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

The Wisconsin Natural Resources Board adopts an order to **repeal** NR 405.02(1)(d), (24m), (27)(a)8., 17 and 18 and 408.02(27); **amend** NR 405.01(1) and (2), 405.02(1)(intro.) and (a) to (c), (8), (11), and (12), 408.02(1), (4), (5), (11), (13) and (21)(a)1.(intro.) and 484.04(21); to **repeal and recreate** NR 405.02(21) and (24) and 408.02(20) and (23) and to **create** NR 405.02(2m), (11c), (11e), (11j), (20m), (24j), (25b), (25d) to (25f), (25i) and (27m), 405.025, 405.16(3) and (4), 405.18, 408.02(2m), (11e), (11m), (11s), (13m), (24m), (25s), (28e), (28j), (28m), (28s), (29m) and (32m), 408.025, 408.06(10), 408.10(5) and (6), 408.11 and 484.04(27m) relating to changes to chs. NR 405 and 408 for incorporation of federal changes to the air permitting program.

AM-06-04

**Statutes Interpreted:** ss. 285.11(6), 285.60 and 285.61 Stats. The State Implementation Plan developed under that provision is revised.

Statutory Authority: ss. 227.11(2)(a), 227.14(1m)(b), 285.11(1), (6) and (17) and 285.65(14), Stats.

## **Explanation of Agency Authority**

Section 227.11(2)(a) gives 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) gives the Department authority to promulgate rules consistent with ch. 285, Stats. Section 285.11(6) gives the Department the authority to develop a state implementation plan for the control of air pollution. Section 285.11(17) gives the Department authority to promulgate rules to modify the meaning of the term "modification". Section 285.65(14) gives the Department authority set source specific conditions in permits.

#### **Related Statute or Rule**

These rules relate directly to regulations for the permitting of activities that result in air emissions at major stationary sources in chapters NR 405 and 408. The consent of the Attorney General and the Revisor of Statutes has been requested for the incorporation by reference of new test methods in ch. NR 484.

## Plain Language Analysis

On December 31, 2002, the United States Environmental Protection Agency (EPA) published regulations that significantly change the way new and modified sources of air pollution are permitted. Wisconsin has three years in which to either adopt the federal rules or submit "different but equivalent regulations" as a State Implementation Plan revision.

Since promulgation of these federal rules, the Department has evaluated the rules, established a stakeholder group to advise the Department and, working with the stakeholder group, developed a proposal for revising Wisconsin's New Source Review (NSR) regulations. Through these meetings, the Department has attempted to develop rule revisions for implementing the December 31, 2002, changes to the federal regulations in Wisconsin that would meets all of the following goals:

- 1. Reduces the administrative burden of the NSR program on both permittees and the Department.
- 2. Is as effective as the current rule in protecting the environment and in allowing for public input on proposed projects.
- 3. Meets the Department's statutory obligations.
- 4. Is likely to be approved by USEPA.

The Department worked extensively with external industrial stakeholders to reach agreement on rule revisions that meet the goals stated above, but consensus was not reached. As the federal rule revisions were being contested in the D.C. Circuit Court of Appeals, a decision was made to halt discussions until the court ruled on the federal changes. The Court made its ruling on June 25, 2005 upholding portions of the federal rule, vacating portions of the federal rule and remanding a portion of the federal rule. As a result, the Department has developed proposed rule revisions that mirror those that the Court upheld so that the State's program will be revised by the date required by EPA.

# Summary of, and Comparison with, Existing or Proposed Federal Regulations

The EPA NSR rule revisions provide exclusions from the NSR process for modifications to existing facilities that occur on equipment that currently has emission control in place or will result in actual emission increases that are less than predefined significance thresholds. EPA had established four primary mechanisms to provide exclusions from the process: the Clean Unit Test, Plant-wide Applicability Limits, Pollution Control Projects and the "Past Actual to Future Actual Emissions" Test. On June 25, 2005, the D.C. Circuit Court of Appeals ruled that the Clean Unit Test and Pollution Control Project exclusion were illegal and vacated those provisions. Those program elements that the Court upheld are discussed below.

Plant-wide Applicability Limits (PALs): The Federal NSR changes provide an exemption from the NSR process for any project that is conducted at a facility that has its emissions restricted by a Plant-wide Applicability Limit (PAL). A PAL is a voluntary cap on plant emissions which is based upon actual plant emissions over a consecutive 24-month period in the ten years prior to the issuing of the PAL. Any project at a facility that is covered by a PAL is exempt from NSR provided the level of the PAL will not be exceeded as a result of the project. PALs are established on a pollutant by pollutant basis. Should a facility require an increase in the PAL level, an increase is allowed after a traditional NSR process is completed for the emissions units affected by the project. The term of a PAL is 10 years, after which it can be renewed at the election of the owner or operator, at a level dependent on emission levels during the term of the PAL, but not higher than the original PAL level.

Past Actual to Future Actual Emissions Test: The Federal NSR revisions provide additional options for determining the impact on emissions resulting from completion of a project. The prior Federal NSR regulation required that the previous two-year's actual emissions be compared to future potential emissions of equipment impacted by a project to determine whether the change in emissions is a significant increase (past actual to future potential test). Electric utility steam generating units may, as an alternative to the past actual to future potential test, compare actual emissions from any 24-consectutive month period in previous 5 years to a projected actual emissions rate in order to determine whether a significant increase would occur (past actual to future actual test). The Federal NSR revisions have made the past actual to future actual test available to all sources as an alternative to the past actual to future potential test; however new emissions units must use the past actual to future potential test.

When using the past actual to future actual test under the Federal NSR revisions, past actual emissions are

determined by using 24-consectutive months of emissions data from the 10 years prior to the commencement of modification or replacement of an emissions unit. The same baseline period must be used for each emissions unit that is modified or replaced for the pollutant being examined; however, differing baseline periods may be used for different pollutants.

Actual emissions are projected for a period of 5 years when using the past actual to future actual test when the capacity of the affected units is not changed by the project, or 10 years if capacity is increased. Emissions that are not associated with the project, such as those due to economic growth, are excluded from the projected actual emission rate as well as those resulting from start-up, shut down or malfunction. Potential emission rates are used when assessing the emission increase that is associated with the installation of a new emissions unit. EPA had required reporting of emission projections to the Department in instances where there is a reasonable possibility that a significant increase could occur as a result of a change, but did not set forth criteria that defines "reasonable possibility". In ruling on these rule changes, the D.C. Circuit Court of Appeals remanded this portion of the rule back to EPA for further clarification. While EPA has yet to act on this remand, the Department has included clear recordkeeping and reporting requirements in instances where there is a reasonable possibility that a significant emission increase could occur.

# **Comparison with Rules in Adjacent States**

On December 31, 2002, EPA published regulations that significantly changed the way new and modified sources of air pollution are permitted. Because Wisconsin has had its NSR regulations approved into its State Implementation Plan, the state has three years in which to either adopt the federal rules or submit "different but equivalent regulations" as a State Implementation Plan revision. EPA requires that each State Implementation Plan include the minimum program elements of the federal program: baseline actual emission calculations, projected actual emission calculations and plant-wide applicability limits.

Michigan, Illinois and Minnesota have not had their attainment area NSR programs approved into their own State Implementation Plans. As a result these states, which have been delegated the authority to issue PSD permits by EPA, have been required to implement the federal NSR rule revisions since March 3, 2003. Illinois' nonattainment NSR program applicable to its nonattainment area that includes Chicago is within its State Implementation Plan and Illinois has yet to submit a revised program to EPA for approval.

Indiana's NSR program has been approved into its State Implementation Plan. Indiana has adopted the federal rule revisions into its regulations in June 2004, has submitted those changes as a revision to its State Implementation Plan to US EPA and is awaiting approval.

Iowa also has its NSR program approved into its State Implementation Plan. Iowa had undergone a stakeholder process in an effort to review EPA's rule changes and determine the rule revisions that are best for the State of Iowa. In September 2005, Iowa suspended its efforts to revise its State Implementation Plan on the premise that the future is not yet clear as to what program elements are required. Iowa will not meet the January 2006 deadline for this submittal to EPA. As of December 26, 2005, it is unknown how US EPA will react to Iowa's suspension of its program revisions.

# Summary of Factual Data and Analytical Methodologies:

Air pollution control programs that have had their NSR programs approved into their state implementation plans are required to submit revisions to their plans that incorporate either the Federal NSR rule revisions or a version that is at least as effective as the Federal NSR rule changes. However, each state

implementation plan revision must include the primary elements of the Federal NSR rule revisions that were upheld by the D.C. Circuit Court of Appeals (PALs and the Past Actual to Future Actual Test). Thus air pollution control programs, such as Wisconsin DNR, have limited discretion in the approach they use in preparing the state implementation plan revision. The revisions to chapters NR 405 and 408 are based upon the changes that have been made by US EPA and upheld by the D.C. Circuit Court of Appeals.

