

NATURAL RESOURCES BOARD AGENDA ITEM

SUBJECT:

Hearing authorization for Order AM-34-07, proposed rules affecting NR 405, 407 and 408 pertaining to the incorporation changes in definition of major sources in federal regulations.

FOR: OCTOBER 2007 BOARD MEETING

TO BE PRESENTED BY: Jeff Hanson, Chief - Permits and Stationary Source Modeling Section

SUMMARY:

The Bureau of Air Management proposes to proceed with the development of rules to amend the definition of "major stationary source" in s. NR 405.02(22)(a)., such that ethanol production facilities that produce ethanol by natural fermentation are not included in the Chemical Processing Plant category. The other changes are to ss. NR 405.07(4)(a)20., 407.02(4)(b) and 408.02(21)(e), which will state that fugitive emissions from these ethanol production facilities will no longer be included in determining whether a facility is considered a major source. This rule package is initiated because of similar federal rule changes published May 1, 2007. Groups likely to be impacted or interested in the issue include, but are not limited to, ethanol production facilities and local citizens.

In addition, a federal rule clarifying two elements of the major source permitting program was promulgated on January 6, 2004. The first is the addition of a definition of Replacement Unit and the second clarifies a component of the emission calculation used when determining emissions under a plantwide applicability limitation (PAL). US EPA has required permitting agencies to add these elements during the next reopening of the permit program regulations. The groups likely to be impacted or interested in the issue include, but are not limited to, major sources of emissions in a variety of industries.

RECOMMENDATION: That the Board authorize the Department to hold hearings on Order AM-34-07.

LIST OF ATTACHED MATERIALS:

- | | | | | | |
|----|-------------------------------------|---|-----|-------------------------------------|----------|
| No | <input type="checkbox"/> | Fiscal Estimate Required | Yes | <input checked="" type="checkbox"/> | Attached |
| No | <input checked="" type="checkbox"/> | Environmental Assessment or Impact Statement Required | Yes | <input type="checkbox"/> | Attached |
| No | <input type="checkbox"/> | Background Memo | Yes | <input checked="" type="checkbox"/> | Attached |

APPROVED:

/S/ Kevin Kessler
Bureau Director, Kevin Kessler

9 / 24 / 07
Date

/S/ Al Shea
Administrator, Al Shea

9 / 24 / 07
Date

/S/ Matthew J Frank
Secretary, Matthew J. Frank

10 / 2 / 07
Date

- | | | |
|------------------------|-----------------------|---------------------|
| cc: Laurie Ross - AD/5 | K. Kessler - AM/7 | Paul Yeung- AM/7 |
| Carol Turner - LS/5 | R. Eckdale - AM/7 (6) | Marcia Penner- LS/5 |

DATE: September 24, 2007 FILE REF: 4533

TO: Natural Resources Board Members

FROM: Matt Frank, Secretary

SUBJECT: Background Memo on Public Hearing Authorization for Order AM-34-07, Pertaining to the Revision of chs. NR 405, 407 & 408, Wis. Adm. Code, Incorporating of New and Existing Changes in Federal Definitions

Why is this rule being proposed?

This rule is being proposed to amend portions of our rules to make incorporate federal rule changes per s. 285.11(16), Wis. Stats.

What event or action triggered the proposal?

The revisions are based on changes in federal permitting regulations and are needed so the Department can retain US EPA's approval of our air permit programs.

On May 1, 2007, US EPA published rules that remove facilities that produce ethanol for industrial purposes from the classification as a chemical processing plant. Under s. 285.11(16), Stats., DNR must promulgate rules consistent with but no more restrictive than the federal Clean Air Act, that specify which sources are classified as "major sources".

In addition, a federal rule clarifying two elements of the major source permitting program was promulgated on January 6, 2004. Because the federal rule changes are clarifications, US EPA allowed permitting authorities to include these changes at the next opportunity to revise major source permitting programs.

What issues are addressed by this rule?

Department regulations are being updated because of changes in federal regulations.

