, the Department did not make use of any factual data or analytical methodologies in the rule development.

9. Analysis and supporting documents used to determine the effect on small business or in preparation of an economic impact report:

The economic impact of the proposed rule is expected to be minimal. When U.S. EPA adopts changes to the federal major air pollution control construction permit program, the Department immediately implements those changes through the state's construction permitting program. For this reason, the consistency changes being proposed, that specifically name NO_x as a precursor to ozone, will not have any additional economic impact on facilities obtaining major source air pollution construction permits (PSD permits).

The adoption of the PM_{2.5} increment will require additional analysis during the air construction permit reviews for minor sources (which may be small businesses) wishing to expand in areas where increment must be analyzed. However, because the Department has developed a weight of evidence approach to evaluate PM_{2.5} emissions against the increment, the Department does not anticipate that this additional analysis will cause noticeable delays in minor source permit issuance times and therefore, will not result in any significant impact to small businesses.

The Department has not been implementing the stage 2 vapor recovery program since 2012 when the state legislature terminated further implementation. Repeal of these outdated rules clarifies applicable requirements for the affected businesses and is not expected to have an adverse economic impact on them. As noted above, U.S. EPA already approved the removal of these requirements from Wisconsin's SIP.

The portion of the rule that proposes to change the definition of volatile organic compounds (VOC) to make the rule consistent with the definition in federal regulations will provide clarity to businesses in how to calculate and report VOC emissions and on the applicability of regulations. This change is not expected to have a negative economic impact on businesses and, since the proposed change is specifically to exclude some organic compounds from the definition of VOC, the rule change could have a small, positive economic impact on certain facilities that use the excluded compounds.

10. Effect on small business (initial regulatory flexibility analysis):

The changes proposed in this rule are not expected to have an adverse economic impact on businesses, including small businesses. Small businesses are usually not major sources for purposes of the major source air pollution control construction permit program (PSD program) because they tend not to have large amounts of emissions. Since the Department is already implementing the PSD program, as required by U.S. EPA, the consistency changes being proposed in this rule will not have any additional economic impacts.

2. Twenty-four hour maximum 2 micrograms per cubic meter

SECTION 5. NR 404.05 (3) (intro.) is amended to read:

NR 404.05 (3) (intro.) CLASS II INCREMENTS. In any area of this state classified under the aet Act as a class II area, the ambient air increments ~~of particulate matter measured as for~~ PM₁₀, PM_{2.5}, sulfur dioxide, and nitrogen dioxide may not exceed the following amounts:

SECTION 6. NR 404.05 (3) (am) is created to read:

NR 404.05 (3) (am) *PM_{2.5}*.

1. Annual arithmetic mean 4 micrograms per cubic meter
2. Twenty-four hour maximum 9 micrograms per cubic meter

SECTION 7. NR 404.05 (4) (intro.) is amended to read:

NR 404.05 (4) (intro.) CLASS III INCREMENTS. In any area of this state classified under the aet Act as a class III area, the ambient air increments ~~of particulate matter measured as for~~ PM₁₀, PM_{2.5}, sulfur dioxide, and nitrogen dioxide may not exceed the following amounts:

SECTION 8. NR 404.05 (4) (am) is created to read:

NR 404.05 (4) (am) *PM_{2.5}*.

1. Annual arithmetic mean 8 micrograms per cubic meter
2. Twenty-four hour maximum 18 micrograms per cubic meter

SECTION 9. NR 405.02 (3), (21) (a), and (21m) (a) are amended to read:

NR 405.02 (3) “Baseline area” means any intrastate area, and every part thereof, designated as attainment or unclassifiable under section 107 (d) (1) ~~(D) or (E)~~ (A) (ii) or (iii) of the Act (42 USC 7407 (d) (1) ~~(D) or (E)~~ (A) (ii) or (iii)) in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established equal to or greater than 1 $\mu\text{g}/\text{m}^3$ (annual average) ~~of the air contaminant for which the minor source baseline date is established~~ for SO₂, NO₂, or PM₁₀, or equal to or greater than 0.3 $\mu\text{g}/\text{m}^3$ (annual average) for PM_{2.5}. Area redesignations under section 107 (d) (1) ~~(D) or (E)~~ (A) (ii) or (iii) of the Act (42 USC 7407 (d) (1) (A) (ii) or (iii)) cannot intersect or be smaller than the area of impact of any major stationary source or major modification which either establishes a minor source baseline date or is subject to this chapter.