# Analysis and Supporting Documents Used to Determine Effect on Small Business or in Preparation of Economic Impact Report

These rule changes provide for exclusions from the PSD and NSR air permitting programs. As a result, greater flexibility is provided to the private sector to manage their affairs without delays that might have previously been incurred while obtaining a PSD or NSR air permit. These rules will result in less environmental permitting costs to be incurred by the private sector as compared to the previous PSD and NSR programs.

#### **Effect on Small Business:**

It is unlikely that small businesses will be impacted by these rule revisions. These rule revisions primarily will affect large, major sources of air emissions, most of which are not small business. The Department has held several public meetings in regard to these rule changes that were attended by external stakeholders, including representatives of the Department of Commerce's Small Business Assistance Program. Any concerns raised by small business representatives were similar to those of larger entities and addressed to the best of the Department's ability.

#### **Agency Contact Person**

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SECTION 1. NR 405.01(1) and (2) are amended to read:

NR 405.01(1) APPLICABILITY. The provisions of this chapter apply to all the construction of any new major stationary sources and all source or any project at an existing major modifications to major sources stationary source located in areas an area designated as attainment or unclassified unclassifiable.

(2) PURPOSE. The purpose of this chapter is to establish, pursuant to s. 285.60, Stats., the requirements and procedures for reviewing and issuing air pollution control construction permits to all any new major stationary sources and all major modifications to any project at an existing major sources stationary source located in areas an area designated as attainment or unclassified unclassifiable.

SECTION 2. NR 405.02 (1)(intro.) and (a) to (c) are amended to read:

NR 405.02(1) "Actual emissions" means the actual rate of emissions of an a regulated NSR air contaminant from an emissions unit, as determined in accordance with pars. (a) through (d) to (c), except that this definition does not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under s. NR 405.18. Instead, subs. (2m) and (25f) shall apply for those purposes.

- (a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the air contaminant during a 2-year-consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The department may shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- (b) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit unless reliable data are available which demonstrate that the actual emissions are different than the source-specific allowable emissions.
- (c) For any emissions unit other than an electric utility steam generating unit, which that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

SECTION 3. NR 405.02(1)(d) is repealed.

SECTION 4. NR 405.02(2m) is created to read:

NR 405.02(2m) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR air contaminant, as determined in accordance with pars. (a) to (d).

(a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the air contaminant during any consecutive

24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The department shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

- 1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns and malfunctions.
- 2. The average rate shall be adjusted downward to exclude any emissions in excess of an emission limitation that was legally enforceable during the consecutive 24-month period.
- 3. For a regulated NSR air contaminant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR air contaminant.
- 4. The average rate may not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for adjusting this amount if required by subd. 2.
- (b) For an existing emissions unit, other than an electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the air contaminant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or, the date a complete permit application is received by the department for a permit required under ch. NR 406 or for a permit revision under ch. NR 407, whichever is earlier, except that the 10-year period may not include any period earlier than November 15, 1990.
- 1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns and malfunctions.
  - 2. The average rate shall be adjusted downward to exclude any emissions in excess of an

emission limitation that was legally enforceable during the consecutive 24-month period.

- 3. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had the major stationary source been required to comply with the limitation during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR part 63, the baseline actual emissions need only be adjusted if the state has taken credit for the emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of s. NR 408.06(9).
- 4. For a regulated NSR air contaminant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR air contaminant.
- 5. The average rate may not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for adjusting this amount if required by subds. 2. and 3.
- (c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of the unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.
- (d) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in par. (a), for other existing emissions units in accordance with the procedures contained in par. (b), and for a new emissions unit, in accordance with the procedures contained in par. (c).

SECTION 5. NR 405.02(8) and (11) are amended to read:

NR 405.02(8) "Building, structure, facility or installation" or "facility, building, structure, equipment, vehicle or action" means all of the air contaminant emitting activities which emit or may emit a regulated NSR air contaminant, belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person. (or persons under common control), except the activities of any vessel. Air Regulated NSR air contaminant emitting activities shall be considered as part of the same industrial grouping if they are classified under the same 2-digit major group as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05.

(11) "Construction" means any physical change or change in the method of operation, (including fabrication, erection, installation, demolition, or modification of an emission unit), which would result in a change in actual emissions.

# SECTION 6. NR 405.02(11c), (11e) and (11j) are created to read:

NR 405.02(11c) "Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this chapter, to sample, condition if applicable, analyze and provide a record of emissions on a continuous basis.

(11e) "Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the air contaminant mass emissions rate in terms of mass per unit of time.

(11j) "Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and data availability requirements of this chapter to monitor process and control device operational parameters, and to record average operational parameter values on a continuous basis.

Note: Process and control device operational parameters include secondary voltages and electric currents, and other

information, such as gas flow rate, O<sub>2</sub> or CO<sub>2</sub> concentrations.

SECTION 7. NR 405.02(12) is amended to read:

NR 405.02(12) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any <u>regulated NSR</u> air contaminant—subject to <u>regulation under the Act</u>—and includes an electric utility steam generating unit. For purposes of this chapter, there are 2 types of emissions units <u>described as follows:</u>

(a) A new emissions unit is any emissions unit which is or will be newly constructed and which has existed for less than 2 years from the date the emissions unit first operated.

(b) An existing emissions unit is any emissions unit that does not meet the requirements in par. (a).

SECTION 8. NR 405.02(20m) is created to read:

NR 405.02(20m) "Lowest achievable emission rate" or "LAER" has the meaning given in s. NR 408.02(19).

SECTION 9. NR 405.02(21) and (24) are repealed and recreated to read:

NR 405.02(21) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR air contaminant and a significant net emissions increase of that air contaminant from the major stationary source.

- (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 shall be considered significant for ozone.
  - (b) A physical change or change in the method of operation does not include any of the following:

- 1. Routine maintenance, repair and replacement.
- 2. Use of an alternative fuel or raw material by reason of any order under sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (15 USC 791 to 798) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 USC 791a to 828c).
- 3. Use of an alternative fuel by reason of an order or rule under section 125 of the Act (42 USC 7425).
- 4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- 5. Use of an alternative fuel or raw material by a stationary source when one of the following applies:
- a. The source was capable of accommodating the alternative fuel or raw material before January 6, 1975, unless the change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to this chapter or ch. NR 406 or 408 or under an operation permit issued pursuant to ch. NR 407.
- b. The source is approved to use the alternative fuel or raw material under any permit issued under this chapter or ch. NR 406, 407 or 408.
- 6. An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to this chapter, ch. NR 406 or 408 or 40 CFR 52.21 or under an operation permit issued pursuant to ch. NR 407.
  - 7. Any change in ownership at a stationary source.
- 8. The installation, operation, cessation of operation or removal of a temporary clean coal technology demonstration project, provided that the project complies with both of the following:
  - a. The state implementation plan.

- b. Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- 9. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated air contaminant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
  - 10. The reactivation of a very clean coal-fired electric utility steam generating unit.
- (c) This definition does not apply with respect to a particular regulated NSR air contaminant when the major stationary source is complying with the requirements under s. NR 405.18 for a PAL for that air contaminant. Instead, the definition at s. NR 405.18(2)(e) shall apply.
- (24) (a) "Net emissions increase" means, with respect to any regulated NSR air contaminant emitted by a major stationary source, the amount by which the difference between the sum of emission increases and the sum of emission decreases of the following exceeds zero:
- 1. The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to the methods contained in s. NR 405.025.
- 2. Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subdivision shall be determined as provided in sub. (2m), except that sub. (2m)(a)3. and (b)4. do not apply.
- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the following:
  - 1. The date 5 years before construction on the particular change commences.
  - 2. The date that the increase from the particular change occurs.
  - (c) An increase or decrease in actual emissions is creditable only if all of the following are

#### satisfied:

- 1. It is contemporaneous with the particular change.
- 2. The department has not relied on it in issuing a permit for the source under this chapter and the permit is in effect when the increase in actual emissions from the particular change occurs.
- (d) An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides or particulate matter measured as  $PM_{10}$  which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- (e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (f) A decrease in actual emissions is creditable only to the extent that all of the following are satisfied:
- 1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
- 2. It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- 3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit an air contaminant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
  - (h) Subsection NR 405.02(1)(a) does not apply for determining creditable increases and decreases.

SECTION 10. NR 405.02(24j) is created to read:

NR 405.02(24j) "Plant-wide applicability limitation" or "PAL" means an emission limitation expressed in tons per year, for a regulated NSR air contaminant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with s. NR 405.18.

SECTION 11. NR 405.02(24m) is repealed.

SECTION 12. NR 405.02 (25b), (25d), (25e), (25f) and (25i) are created to read:

NR 405.02(25b) "Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters and to calculate and record the mass emissions rate on a continuous basis.

Note: Process and control device operational parameters include secondary voltages and electric currents, and other information, such as gas flow rate,  $O_2$  or  $CO_2$  concentrations.