Summary of the Rules

The Bureau of Air Management proposes to amend the definition of "major stationary source" in s. NR 405.02(22)(a)., such that ethanol production facilities that produce ethanol by natural fermentation, (those included in NAICS codes 325193 or 312140), are not included in the Chemical Processing Plant category. The other changes are to ss. NR 405.07(4)(a)20., 407.02(4)(b) and 408.02(21)(e), which will state that fugitive emissions from these ethanol production facilities will no longer be included in determining whether a facility is considered a major source. This rule package is initiated because of federal rule changes published May 1, 2007.

A federal rule clarifying two elements of the major source permitting program was promulgated on January 6, 2004. The first is the addition of a definition of Replacement Unit and the second clarifies a component of the emission calculation used when determining emissions under a plantwide applicability

limitation (PAL). US EPA has required permitting agencies to add these elements during the next reopening of the permit program regulations.

How does this proposal affect existing policy?

Currently fuel ethanol production facilities are considered chemical processing plants. As such, if potential emissions of any criteria pollutant exceeds 100 tons per year, the facility is considered to be a major source under the Prevention of Significant Deterioration (PSD) Program. Moreover, the fugitive emissions from such a facility are included when the major source determinations are made for these plants. After this proposed rule change, the major source applicability threshold will be 250 tons per year and the fugitive emissions will not be included when the major source determinations are made for these plants under the PSD program. The change will not have an impact on the Title V operation permit program's or the nonattainment area new source review program's major source emission level; however, those programs will no longer require fugitive emissions to be included as a part of the calculation of emissions as well.

The inclusion of a definition of replacement unit and the plantwide applicability limitation (PAL) emission calculation clarification within ch. NR 405 and 408 will not impact existing policies since the term is currently not defined in those chapters. The addition of a replacement unit definition will clarify the use of the term as it applies to emission unit replacement in determining how emissions are calculated in determining applicability of the chapters to plant modifications. The proposed PAL related change will clarify the calculation of allowable emission rates under a PAL.

Has the Board dealt with these issues before? If so, when and why?

The chapters that are being revised have had numerous changes in the past. Most changes are made to stay current and consistent with federal changes and to add clarity to existing regulations.

Who will be impacted by the proposed rule? How will they be impacted?

The groups likely to be impacted or interested in the ethanol plant matter include, but are not limited to, ethanol production facilities and local citizens. Groups likely to be impacted or interested in the Federal rule permit rule clarifications include, but are not limited to, major sources of emissions in a variety of industries.

As a result of the ethanol rule, ethanol plants with greater emissions potential and likely greater capacities will not be considered PSD major sources and therefore not required to meet more restrictive emission limits and requirements. Moreover, since fugitive emissions are not included in the major source applicability determination, more process emissions can be allowed before exceeding the major source thresholds for the Title V and non-attainment area permitting programs. Many of the ethanol plants face significant citizen oppositions during the permitting phase. Citizens may raise more concerns on ethanol plants as they may perceive this rule as allowing larger facilities without more restrictive requirements.

The addition of a replacement unit definition will clarify the use of the term as it applies to replacement of emission units when determining how emissions are calculated while assessing the applicability of the federal construction permit programs to plant modifications. The proposed plantwide applicability limitation related change clarifies the calculation of allowable emission rates under the limitation.

Information on environmental analysis.

Under s. NR 150.03(3), Wis. Adm. Code, an environmental analysis is not needed because this proposal is considered a Type III Action. A Type III Action is one that normally does not have the potential to cause significant environmental effects, normally does not significantly affect energy usage and normally does not involve unresolved conflicts in the use of available resources.

Small business analysis.

Ethanol plants near the major source thresholds are generally not small businesses under 227.11, Wis. Stats. Ethanol plants with those levels of emissions will have revenues over 5 million dollars per year.

The clarifications of plantwide applicability limitation and replacement unit definitions will not affect small business as these are clarifications and not invoking new requirements on major sources.

The proposed rule is not expected to have a significant economic impact on small businesses.

Fiscal Estimate — 2007 Session

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Updated	LRB Number	Amendment Number if Applicable
<input type="checkbox"/> Corrected	<input type="checkbox"/> Supplemental	Bill Number	Administrative Rule Number NR 405, 407, 408

Subject

Proposed rule package on Air items to make them consistent with federal regulations.