(21) (a) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds or nitrogen oxides shall be considered significant for ozone.

(21m) (a) In the case of ~~particulate matter~~ PM₁₀ and sulfur dioxide, January 6, 1975.

SECTION 10. NR 405.02 (21m) (c) is created to read:

NR 405.02 (21m) (c) In the case of PM_{2.5}, October 20, 2010.

SECTION 11. NR 405.02 (22) (b) and (22m) (a) 1. and (b) 1. are amended to read:

NR 405.02 (22) (b) A major source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone.

(22m) (a) 1. In the case of ~~particulate matter~~ PM₁₀ and sulfur dioxide, August 7, 1977.

(b) 1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107 (d) (1) ~~(D) or (E)~~ (A) (ii) or (iii) of the Act (42 USC 7407(d)(1)~~(D) or (E)~~ (A)(ii) or (iii)) for the air contaminant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166.

SECTION 12. NR 405.02 (22m) (a) 3. is created to read:

NR 405.02 (22m) (a) 3. In the case of PM_{2.5}, October 20, 2011.

SECTION 13. NR 405.02 (27) (a) 6. is amended to read:

NR 405.02 (27) (a) 6. Ozone: 40 tpy of volatile organic compounds or nitrogen oxides.

SECTION 14. NR 405.07 (8) (a) 3m. is amended to read:

NR 405.07 (8) (a) 3m. PM_{2.5} – ~~2.3~~ 0 μg/m³, ~~24 hour average~~.

SECTION 15. NR 405.07 (8) (a) 3m. (Note) is created to read:

NR 405.07 (8) (a) 3m. (Note) In accordance with *Sierra Club v. EPA*, 706 F.3d 428 (D.C. Cir. 2013), no exemption is available with regard to PM_{2.5}.

SECTION 16. NR 405.07 (8) (a) 5. (Note) is amended to read:

NR 405.07 (8) (a) 5. (Note) No de minimis air quality level is provided for ozone. However, any source with a net increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to regulation under this chapter would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

SECTION 17. NR 420.02 (8m), (26), (32), and (38m) are repealed.

SECTION 18. NR 420.02 (39) is amended to read:

NR 420.02 (39) “Vapor recovery system” or “vapor control system” ~~means~~ mean a system that gathers organic compound vapors released during the operation of any transfer, storage, or process equipment and processes the vapors so as to prevent their emission into the ambient air.

SECTION 19. NR 420.03 (4) (b) 3. is amended to read:

NR 420.03 (4) (b) 3. All gauging and sampling devices are ~~vapor-tight~~ vapor tight except when gauging or sampling is taking place.

SECTION 20. NR 420.04 (1) (b) 4. and (3) (c) 1. are amended to read:

NR 420.04 (1) (b) 4. All loading and vapor lines are equipped with fittings which make ~~vapor-tight~~ vapor tight connections and which close automatically when disconnected.

(3) (c) 1. vapor balance system with a ~~vapor-tight~~ vapor tight vapor return line from the storage tank to the delivery vessel and a system that will ensure the vapor line is connected before gasoline can be transferred into the storage tank.

SECTION 21. NR 420.045 is repealed.

SECTION 22. NR 425.035 is repealed.

SECTION 23. NR 439.06 (3) (i) is repealed.

SECTION 24. NR 484.05 (4) and (5) are repealed.

SECTION 25. NR 494.04 is repealed.

SECTION 26. 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 27. BOARD ADOPTION. 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

By _____
Cathy Stepp, Secretary

(SEAL)