(25d) "Prevention of significant deterioration program" or "PSD program" means a major source preconstruction permit program that has been approved by the administrator and incorporated into the state implementation plan to implement the requirements of 40 CFR 51.166. Any permit issued under a PSD program is a major NSR permit.

(25e) "Project" means a physical change in, or change in method of operation of, an existing major stationary source.

(25f)(a) "Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR air contaminant in any one of the 5 years following the date the unit resumes regular operation after the project. If the project involves increasing the emissions unit's design capacity or the emissions unit's potential to emit the regulated NSR air contaminant, and full utilization of the emissions unit's capacity or potential would result in a significant

net emissions increase, "projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR air contaminant in any one of the 10 years following the date the unit resumes regular operation after the project.

- (b) 1. In determining the projected actual emissions before beginning actual construction, the owner or operator of the major stationary source shall do all of the following:
- a. Consider all relevant information, including historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities and compliance plans under the approved state implementation plan.
- b. Include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns and malfunctions.
- 2. In determining the projected actual emissions before beginning actual construction, the owner or operator shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under sub. (2m) and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
- (c) In lieu of using the method in par. (b), the owner or operator may elect to use the emissions unit's potential to emit, in tons per year, as defined under sub. (25).
  - (25i) "Regulated NSR air contaminant" means all of the following:
- (a) Any air contaminant for which a national ambient air quality standard has been promulgated and any constituents or precursors for the air contaminants identified by the administrator, e.g., volatile organic compounds are precursors for ozone.
  - (b) Any air contaminant that is subject to any standard promulgated under section 111 of the Act.

- (c) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act.
- (d) Any air contaminant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act (42 USC 7412) or added to the list pursuant to section 112(b)(2) of the Act (42 USC 7412(b)(2)), which have not been delisted pursuant to section 112(b)(3) of the Act (42 USC 7412 (b)(3)), are not regulated NSR air contaminants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general air contaminant listed under section 108 of the Act (42 USC 7408).

SECTION 13. NR 405.02(27)(a)8., 17., and 18. are repealed.

SECTION 14. NR 405.02(27m) is created to read:

NR 405.02(27m) "Significant emissions increase" means, for a regulated NSR air contaminant, an increase in emissions that is equal to or greater than the value for that air contaminant listed in s. NR 405.02(27).

SECTION 15. NR 405.025 is created to read:

NR 405.025 **Methods for calculation of increases in actual emissions.** (1) For projects that only involve existing emissions units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall equal the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit involved in the project.

(2) For projects that only involve construction of a new emissions unit or units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall

equal the sum of the differences between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions for each unit before the project.

(3) For projects that involve existing and new emissions units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall equal the sum of the emissions increases for each emissions unit involved in the project, using the method specified in sub.

(1) for existing emissions units and the method in sub. (2) for new emissions units.

# SECTION 16. NR 405.16(3) and (4) are created to read:

NR 405.16(3) For a project involving existing emissions units at a major stationary source which does not have a PAL, in circumstances where the calculated difference between projected actual emissions using the method specified in s. NR 405.02(25f)(b)1. to 2., and baseline actual emissions does not exceed the level that is considered significant for the air contaminant, the owner or operator shall do the following as applicable:

- (a) Before beginning actual construction of the project, document and maintain a record of all of the following:
  - 1. A description of the project.
- Identification of the emissions unit or units whose emissions of a regulated NSR air contaminant could be affected by the project.
- 3. The calculation of the net emissions increase under s. NR 405.02(24)(a) that was used to determine that the project is not a major modification for any regulated NSR air contaminant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under s. NR 405.02(25f)(b)2. and an explanation why the amount was excluded, and any netting calculations, if applicable.
  - (b) If the emissions unit is an existing electric utility steam generating unit, before beginning actual

construction, provide a copy of the information in par. (a) to the department. Nothing in this paragraph shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.

- (c) If the owner or operator excludes emissions from the calculation of projected actual emissions under s. NR 405.02(25f)(b)2. and the difference between projected actual emissions and baseline actual emissions exceeds the level that is considered to be significant for the air contaminant prior to the exclusion of emissions from the calculation of projected actual emissions under s. NR 405.02(25f)(b)2., before beginning actual construction, provide a copy of the information in par. (a) to the department. Nothing in this paragraph shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.
- (d) Monitor the emissions of any regulated NSR air contaminant that could increase as a result of the project and that is emitted by any emissions unit identified in par. (a)2. and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR air contaminant at the emissions unit.
- (e) If the unit is an existing electric utility steam generating unit, submit a report to the department within 60 days after the end of each year during which records must be generated under par. (d) setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- (f) If the unit is an existing unit other than an electric utility steam generating unit, submit a report to the department if the annual emissions, in tons per year, from the project identified in par. (a), exceed the baseline actual emissions, as documented and maintained pursuant to par. (d) by a significant amount, as defined in s. NR 405.02(27), for that regulated NSR air contaminant, and if the emissions differ from the preconstruction projection that was provided to the department pursuant to par. (c). The report shall be

submitted to the department within 60 days after the end of the year. The report shall contain all of the following:

- 1. The name, address and telephone number of the major stationary source.
- 2. The annual emissions as calculated pursuant to par. (a)3.
- 3. Any other information that the owner or operator wishes to include in the report, e.g., an explanation as to why the emissions differ from the preconstruction projection.
- (4) The owner or operator of the source shall make the information required to be documented and maintained pursuant to sub. (3) available for inspection, upon request by the department or the general public.

#### SECTION 17. NR 405.18 is created to read:

NR 405.18 Plant-wide applicability limitations (PALs). (1) APPLICABILITY. (a) This section applies to any existing major stationary source which wishes to operate under a PAL. The department may approve the use of a PAL for any existing major stationary source if the source and its application for a PAL meets all of the requirements in this section.

- (b) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in this section and complies with the PAL permit:
  - 1. Is not a major modification for the PAL regulated air contaminant.
  - 2. Does not have to be approved under this chapter.
  - 3. Is not subject to the provisions in s. NR 405.16(2).
- (c) Except as provided under par. (b)3., a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations and work practice requirements that were established prior to the effective date of the PAL.

- (2) DEFINITIONS. The following definitions apply to terms used in this subsection for the purpose of developing and implementing PALs consistent with this section.
- (a) "Allowable emissions" has the meaning given in s. NR 405.02(2), except as this definition is modified according to both of the following:
- 1. The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.
- 2. An emissions unit's potential to emit shall be determined using the definition in s. NR 405.02(25), except that the words "or enforceable as a practical matter" should be added after "federally enforceable".
  - (b) "Major emissions unit" means either of the following:
- 1. Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL regulated air contaminant in an attainment area.
- 2. Any emissions unit that emits or has the potential to emit the PAL regulated air contaminant in an amount that is equal to or greater than the major source threshold for the PAL regulated air contaminant as defined by the Act for nonattainment areas.

Note: In accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

- (c) "PAL effective date" means the date of issuance of the PAL permit except that, in the case of an increased PAL, "PAL effective date" means the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL regulated air contaminant.
- (d) "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.
  - (e) "PAL major modification" means, notwithstanding s. NR 405.02(21) and (24), any physical

change in or change in the method of operation of the PAL source that causes it to emit the PAL regulated air contaminant at a level equal to or greater than the PAL.

- (f) "PAL permit" means the construction permit issued by the department that establishes a PAL for a major stationary source.
- (g) "PAL regulated air contaminant" means the regulated NSR air contaminant for which a PAL is established at a major stationary source.
- (h) "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL regulated air contaminant in an amount that is equal to or greater than the significant level, as defined in s. NR 405.02(27) or in the Act, whichever is lower, for that PAL regulated air contaminant, but less than the amount that would qualify the unit as a major emissions unit.
- (i) "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL regulated air contaminant in an amount less than the significant level for that PAL regulated air contaminant, as defined in s. NR 405.02(27) or in the Act, whichever is lower.
- (3) PERMIT APPLICATION REQUIREMENTS. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit all of the following information to the department for approval:
- (a) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations or work practices apply to each unit.
- (b) Calculations of the baseline actual emissions with supporting documentation. Baseline actual emissions shall include emissions associated not only with operation of the unit, but also emissions associated with startups, shutdowns and malfunctions.
- (c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month

rolling total for each month as required by sub. (13)(a).

- (4) GENERAL REQUIREMENTS FOR ESTABLISHING PALS. (a) The department may establish a PAL in a permit for a major stationary source if all of the following requirements are met:
- 1. The PAL imposes an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL. For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
- 2. The PAL is established in a PAL permit that meets the public participation requirements in sub. (5).
  - 3. The PAL permit contains all the requirements of sub. (7).
- 4. The PAL includes fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL regulated air contaminant at the major stationary source.
  - 5. The PAL shall regulate emissions of only one air contaminant.
  - 6. The PAL has a PAL effective period of 10 years.
- 7. The owner or operator of the major stationary source with a PAL complies with the monitoring, recordkeeping and reporting requirements provided in subs. (12) to (14) for each emissions unit under the PAL through the PAL effective period.
- 8. The department determines that the requirements of s. 285.63, Stats., and, if applicable, s. 285.64, Stats., are met.
  - (b) At no time during or after the PAL effective period are emissions reductions of a PAL regulated

air contaminant that occur during the PAL effective period creditable as decreases for purposes of offsets under ch. NR 408 unless the PAL is reduced by the amount of the emissions reductions and the reductions would be creditable in the absence of the PAL.