Fiscal Effect

State: No State Fiscal Effect
 Indeterminate

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- | | |
|--|---|
| <input type="checkbox"/> Increase Existing Appropriation | <input type="checkbox"/> Increase Existing Revenues |
| <input type="checkbox"/> Decrease Existing Appropriation | <input type="checkbox"/> Decrease Existing Revenues |
| <input type="checkbox"/> Create New Appropriation | |

Increase Costs — May be possible to absorb within agency's budget.

Yes No

Decrease Costs

Local: No Local Government Costs

Indeterminate

1. Increase Costs
 Permissive Mandatory
2. Decrease Costs
 Permissive Mandatory

3. Increase Revenues
 Permissive Mandatory
4. Decrease Revenues
 Permissive Mandatory

5. Types of Local Governmental Units Affected:

- Towns Villages Cities
 Counties Others _____
 School Districts WTCS Districts

Fund Sources Affected

- GPR FED PRO PRS SEG SEG-S

Affected Chapter 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

Rule Summary:

The Department proposes rules to amend the definition of "major stationary source" in s. NR 405.02(22)(a), such that ethanol production facilities that produce ethanol by natural fermentation are not included in the Chemical Processing Plant category. The other changes are to ss. NR 405.07(4)(a)20., 407.02(4)(b) and 408.02(21)(e), which will state that fugitive emissions from these ethanol production facilities will no longer be included in determining whether a facility is considered a major source.

In addition, a federal rule clarifying two elements of the major source permitting program was promulgated on January 6, 2004. The first is the addition of a definition of Replacement Unit and the second clarifies a component of the emission calculation used when determining emissions under a plantwide applicability limitation (PAL). US EPA has required permitting agencies to add these elements during the next reopening of the permit program regulations.

Fiscal Summary:

The proposed changes are being done so that the Department's regulations are updated to reflect the current federal regulations. These are definition changes with no fiscal impact.

Long-Range Fiscal Implications

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
/S/ Joe Polasek	266-2794	09-21-07

Fiscal Estimate Worksheet — 2007 Session

Detailed Estimate of Annual Fiscal Effect

- Original Updated
 Corrected Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 405, 407, 408

Subject

Proposed rule package on Air items to make them consistent with federal regulations.

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

Annualized Costs:	Annualized Fiscal Impact on State Funds from:	
A. State Costs by Category	Increased Costs	Decreased Costs
State Operations — Salaries and Fringes	\$	\$ -
(FTE Position Changes)	(FTE)	(FTE)
State Operations — Other Costs		-
Local Assistance		-
Aids to Individuals or Organizations		-
Total State Costs by Category	\$	\$ -
B. State Costs by Source of Funds	Increased Costs	Decreased Costs
GPR	\$	\$ -
FED		-
PRO/PRS		-
SEG/SEG-S		-
State Revenues	Increased Revenue	Decreased Revenue
GPR Taxes	\$	\$ -
GPR Earned		-
FED		-
PRO/PRS		-
SEG/SEG-S		-
Total State Revenues	\$	\$ -

Net Annualized Fiscal Impact

	<u>State</u>	<u>Local</u>
Net Change in Costs	\$ _____	\$ _____
Net Change in Revenues	\$ _____	\$ _____

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
/S/ Jow Polasek	266-2794	09-21-07

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

The Wisconsin Natural Resources Board proposes an order to **amend** NR 405.02(12)(b) and (22)(a)1., 405.07(4)(a)20., 405.18(6)(e), 407.02(4)(b)20., 408.02(13)(b) and (21)(e)5. and 408.11(6)(e) and to **create** NR 405.02(25k), 408.02(29s) and 484.05(17) relating to major source definition and affecting small business.