- (5) PUBLIC PARTICIPATION REQUIREMENTS FOR PALS. PALs shall be established, renewed or increased, through a procedure that is consistent with s. NR 405.15. This includes the requirement that the department provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The department shall address all material comments before taking final action on the permit.
- (6) SETTING THE 10-YEAR PAL LEVEL. (a) The PAL level shall be established as the sum of the baseline actual emissions, as defined in s. NR 405.02(2m), of the PAL regulated air contaminant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL regulated air contaminant under s. NR 405.02(27) or the Act, whichever is lower.
- (b) When establishing the PAL level, only one consecutive 24-month period may be used to determine the baseline actual emissions for all existing emissions units for each PAL regulated air contaminant.
- (c) A different consecutive 24-month period may be used for each different PAL regulated air contaminant.
- (d) Emissions associated with units that were permanently shut down after the 24-month period established under par. (b) shall be subtracted from the PAL level.
- (e) Emissions from units on which actual construction began after the 24-month period established under par. (b) shall be added to the PAL level in an amount equal to the potential to emit of the units.
- (f) The department shall specify a reduced PAL level in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirements that the department is aware of prior to issuance of the PAL permit.

Note: If the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO<sub>X</sub> to a new rule limit of 30 ppm, the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of the unit.

- (7) CONTENTS OF THE PAL PERMIT. The PAL permit shall contain all of the following information:
- (a) The PAL regulated air contaminant and the corresponding plant-wide emission limitation in tons per year.
  - (b) The PAL effective date and the expiration date of the PAL.
- (c) A specification that if the owner or operator applies to renew a PAL in accordance with sub.

  (10) before the end of the PAL effective period, the PAL does not expire at the end of the PAL effective period, but shall remain in effect until a revised PAL permit is issued by the department.
- (d) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.
- (e) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of sub. (9).
- (f) The calculation procedures that the owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by sub. (13)(a).
- (g) A requirement that the owner or operator monitor all emissions units in accordance with the provisions under sub. (12).
- (h) A requirement to retain the records required under sub. (13) on site. Records may be retained in an electronic format.
  - (i) A requirement to submit the reports required under sub. (14) by the required deadlines.
  - (j) Any other requirements that the department deems necessary to implement and enforce the

- (8) PAL EFFECTIVE PERIOD AND REOPENING OF THE PAL PERMIT. (a) PAL effective period. The department shall specify a PAL effective period of 10 years.
- (b) *Reopening of the PAL permit.* 1. During the PAL effective period, the department shall reopen and revise the PAL permit to do any of the following:
- a. Correct typographical errors in the PAL permit or correct calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.
- b. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under ch. NR 408.
  - c. Revise the PAL to reflect an increase in the PAL as provided under sub. (11).
  - 2. The department may reopen and revise the PAL permit to do any of the following:
- a. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date.
- b. Reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the department may impose on the major stationary source.
- c. Reduce the PAL if the department determines that a reduction is necessary to avoid causing or contributing to a violation of an NAAQS or a PSD increment violation, or to an adverse impact on an AQRV that has been identified for a federal class I area by a federal land manager and for which information is available to the general public.
- 3. Except for the permit reopening in subd. 1.a. for the correction of typographical or calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with the public participation requirements of sub. (5).
- (9) EXPIRATION OF A PAL. Any PAL that is not renewed in accordance with the procedures in sub. (10) shall expire at the end of the PAL effective period, and the following requirements shall apply:

- (a) For each emissions unit, or each group of emissions units, that existed under the PAL, the owner or operator shall comply with an allowable emission limitation under a revised permit established according to the following procedures:
- 1. Within the time frame specified for PAL renewals in sub. (10)(b), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit, or each group of emissions units, if a grouping is more appropriate as determined by the department, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under sub. (10)(e), the distribution shall be made as if the PAL had been adjusted.
- 2. Based upon the information submitted under subd. 1., the department shall determine whether and how the PAL allowable emissions will be distributed and issue a revised permit under s. NR 406.035 incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate.

[Drafter's note: s. NR 406.035 is being created within Board order AM-32-04b]

- (b) The owner or operator of each emissions unit or group of emissions units shall comply with the allowable emission limitation on a 12-month rolling basis. The department may approve the use of monitoring systems, such as source testing, or emission factors, other than CEMS, CERMS, PEMS or CPMS, to demonstrate compliance with the allowable emission limitation.
- (c) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under par. (a)2., the owner or operator shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (d) Any physical change or change in the method of operation at the major stationary source shall be subject to the requirements of this chapter if the change constitutes a major modification.

- (e) The owner or operator shall continue to comply with any state or federal applicable requirements, such as BACT, RACT or NSPS, that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to s. NR 405.16(2), but were eliminated by the PAL in accordance with the provisions in sub. (1)(b)3.
- (10) RENEWAL OF A PAL. (a) The department shall follow the procedures specified in sub. (5) in approving any request to renew a PAL and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During the public review, any person may propose a PAL level for the source for consideration by the department.
- (b) The owner or operator shall submit a timely application to the department to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of expiration of the PAL. If the owner or operator submits a complete application to renew the PAL within this time period, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
  - (c) The application to renew a PAL permit shall contain all of the following information:
  - 1. The information required in sub. (3)(a) to (c).
  - 2. A proposed PAL level.
- 3. The sum of the potential to emit of all emissions units under the PAL, with supporting documentation.
- 4. Any other information the owner or operator wishes the department to consider in determining the appropriate level for renewing the PAL.
- (d) In determining whether and how to adjust the PAL, the department shall consider the options outlined in subds. 1. and 2. However, in no case may any adjustment fail to comply with subd. 3. The adjustment options, and requirements, are as follows:

- 1. If the emissions level calculated in accordance with sub. (6) is equal to or greater than 80% of the existing PAL level, the department may renew the PAL at the same level without considering the factors set forth in subd. 2.
- 2. The department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the department in a written rationale.
- 3. Notwithstanding subds. 1. and 2., if the potential to emit of the major stationary source is less than the PAL, the department shall adjust the PAL to a level no greater than the potential to emit of the source. The department may not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of sub. (11).
- (e) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the department has not already adjusted for the requirement, the PAL shall be adjusted at the time of PAL renewal or operation permit renewal, whichever occurs first.
- (11) INCREASING A PAL DURING THE PAL EFFECTIVE PERIOD. (a) The department may increase a PAL level only if the owner or operator complies with all of the following provisions:
- 1. The owner or operator shall submit a complete application to request an increase in the PAL level for a PAL major modification. The application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
- 2. As part of this application, the owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units under the PAL assuming application of BACT-equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units, exceeds the PAL. The

level of control that would result from BACT-equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. The assumed control level for that emissions unit shall be equal to the level of BACT or LAER that currently applies to that emissions unit.

- 3. The owner or operator obtains a major NSR permit for all emissions units identified in subd. 1., regardless of the magnitude of the emissions increase from them. These emissions units shall comply with any emissions control requirements resulting from the major NSR process, for example, BACT, even though they have also become subject to the PAL or continue to be subject to the PAL.
- (b) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL regulated air contaminant.
- (c) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT-equivalent controls as determined in accordance with par.

  (a)2., plus the sum of the baseline actual emissions of the small emissions units.
- (d) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of sub. (5).
- (12) MONITORING REQUIREMENTS FOR PALS. (a) 1. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL regulated air contaminant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by any authorized system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

- 2. Except as provided for in subd. 3., the PAL monitoring system shall employ one or more of the 4 general monitoring approaches meeting the minimum requirements in par. (b) and shall be approved by the department.
- 3. Notwithstanding subd. 2., the owner or operator may employ an alternative monitoring approach that meets subd. 1. if approved by the department.
- 4. Failure to use a monitoring system that meets the requirements of this subsection renders the PAL invalid.
- (b) The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in pars. (c) to (i):
  - 1. Mass balance calculations for activities using coatings or solvents.
  - 2. CEMS.
  - 3. CPMS or PEMS.
  - 4. Emission factors.
- (c) An owner or operator using mass balance calculations to monitor PAL regulated air contaminant emissions from activities using coating or solvents shall do all of the following:
- 1. Provide a demonstrated means of validating the published content of the PAL regulated air contaminant that is contained in or created by all materials used in or at the emissions unit.
- 2. Assume that the emissions unit emits all of the PAL regulated air contaminant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process.
- 3. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from the material, use the highest value of the range to calculate the PAL regulated air contaminant emissions unless the department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

- (d) An owner or operator using CEMS to monitor PAL regulated air contaminant emissions shall ensure that the CEMS does both of the following:
- 1. Complies with applicable performance specifications found in 40 CFR part 60, appendix B incorporated by reference in s. NR 484.04(21).
- 2. Samples, analyzes and records data at least every 15 minutes while the emissions unit is operating.
- (e) An owner or operator using CPMS or PEMS to monitor PAL regulated air contaminant emissions shall ensure that the CPMS or PEMS does both of the following:
- Is based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL regulated air contaminant emissions across the range of operation of the emissions unit.
- 2. Samples, analyzes and records data at least every 15 minutes, or at another less frequent interval approved by the department, while the emissions unit is operating.
- (f) An owner or operator using emission factors to monitor PAL regulated air contaminant emissions shall do all of the following:
- 1. Adjust all emission factors, if appropriate, to account for the degree of uncertainty or limitations in the factors' development.
- 2. Operate the emissions unit within the designated range of use for the emission factor, if applicable.
- 3. If technically practicable, for a significant emissions unit that relies on an emission factor to calculate PAL regulated air contaminant emissions, conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the department determines that testing is not required.
  - (g) A source owner or operator shall record and report maximum potential emissions without

considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during the periods is specified in the PAL permit.

- (h) Notwithstanding the requirements in pars. (c) to (g), where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL regulated air contaminant emissions rate at all operating points of the emissions unit, the department shall, at the time of permit issuance do one of the following:
- 1. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at the operating points.
- Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL regulated air contaminant emissions is a violation of the PAL.
- (i) All data used to establish the PAL regulated air contaminant shall be re-validated through performance testing or other scientifically valid means approved by the department. The testing shall occur at least once every 5 years after the issuance of the PAL.
- (13) RECORDKEEPING REQUIREMENTS. (a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of the PAL permit, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of the record.
- (b) The PAL permit shall require an owner or operator to retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
  - 1. A copy of the PAL permit application and any applications for revisions to the PAL.
- 2. Each annual certification of compliance pursuant to s. NR 439.03(8) and the data relied on in certifying the compliance.

- (14) REPORTING AND NOTIFICATION REQUIREMENTS. The owner or operator shall submit the following reports and information to the department:
- (a) *Semi-annual report*. The semi-annual report shall be submitted to the department within 30 days of the end of each reporting period. This report shall contain all of the following information:
  - 1. The name of the owner and operator and the permit number.
- 2. Total annual emissions, in tons/year, based on a 12-month rolling total for each month in the reporting period recorded pursuant to sub. (13)(a).
- 3. All data relied upon, including any quality assurance or quality control data, in calculating the monthly and annual PAL regulated air contaminant emissions.
- 4. A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- 5. The number, duration and cause of any deviations or monitoring malfunctions other than the time associated with zero and span calibration checks, and any corrective action taken.
- 6. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the air contaminant or the number determined by method included in the permit, as provided by sub. (12)(g).
- 7. A signed statement by the responsible official certifying the truth, accuracy and completeness of the information provided in the report.
- (b) *Deviation report*. A report shall be submitted for any deviation from, or exceedance of, the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to s. NR 439.03 shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits in s. NR 439.03. The reports shall contain all of the following information:

- 1. The name of the owner and operator and the permit number.
- 2. The PAL permit requirement that was deviated from or that was exceeded.
- 3. Emissions resulting from the deviation or the exceedance.
- 4. A signed statement by the responsible official certifying the truth, accuracy and completeness of the information provided in the report.
- (c) *Re-validation results*. The results of any re-validation test or method shall be submitted within 3 months after completion of the test or method.
- (15) TRANSITION REQUIREMENTS. The department may not issue a PAL permit that does not comply with the requirements of this section after the effective date of this subsection... [revisor insert date].

#### SECTION 18. NR 408.02(1) is amended to read:

NR 408.02(1) "Actual emissions" means the actual rate of emissions of a pollutant regulated NSR air contaminant from an emissions unit, as determined as follows:in accordance with pars. (a) to (c), except that this definition does not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under s. NR 408.11. Instead, subs. (2m) and (28s) shall apply for those purposes.

(a) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a 2 year consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates and types of materials processed, stored or combusted during the selected time period. Where the implementation plan for an area is based on allowable emissions, or where actual emissions exceed allowable emissions, the

department may presume that the source specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

- (b) For any emissions unit, other than an electric utility steam generating unit as specified in par.

  (c), which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (c) For an electric utility steam generating unit, other than a new unit or the replacement of an existing unit, actual emissions of the unit following a physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the department, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the department if it determines a period to be more representative of normal source post-change operations. The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

# SECTION 19. NR 408.02(2m) is created to read:

NR 408.02(2m) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR air contaminant, as determined in accordance with pars. (a) to (d).

- (a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the air contaminant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The department shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
  - 1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions

associated with startups, shutdowns and malfunctions.

- 2. The average rate shall be adjusted downward to exclude any emissions in excess of an emission limitation that was legally enforceable during the consecutive 24-month period.
- 3. For a regulated NSR air contaminant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR air contaminant.
- 4. The average rate may not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for adjusting this amount if required by subd. 2.
- (b) For an existing emissions unit, other than an electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the air contaminant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or, the date a complete permit application is received by the department for a permit required under ch. NR 406 or for a permit revision under ch. NR 407, whichever is earlier, except that the 10-year period may not include any period earlier than November 15, 1990.
- 1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns and malfunctions.
- 2. The average rate shall be adjusted downward to exclude any emissions in excess of an emission limitation that was legally enforceable during the consecutive 24-month period.
- 3. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had the major stationary source been required to comply with the limitation during the consecutive 24-month

period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR part 63, the baseline actual emissions need only be adjusted if the state has taken credit for the emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of s. NR 408.06(9).

- 4. For a regulated NSR air contaminant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR air contaminant.
- 5. The average rate may not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for adjusting this amount if required by subds. 2. and 3.
- (c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of the unit shall equal zero; and thereafter, shall equal the unit's potential to emit.
- (d) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in par. (a), for other existing emissions units in accordance with the procedures contained in par. (b), and for a new emissions unit in accordance with the procedures contained in par. (c).

SECTION 20. NR 408.02(4), (5) and (11) are amended to read:

NR 408.02(4) "Best available control technology" or "BACT" means an emissionsemission limitation, including a visible emissions standard, based on the maximum degree of reduction for each regulated NSR air contaminant subject to regulation under the Act (42 USC 7401 to 7671q) which would be emitted from any proposed major stationary source or major modification which the department, on a

case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such the source or modification through application of production processes or available methods, systems and techniques, including elean fuels, fuel cleaning or treatment or innovative fuel combustion techniques for control of the air contaminant. In no event may application of best available control technology result in emissions of any air contaminant which would exceed the emissions allowed by any applicable standard under chs. NR 440 and 447 to 449 and subch. III of ch. NR 446 and 40 CFR parts 60 and 61. Emissions from any source utilizing clean fuels or any other means to comply with this subsection may not be allowed to increase above the levels that would have been required prior to enactment of the 1990 clean air Act amendments on November 15, 1990. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of a design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

- (5) "Building, structure, facility or installation" means all of the air contaminant emitting activities which emit or may emit a regulated NSR air contaminant, which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person, or persons under common control, except the activity of any vessel. Air Regulated NSR air contaminant sources shall be considered as part of the same industrial grouping if they are classified under the same 2-digit major group as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05.
  - (11) "Construction" means any physical change or change in the method of operation, including

fabrication, erection, installation, demolition or modification of an emissions unit, which would result in a change in actual emissions.

SECTION 21. NR 408.02(11e), (11m) and (11s) are created to read:

NR 408.02(11e) "Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this chapter, to sample, condition if applicable, analyze and provide a record of emissions on a continuous basis.

(11m) "Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the air contaminant mass emissions rate in terms of mass per unit of time.

(11s) "Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and data availability requirements of this chapter to monitor process and control device operational parameters, and to record average operational parameter values on a continuous basis.

Note: Process and control device operational parameters include secondary voltages and electric currents, and other information, such as gas flow rate,  $O_2$  or  $CO_2$  concentrations.

SECTION 22. NR 408.02(13) is amended to read:

NR 408.02(13) "Emissions unit" means any part of a stationary source, including point and area sources, which emits or would have the potential to emit any pollutant, including fugitive emissions, subject to regulation under the Act or under chs. NR 400 to 499 regulated NSR air contaminant and includes an electric utility steam generating unit. For purposes of this chapter, there are 2 types of emissions units described as follows:

(a) A new emissions unit is any emissions unit which is or will be newly constructed and which

has existed for less than 2 years from the date the emissions unit first operated.

(b) An existing emissions unit is any emissions unit that does not meet the requirements in par. (a).

SECTION 23. NR 408.02(13m) is created to read:

NR 408.02(13m) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over the lands.

SECTION 24. NR 408.02(20) is repealed and recreated to read:

NR 408.02(20) "Major modification" means any physical change in, or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR air contaminant and a significant net emissions increase of that air contaminant from the major stationary source.