AM-34-07

Summary Prepared by the Department of Natural Resources

1. **Statute interpreted:** Sections 227.11(2)(a), 227.14(1m)(b), 285.11(1) and (16), Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.
2. **Statutory authority:** Sections 227.11(2)(a) and 285.11(1) and (16), Stats.
3. **Explanation of agency authority:**

Section 227.11(2)(a), Stats., gives state agencies general rulemaking authority. Section 227.14(1m)(b), Stats., allows the Department to use the format of federal regulations in preparing a proposed rule if it determines that all or part of a state environmental regulatory program is to be administered according to standards, requirements or methods which are similar to standards, requirements or methods specified for all or part of a federal environmental program. Section 285.11(1), Stats., gives the Department authority to promulgate rules consistent with ch. 285, Stats. Section 285.11(16), Stats., requires the Department to 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.

4. **Related statute or rule:**

These rules relate directly to the permitting of activities that result in air emissions at major stationary sources. The consent of the Attorney General and the Revisor of Statutes will be requested for the incorporation by reference of source classification codes in ch. NR 484.

5. **Plain language analysis:**

The proposed rules contained in this order reflect changes made by the United States Environmental Protection Agency (EPA) in their regulations regarding the definition of a major stationary source in the air permit programs. The Department needs to make this change in order to retain EPA approval of Wisconsin's air permit programs.

On May 1, 2007, EPA published federal regulations that specifically excluded ethanol production facilities that produce ethanol by natural fermentation from the Chemical Processing Plant category in the Prevention of Significant Deterioration (PSD) program. In the same federal rule package EPA stated that fugitive emissions from these ethanol production facilities would no longer be included in determining whether a facility is considered a major source in the PSD, Title V operation permit and nonattainment area permit review programs.

Currently fuel ethanol production facilities are considered as a chemical processing plant, which is one of the major stationary source categories under federal regulations. As such, if the potential to emit any of the criteria pollutants exceeds 100 tons per year, the facility is considered to be a major source under the PSD Program. Moreover, the fugitive emissions from such a facility are included when the major source determinations are made for these plants. After this proposed rule change, the major source applicability threshold for ethanol plants will be 250 tons per year and the fugitive emissions will not be included when the major source determinations are made for these plants under the PSD program. The change will not have an impact on the Title V operation permit program's or the nonattainment area new source review program's major source emission level; however, it will no longer require fugitive emissions to be included as a part of the calculation of emissions from ethanol plants.

The inclusion of a definition of replacement unit and the plantwide applicability limitation (PAL) emission calculation clarification within ch. NR 405 and 408 will not impact existing policies since the term is currently not defined in those chapters. The addition of a replacement unit definition will clarify the use of the term as it applies to emission unit replacement in determining how emissions are calculated in determining applicability of the chapters to plant modifications. The proposed PAL related change will clarify the calculation of allowable emission rates under a PAL.

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

The proposed rule will make state regulations similar to or the same as the federal regulations and to clarify other state requirements.

7. Comparison with similar rules in adjacent states:

The proposed rule is based on the federal rule changes. The adjacent states will all be implementing the federal rule changes.

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

The proposed rule is based on the federal rule changes. Information on the federal rule changes are obtained from federal registers published on January 6, 2004 and May 1, 2007.

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

An analysis of the effect of the proposed rules on small business was not performed since ethanol plants currently existing in the State that operate near the major source thresholds are not small businesses under 227.11, Stats. Ethanol plants with those levels of emissions will have revenues over 5 million dollars per year. Preparation of an economic impact report has not been requested.

10. Effect on small business:

These rules should not have a significant economic impact on small businesses because ethanol plants do not meet the definition of a small business.

The inclusion of a definition of replacement unit and the PAL emission calculation clarification within

chs. NR 405 and 408 will not impact small business because the purpose of the inclusion is to clarify existing regulations for major sources.

11. Agency contact person:

Jeffrey Hanson, P.O. Box 7921, Madison, WI 53707, Telephone number: (608) 266-6876; e-mail address: jeffreyc.hanson@wisconsin.gov

12. Place where comments are to be submitted and deadline for submission:

Written comments may be submitted at the public hearings, by regular mail, fax or email to:

Jeffrey Hanson
Department of Natural Resources
Bureau of Air Management
PO Box 7921
Madison WI 53707
Fax: (608) 267-0560
jeffreyc.hanson@wisconsin.gov

Written comments may also be submitted to the Department using the Wisconsin Administrative Rules Internet Web site at <http://adminrules.wisconsin.gov>.