- (a) Any physical change in, or change in the method of operation of a major source of VOCs located in an extreme nonattainment area for ozone which results in any increase in emissions of VOCs from any discrete operation, emissions unit or other pollutant emitting activity at the source shall be considered a major modification for ozone.
- (b) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source, that is considered significant for VOCs shall be considered significant for ozone.
- (c) For the purpose of applying the requirements of s. NR 408.03(6) to major sources of nitrogen oxides located in ozone nonattainment areas or in ozone transport regions, any significant net emissions increase of nitrogen oxides is considered significant for ozone, in addition to any separate requirements for nitrogen oxides.
- (d) For the purposes of applying the requirements of s. NR 408.03(4) to major sources of  $PM_{10}$  precursors, any significant net emissions increase of a  $PM_{10}$  precursor is considered significant for  $PM_{10}$ .

- (e) A physical change or change in the method of operation does not include:
- 1. Routine maintenance, repair and replacement.
- 2. Use of an alternative fuel or raw material by reason of any order under section 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (15 USC 791 to 798) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 USC 791a to 828c).
- 3. Use of an alternative fuel by reason of an order or rule under section 125 of the Act (42 USC 7425).
- 4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- 5. Use of an alternative fuel or raw material by a stationary source when one of the following applies:
- a. The source was capable of accommodating before December 21, 1976, unless the change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to this chapter or ch. NR 405 or 406 or under an operation permit issued pursuant to ch. NR 407.
- b. The source is approved to use an alternative fuel or raw material under any permit issued under this chapter or ch. NR 405, 406 or 407.
- 6. An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to ch. NR 405 or 406 or this chapter, or under operation permits issued pursuant to ch. NR 407.
  - 7. Any change in ownership at a stationary source.
- 8. The installation, operation, cessation of operation or removal of a temporary clean coal technology demonstration project, provided that the project complies with both of the following:

- a. The state implementation plan.
- b. Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (f) This definition does not apply with respect to a particular regulated NSR air contaminant when the major stationary source is complying with the requirements of s. NR 408.11 for a PAL for that air contaminant. Instead the definition in s. NR 408.11(2)(e) shall apply.

# SECTION 25. NR 408.02(21)(a)1.(intro.) is amended to read:

NR 408.02(21)(a)1.(intro.) Any stationary source of air pollutants contaminants which emits or has the potential to emit 100 tons per year (tpy) or more of any pollutant air contaminant for which the area in which the source is located is nonattainment, except that lower emissions thresholds shall apply as follows to any stationary source for which a complete construction permit application was submitted or was required to be submitted after November 15, 1992:

### SECTION 26. NR 408.02(23) is repealed and recreated to read:

NR 408.02(23) (a) "Net emissions increase" means, with respect to any regulated NSR air contaminant emitted by a major stationary source, the amount by which the difference between the sum of emission increases and the sum of emission decreases of the following exceeds zero:

- 1. The increase in emissions from a particular physical change or change in the method of operation at a stationary source calculated pursuant to the methods contained in s. NR 408.025.
- 2. Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subdivision shall be determined as provided in sub. (2m), except that sub. (2m)(a)3. and (b)4. do not apply.

- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the following:
  - 1. The date 5 years before construction on the particular change commences.
  - 2. The date that the increase from the particular change occurs.
- (c) An increase or decrease in actual emissions is creditable only if all of the following are satisfied:
  - 1. It is contemporaneous with the particular change.
- 2. The department has not relied on it in issuing a permit for the source under this chapter and the permit is in effect when the increase in actual emissions from the particular change occurs.
- (d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (e) A decrease in actual emissions is creditable only to the extent that all of the following are satisfied:
- 1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
- 2. It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- 3. The department has not relied on it in issuing any permit under ch. NR 405, 406, 407 or this chapter or the state has not relied on it in demonstrating attainment or reasonable further progress.
- 4. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit an air contaminant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed

180 days.

(g) Subsection NR 408.02(1)(a) does not apply for determining creditable increases and decreases or after a change.

SECTION 27. NR 408.02(24m) and (25s) are created to read:

NR 408.02(24m) "Nonattainment major new source review" or "NSR" program means a major source preconstruction permit program that has been approved by the administrator and incorporated into the state implementation plan to implement the requirements of 40 CFR part 51, appendix S, Sections I to VI. Any permit issued under the program is a major NSR permit.

(25s) "Plant-wide applicability limitation" or "PAL" means an emission limitation expressed in tons per year, for a regulated NSR air contaminant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with s. NR 408.11.

SECTION 28. NR 408.02(27) is repealed.

SECTION 29. NR 408.02(28e), (28j), (28m), (28s), (29m) and (32m) are created to read:

NR 408.02(28e) "Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters and to calculate and record the mass emissions rate on a continuous basis.

Note: Process and control device operational parameters include secondary voltages and electric currents, and other information, such as gas flow rate,  $O_2$  or  $CO_2$  concentrations.

- (28j) "Prevention of significant deterioration permit" or "PSD permit" means a major source preconstruction permit issued under ch. NR 405.
  - (28m) "Project" means a physical change in, or change in method of operation of, an existing

major stationary source.

- (28s)(a) "Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR air contaminant in any one of the 5 years following the date the unit resumes regular operation after the project. If the project involves increasing the emissions unit's design capacity or the emissions unit's potential to emit the regulated NSR air contaminant, and full utilization of the emissions unit's capacity or potential would result in a significant net emissions increase, "projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR air contaminant in any one of the 10 years following the date the unit resumes regular operation after the project.
- (b) 1. In determining the projected actual emissions before beginning actual construction, the owner or operator of the major stationary source shall do all of the following:
- a. Consider all relevant information, including historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities and compliance plans under the approved state implementation plan.
- b. Include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns and malfunctions.
- 2. In determining the projected actual emissions before beginning actual construction, the owner or operator shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under sub. (2m) and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
  - (c) In lieu of using the method in par. (b), the owner or operator may elect to use the emissions

unit's potential to emit, in tons per year, as defined under sub. (28).

- (29m) "Regulated NSR air contaminant" means all of the following:
- (a) Nitrogen oxides or any volatile organic compounds.
- (b) Any air contaminant for which a national ambient air quality standard has been promulgated.
- (c) Any air contaminant that is a constituent or precursor of a general air contaminant listed under par. (a) or (b), provided that a constituent or precursor pollutant may only be regulated under this chapter or ch. NR 405 as part of regulation of the general air contaminant.
- (32m) "Significant emissions increase" means, for a regulated NSR air contaminant, an increase in emissions that is equal to or greater than the value for that air contaminant listed in s. NR 408.02(32).

#### SECTION 30. NR 408.025 is created to read:

NR 408.025 **Methods for calculation of increases in actual emissions.** (1) For projects that only involve existing emissions units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall equal the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit involved in the project.

- (2) For projects that only involve construction of a new emissions unit or units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall equal the sum of the differences between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions for each unit before the project.
- (3) For projects that involve existing and new emissions units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall equal the sum of the emissions increases for each emissions unit involved in the project, using the method specified in sub.

  (1) for existing emissions units and the method in sub. (2) for new emissions units.

### SECTION 31. NR 408.06(10) is created to read:

NR 408.06(10) The total increase in emissions, in tons per year, resulting from a major modification that must be offset in accordance with this section shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit.

## SECTION 32. NR 408.10(5) and (6) are created to read:

NR 408.10(5) For a project involving existing emissions units at a major stationary source, which does not have a PAL, in circumstances where the calculated difference between projected actual emissions using the method specified in s. NR 408.02(28s)(b)1. and 2., and baseline actual emissions does not exceed the level that is considered to be significant for the air contaminant, the owner or operator shall do the following as applicable:

- (a) Before beginning actual construction of the project, document and maintain a record of all of the following:
  - 1. A description of the project.
- Identification of the emissions unit or units whose emissions of a regulated NSR air contaminant could be affected by the project.
- 3. The calculation of the net emissions increase under s. NR 408.02(23)(a) that was used to determine that the project is not a major modification for any regulated NSR air contaminant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under s. NR 408.02(28s)(b)2. and an explanation why the amount was excluded, and any netting calculations, if applicable.
- (b) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, provide a copy of the information in par. (a) to the department. Nothing in this paragraph

shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.

- (c) If the owner or operator excludes emissions from the calculation of projected actual emissions under s. NR 408.02(28s)(b)2. and the difference between projected actual emissions and baseline actual emissions exceeds the level that is considered to be significant for the air contaminant prior to the exclusion of emissions from the calculation of projected actual emissions under s. NR 408.02(28s)(b)2., before beginning actual construction, provide a copy of the information in par. (a) to the department. Nothing in this paragraph shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.
- (d) Monitor the emissions of any regulated NSR air contaminant that could increase as a result of the project and that is emitted by any emissions unit identified in par. (a)2. and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR air contaminant at the emissions unit.
- (e) If the unit is an existing electric utility steam generating unit, submit a report to the department within 60 days after the end of each year during which records must be generated under par. (d) setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- (f) If the unit is an existing unit other than an electric utility steam generating unit, submit a report to the department if the annual emissions, in tons per year, from the project identified in par. (a), exceed the baseline actual emissions, as documented and maintained pursuant to par. (d), by a significant amount, as defined in s. NR 408.02(32) for that regulated NSR air contaminant, and if the emissions differ from the preconstruction projection that was provided to the department pursuant to par. (c). The report shall be submitted to the department within 60 days after the end of the year. The report shall contain all of the

following:

- 1. The name, address and telephone number of the major stationary source.
- 2. The annual emissions as calculated pursuant to par. (a)3.
- 3. Any other information that the owner or operator wishes to include in the report, e.g., an explanation as to why the emissions differ from the preconstruction projection.
- (6) The owner or operator of the source shall make the information required to be documented and maintained pursuant to sub. (5) available for inspection, upon request, by the department or the general public.

### SECTION 33. NR 408.11 is created to read:

NR 408.11 Plant-wide applicability limitations (PALs). (1) APPLICABILITY. (a) This section applies to any existing major stationary source which wishes to operate under a PAL. The department may approve the use of a PAL for any existing major stationary source if the source and its application for a PAL meets all of the requirements in this section.

- (b) The department may not allow a PAL for VOC or  $NO_X$  for any major stationary source located in an extreme ozone nonattainment area.
- (c) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in this section, and complies with the PAL permit:
  - 1. Is not a major modification for the PAL regulated air contaminant.
  - 2. Does not have to be approved under this chapter.
  - 3. Is not subject to the provisions in s. NR 408.10(4).
- (d) Except as provided under par. (c)3., a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations and work practice requirements that were

established prior to the effective date of the PAL.

- (2) DEFINITIONS. The following definitions apply to terms used in this subsection for the purpose of developing and implementing PALs consistent with this section.
- (a) "Allowable emissions" has the meaning given in s. NR 408.02(2), except as this definition is modified according to both of the following:
- 1. The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.
- 2. An emissions unit's potential to emit shall be determined using the definition in s. NR 408.02(28), except that the words "or enforceable as a practical matter" should be added after "federally enforceable".
  - (b) "Major emissions unit" means either of the following:
- 1. Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL regulated air contaminant in an attainment area.
- 2. Any emissions unit that emits or has the potential to emit the PAL regulated air contaminant in an amount that is equal to or greater than the major source threshold for the PAL regulated air contaminant as defined by the Act for nonattainment areas.

Note: In accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

- (c) "PAL effective date" means the date of issuance of the PAL permit except that, in the case of an increased PAL, "PAL effective date" means the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL regulated air contaminant.
- (d) "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.

- (e) "PAL major modification" means, notwithstanding s. NR 408.02(20) and (23), any physical change in, or change in the method of operation of the PAL source that causes it to emit the PAL regulated air contaminant at a level equal to or greater than the PAL.
- (f) "PAL permit" means the construction permit issued by the department that establishes a PAL for a major stationary source.
- (g) "PAL regulated air contaminant" means the regulated NSR air contaminant for which a PAL is established at a major stationary source.
- (h) "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL regulated air contaminant in an amount that is equal to or greater than the significant level, as defined in s. NR 408.02(32) or in the Act, whichever is lower, for that PAL regulated air contaminant, but less than the amount that would qualify the unit as a major emissions unit.
- (i) "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL regulated air contaminant in an amount less than the significant level for that PAL regulated air contaminant, as defined in s. NR 408.02(32) or in the Act, whichever is lower.
- (3) PERMIT APPLICATION REQUIREMENTS. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit all of the following information to the department for approval:
- (a) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations or work practices apply to each unit.
- (b) Calculations of the baseline actual emissions with supporting documentation. Baseline actual emissions shall include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown and malfunction.
  - (c) The calculation procedures that the major stationary source owner or operator proposes to use

to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by sub. (13)(a).

- (4) GENERAL REQUIREMENTS FOR ESTABLISHING PALS. (a) The department may establish a PAL at a major stationary source if all of the following requirements are met:
- 1. The PAL imposes an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL. For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
- The PAL is established in a PAL permit that meets the public participation requirements in sub.
  - 3. The PAL permit contains all the requirements of sub. (7).
- 4. The PAL includes fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL regulated air contaminant at the major stationary source.
  - 5. The PAL shall regulate emissions of only one air contaminant.
  - 6. The PAL has a PAL effective period of 10 years.
- 7. The owner or operator of the major stationary source with a PAL complies with the monitoring, recordkeeping and reporting requirements provided in subs. (12) to (14) for each emissions unit under the PAL through the PAL effective period.
- 8. The department determines that the requirements of s. 285.63, Stats., and, if applicable, s. 285.64, Stats., are met.

- (b) At no time during or after the PAL effective period are emissions reductions of a PAL regulated air contaminant that occur during the PAL effective period creditable as decreases for purposes of offsets under s. NR 408.06 unless the PAL is reduced by the amount of the emissions reductions and the reductions would be creditable in the absence of the PAL.
- (5) PUBLIC PARTICIPATION REQUIREMENTS FOR PALS. PALs shall be established, renewed or increased through a procedure that is consistent with s. NR 408.09. This includes the requirement that the department provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The department shall address all material comments before taking final action on the permit.
- (6) SETTING THE 10-YEAR PAL LEVEL. (a) The PAL level shall be established as the sum of the baseline actual emissions, as defined in s. NR 408.02(2m), of the PAL regulated air contaminant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL regulated air contaminant under s. NR 408.02(32) or under the Act, whichever is lower.
- (b) When establishing the PAL level, for a PAL regulated air contaminant, only one consecutive 24-month period may be used to determine the baseline actual emissions for all existing emissions units.
- (c) A different consecutive 24-month period may be used for each different PAL regulated air contaminant.
- (d) Emissions associated with units that were permanently shut down after the 24-month period established under par. (b) shall be subtracted from the PAL level.
- (e) Emissions from units on which actual construction began after the 24-month period established under par. (b) shall be added to the PAL level in an amount equal to the potential to emit of the units.
- (f) The department shall specify a reduced PAL level in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirements that the department is aware of prior to issuance of the PAL permit.

Note: If the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO<sub>X</sub> to a new rule limit of 30 ppm, the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of the unit.

- (7) CONTENTS OF THE PAL PERMIT. The PAL permit shall contain all of the following information:
- (a) The PAL regulated air contaminant and the corresponding plant-wide emission limitation in tons per year.
  - (b) The PAL effective date and the expiration date of the PAL.
- (c) A specification that if the owner or operator applies to renew a PAL in accordance with sub.

  (10) before the end of the PAL effective period, the PAL does not expire at the end of the PAL effective period, but shall remain in effect until a revised PAL permit is issued by the department.
- (d) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.
- (e) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of sub. (9).
- (f) The calculation procedures that the owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by sub. (13)(a).
- (g) A requirement that the owner or operator monitor all emissions units in accordance with the provisions under sub. (12).
- (h) A requirement to retain the records required under sub. (13) on site. Records may be retained in an electronic format.
  - (i) A requirement to submit the reports required under sub. (14) by the required deadlines.
  - (j) Any other requirements that the department deems necessary to implement and enforce the

- (8) PAL EFFECTIVE PERIOD AND REOPENING OF THE PAL PERMIT. (a) PAL effective period. The department shall specify a PAL effective period of 10 years.
- (b) *Reopening of the PAL permit.* 1. During the PAL effective period, the department shall reopen and revise the PAL permit to do any of the following:
- a. Correct typographical errors in the PAL permit or correct calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.
- b. Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under this chapter.
  - c. Revise the PAL to reflect an increase in the PAL as provided under sub. (11).
  - 2. The department may reopen and revise the PAL permit to do any of the following:
- a. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date.
- b. Reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the department may impose on the major stationary source.
- c. Reduce the PAL if the department determines that a reduction is necessary to avoid causing or contributing to a violation of an NAAQS or a PSD increment violation, or to an adverse impact on an AQRV that has been identified for a federal class I area by a federal land manager and for which information is available to the general public.
- 3. Except for the permit reopening in subd. 1.a. for the correction of typographical or calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with the public participation requirements of sub. (5).
- (9) EXPIRATION OF A PAL. Any PAL that is not renewed in accordance with the procedures in sub. (10) shall expire at the end of the PAL effective period, and the following requirements shall apply:

- (a) For each emissions unit, or each group of emissions units, that existed under the PAL, the owner or operator shall comply with an allowable emission limitation under a revised permit established according to the following procedures:
- 1. Within the time frame specified for PAL renewals in sub. (10)(b), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit or each group of emissions units, if a grouping is more appropriate as determined by the department, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under sub. (10)(e), the distribution shall be made as if the PAL had been adjusted.
- 2. Based upon the information submitted under subd. 1., the department shall determine whether and how the PAL allowable emissions will be distributed and issue a revised permit under s. NR 406.035 incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate.