Hearing dates and submission deadline are to be determined.

The consent of the Attorney General and the Revisor of Statutes will be requested for the incorporation by reference of new test methods in ch. NR 484.

SECTION 1. NR 405.02(12)(b) and (22)(a)1. are amended to read:

NR 405.02(12)(b) An existing emissions unit is any emissions unit that does not meet the requirements in par. (a). Notwithstanding par. (a), a replacement unit, as defined in sub. (25k), is an existing emissions unit.

(22)(a)1. Any of the following stationary sources of air contaminants which emits, or has the potential to emit, 100 tons per year or more of any air contaminant subject to regulation under the ~~act~~ Act:

Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries,

sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation, as described by the 6-digit code of 312140 or 325193 in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05(17)), fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants.

SECTION 2. NR 405.02(25k) is created to read:

NR 405.02(25k) "Replacement unit" means an emissions unit for which all the criteria listed in pars. (a) to (d) are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

(a) The emissions unit is a reconstructed unit within the meaning of s. NR 400.02(130), or the emissions unit completely takes the place of an existing emissions unit.

(b) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

(c) The replacement does not change any of the basic design parameters of the process line.

(d) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

SECTION 3. NR 405.07(4)(a)20. is amended to read:

NR 405.07(4)(a)20. Chemical process plants. The chemical processing plants category does not include ethanol production facilities that produce ethanol by natural fermentation, as described by the 6-

digit code of 312140 or 325193 in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05(17).

SECTION 4. NR 405.18(6)(e) is amended to read:

NR 405.18(6)(e) ~~Emissions from units on~~ For newly constructed units, which do not include modifications to existing units, which began actual construction ~~began~~ after the 24-month period, in lieu of adding the baseline actual emissions established under par. (b), the emissions shall be added to the PAL level in an amount equal to the potential to emit of the units.

SECTION 5. NR 407.02(4)(b)20. is amended to read:

NR 407.02(4)(b)20. Chemical process plants. The chemical processing plants category does not include ethanol production facilities that produce ethanol by natural fermentation, as described by the 6-digit code of 312140 or 325193 in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05(17).

SECTION 6. NR 408.02(13)(b) and (21)(e)5. are amended to read:

NR 408.02(13)(b) An existing emissions unit is any emissions unit that does not meet the requirements in par. (a). Notwithstanding par. (a), a replacement unit, as defined in sub. (29s), is an existing emissions unit.

(21)(e)5. Chemical process plants. The chemical processing plants category does not include ethanol production facilities that produce ethanol by natural fermentation, as described by the 6-digit code of 312140 or 325193 in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05(17).

SECTION 7. NR 408.02(29s) is created to read:

NR 408.02(29s) "Replacement unit" means an emissions unit for which all the criteria listed in pars. (a) to (d) are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

(a) The emissions unit is a reconstructed unit within the meaning of s. NR 400.02(130), or the emissions unit completely takes the place of an existing emissions unit.

(b) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

(c) The replacement does not change any of the basic design parameters of the process line.

(d) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

SECTION 8. NR 408.11(6)(e) is amended to read:

NR 408.11(6)(e) ~~Emissions from units on~~ For newly constructed units, which do not include modifications to existing units, which began actual construction ~~began~~ after the 24-month period, in lieu of adding the baseline actual emissions established under par. (b), the emissions shall be added to the PAL level in an amount equal to the potential to emit of the units.

SECTION 9. NR 484.05(17) is created to read:

	Document Reference	Document Title	Incorporated by Reference For
	NR 484.05		
(17)	NTIS Order Nos.: printed - PB2007-100002 CD-ROM - PB2007-500023	<u>North American Industry Classification System United States, 2007</u>	NR 405.02(22)(a)1. NR 405.07(4)(a)20. NR 407.02(4)(b)20. NR 408.02(21)(e)5.

SECTION 10. 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 11. 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 _____
Matthew J. Frank, Secretary

(SEAL)