[Drafter's note: s. NR 406.035 is being created within Board order AM-32-04b]

- (b) The owner or operator of each emissions unit or group of emissions units shall comply with the allowable emission limitation on a 12-month rolling basis. The department may approve the use of monitoring systems, such as source testing, emission factors, etc., other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.
- (c) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under par. (a)2., the owner or operator shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (d) Any physical change or change in the method of operation at the major stationary source shall be subject to the requirements of this chapter if the change constitutes a major modification.

- (e) The owner or operator shall continue to comply with any state or federal applicable requirements, such as BACT, RACT or NSPS, that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to s. NR 408.10(4), but were eliminated by the PAL in accordance with the provisions in sub. (1)(b)3.
- (10) RENEWAL OF A PAL. (a) The department shall follow the procedures specified in sub. (5) in approving any request to renew a PAL and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During the public review, any person may propose a PAL level for the source for consideration by the department.
- (b) The owner or operator shall submit a timely application to the department to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of expiration of the PAL. If the owner or operator submits a complete application to renew the PAL within this time period, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
  - (c) The application to renew a PAL permit shall contain all of the following information:
  - 1. The information required in sub. (3)(a) to (c).
  - 2. A proposed PAL level.
- 3. The sum of the potential to emit of all emissions units under the PAL, with supporting documentation.
- 4. Any other information the owner or operator wishes the department to consider in determining the appropriate level for renewing the PAL.
- (d) In determining whether and how to adjust the PAL, the department shall consider the options outlined in subds. 1. and 2. However, in no case may any adjustment fail to comply with subd. 3. The adjustment options, and requirements, are as follows:

- 1. If the emissions level calculated in accordance with sub. (6) is equal to or greater than 80% of the existing PAL level, the department may renew the PAL at the same level without considering the factors in subd. 2.
- 2. The department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the department in a written rationale.
- 3. Notwithstanding subds. 1. and 2., if the potential to emit of the major stationary source is less than the PAL, the department shall adjust the PAL to a level no greater than the potential to emit of the source. The department may not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of sub. (11).
- (e) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the department has not already adjusted for the requirement, the PAL shall be adjusted at the time of PAL renewal or operation permit renewal, whichever occurs first.
- (11) INCREASING A PAL DURING THE PAL EFFECTIVE PERIOD. (a) The department may increase a PAL level only if the owner or operator complies with all of the following provisions:
- 1. The owner or operator shall submit a complete application to request an increase in the PAL level for a PAL major modification. The application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
- 2. As part of this application, the owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units under the PAL assuming application of BACT-equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units, exceeds the PAL. The

level of control that would result from BACT-equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. The assumed control level for that emissions unit shall be equal to the level of BACT or LAER that currently applies to that emissions unit.

- 3. The owner or operator obtains a major NSR permit for all emissions units identified in subd. 1., regardless of the magnitude of the emissions increase from them. These emissions units shall comply with any emissions control requirements resulting from the major NSR process, for example, LAER and offsets, even though they have also become subject to the PAL or continue to be subject to the PAL.
- (b) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL regulated air contaminant.
- (c) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT-equivalent controls as determined in accordance with par.

  (a)2., plus the sum of the baseline actual emissions of the small emissions units.
- (d) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of sub. (5).
- (12) MONITORING REQUIREMENTS FOR PALS. (a) 1. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL regulated air contaminant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by any authorized system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

- 2. Except as provided for in subd. 3., the PAL monitoring system shall employ one or more of the 4 general monitoring approaches meeting the minimum requirements in par. (b) and shall be approved by the department.
- 3. Notwithstanding subd. 2., the owner or operator may employ an alternative monitoring approach that meets subd. 1. if approved by the department.
- 4. Failure to use a monitoring system that meets the requirements of this subsection renders the PAL invalid.
- (b) The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in pars. (c) to (i):
  - 1. Mass balance calculations for activities using coatings or solvents.
  - 2. CEMS.
  - 3. CPMS or PEMS.
  - 4. Emission factors.
- (c) An owner or operator using mass balance calculations to monitor PAL regulated air contaminant emissions from activities using coating or solvents shall do all of the following:
- 1. Provide a demonstrated means of validating the published content of the PAL regulated air contaminant that is contained in or created by all materials used in or at the emissions unit.
- 2. Assume that the emissions unit emits all of the PAL regulated air contaminant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process.
- 3. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from the material, use the highest value of the range to calculate the PAL regulated air contaminant emissions unless the department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

- (d) An owner or operator using CEMS to monitor PAL regulated air contaminant emissions shall ensure that the CEMS does both of the following:
- 1. Complies with applicable performance specifications found in 40 CFR part 60, appendix B incorporated by reference in s. NR 484.04(21).
- 2. Samples, analyzes and records data at least every 15 minutes while the emissions unit is operating.
- (e) An owner or operator using CPMS or PEMS to monitor PAL regulated air contaminant emissions shall ensure that the CPMS or PEMS does both of the following:
- Is based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL regulated air contaminant emissions across the range of operation of the emissions unit.
- 2. Samples, analyzes and records data at least every 15 minutes, or at another less frequent interval approved by the department, while the emissions unit is operating.
- (f) An owner or operator using emission factors to monitor PAL regulated air contaminant emissions shall do all of the following:
- 1. Adjust all emission factors, if appropriate, to account for the degree of uncertainty or limitations in the factors' development.
- 2. Operate the emissions unit within the designated range of use for the emission factor, if applicable.
- 3. If technically practicable, for a significant emissions unit that relies on an emission factor to calculate PAL regulated air contaminant emissions, conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the department determines that testing is not required.
  - (g) A source owner or operator shall record and report maximum potential emissions without

considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during the periods is specified in the PAL permit.

- (h) Notwithstanding the requirements in pars. (c) to (g), where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL regulated air contaminant emissions rate at all operating points of the emissions unit, the department shall, at the time of permit issuance, do one of the following:
- 1. Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at the operating points.
- Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL regulated air contaminant emissions is a violation of the PAL.
- (i) All data used to establish the PAL regulated air contaminant level shall be re-validated through performance testing or other scientifically valid means approved by the department. The testing shall occur at least once every 5 years after the issuance of the PAL.
- (13) RECORDKEEPING REQUIREMENTS. (a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of the PAL permit, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of the record.
- (b) The PAL permit shall require an owner or operator to retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
  - 1. A copy of the PAL permit application and any applications for revisions to the PAL.
- 2. Each annual certification of compliance pursuant to s. NR 439.03(8) and the data relied on in certifying the compliance.

- (14) REPORTING AND NOTIFICATION REQUIREMENTS. The owner or operator shall submit the following reports and information to the department:
- (a) *Semi-annual report*. The semi-annual report shall be submitted to the department within 30 days of the end of each reporting period. This report shall contain all of the following information:
  - 1. The name of the owner and operator and the permit number.
- 2. Total annual emissions, in tons/year, based on a 12-month rolling total for each month in the reporting period recorded pursuant to sub. (13)(a).
- 3. All data relied upon, including any quality assurance or quality control data, in calculating the monthly and annual PAL regulated air contaminant emissions.
- 4. A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- 5. The number, duration and cause of any deviations or monitoring malfunctions other than the time associated with zero and span calibration checks, and any corrective action taken.
- 6. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the air contaminant or the number determined by method included in the permit, as provided by sub. (12)(g).
- 7. A signed statement by the responsible official certifying the truth, accuracy and completeness of the information provided in the report.
- (b) *Deviation report*. A report shall be submitted for any deviation from, or exceedance of, the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to s. NR 439.03 shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits in s. NR 439.03. The reports shall contain all of the following information:

- 1. The name of the owner and operator and the permit number.
- 2. The PAL permit requirement that was deviated from or that was exceeded.
- 3. Emissions resulting from the deviation or the exceedance.
- 4. A signed statement by the responsible official certifying the truth, accuracy and completeness of the information provided in the report.
- (c) *Re-validation results*. The results of any re-validation test or method shall be submitted within 3 months after completion of the test or method.
- (15) TRANSITION REQUIREMENTS. The department may not issue a PAL permit that does not comply with the requirements of this section after the effective date of this subsection... [revisor insert date].

SECTION 34. NR 484.04(21) is amended to read:

	CFR Appendix Referenced	Title	Incorporated by Reference For
NR 484.04			
(21)	40 CFR part 60 Appendix B	Performance Specifications	<u>NR 405</u>
(21)			<u>NR 408</u>
			NR 428
			NR 439
			NR 460 to 469

SECTION 35. NR 484.04(27m) is created to read:

CFR Appendix Referenced	Title	Incorporated by Reference For
NR 484.04		ND 405
(27m) 40 CFR part 82, Subpart A,		NR 405
Appendices A and B		NR 408

SECTION 36. 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 37. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin			
Natural Resources Board on February 22, 2006.			
Dated at Madison, Wisconsin			
STATE OF WISCONSIN			
DEPARTMENT OF NATURAL RESOURCES			

(SEAL)

Scott Hassett, Secretary