

## Chapter NR 408

### CONSTRUCTION PERMITS FOR DIRECT MAJOR SOURCES IN NONATTAINMENT AREAS

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**Note:** The preexisting sections NR 408.01 and 408.02 were repealed, sections NR 408.025 to 408.07 were renumbered to NR 406.08 to 406.13 and am. NR 406.10 and 406.11, *Register*, May, 1993, No. 449, eff. 6-1-93.

**NR 408.01 Applicability; purpose. (1) APPLICABILITY.** This chapter applies to all new direct major sources and all major modifications to direct major sources located in areas designated as ozone transport regions or nonattainment areas by the U.S. environmental protection agency or by the department.

**(2) PURPOSE.** The purpose of this chapter is to establish requirements and procedures, in addition to those in ch. NR 406, for reviewing and issuing construction permits to all new direct major sources and all major modifications to direct major sources located in areas designated as ozone transport regions or nonattainment areas by the U.S. environmental protection agency or by the department.

**History:** Cr. *Register*, May, 1993, No. 449, eff. 6-1-93; am. *Register*, June, 1995, No. 474, eff. 7-1-95.

**NR 408.02 Definitions.** The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

**(1)** “Actual emissions” means the actual rate of emissions of a regulated NSR air contaminant from an emissions unit, as determined 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 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 by the department 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) For any emissions unit 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) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

**(2)** “Allowable emissions” means the emissions rate of a stationary source calculated using the maximum rated capacity of the source, or using federally enforceable limits which restrict the operating rate, or hours of operation or both, if the source is subject to such federally enforceable limits, and using the most stringent of the following:

(a) Any applicable standards in chs. NR 440 and 447 to 449 and subch. IV of ch. NR 446.

(b) Any applicable emissions limitations in chs. NR 400 to 499.

(c) Any applicable state implementation plan emissions limitation including a limitation with a future compliance date.

(d) Any emissions rate specified as a federally enforceable permit condition, including a limitation with a future compliance date.

**(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 subs. 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).

(3) "Begin actual construction" means the initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Activities include, but are not limited to, installation of building supports and foundations, laying of underground pipe work and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(4) "Best available control technology" or "BACT" means an emission limitation, including a visible emissions standard, based on the maximum degree of reduction for each regulated NSR air contaminant 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 the source or modification through application of production processes or available methods, systems and techniques, including 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. IV of ch. NR 446 and 40 CFR parts 60 and 61. 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, op-

erational 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 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. 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.

(6) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion or post combustion stage, at a new or existing facility which will achieve significant reductions in emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity or process steam which was not in widespread use as of November 15, 1990.

(7) "Clean coal technology demonstration project" means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. environmental protection agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

(8) "Commence" as applied to construction of a major source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and has done one of the following:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time.

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(9) "Commence operation" means the initial startup of an emissions unit following completion of construction which results in the emission of an air contaminant for which the area is designated nonattainment. Any replacement unit that requires shakedown commences operation after a reasonable shakedown period, not to exceed 180 days.

(10) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary, as determined by the department, for processing the application. Designating an application complete for purposes of permit processing does not preclude the department from requesting or accepting any additional information.

(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 emissions.

(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<sub>2</sub> or CO<sub>2</sub> concentrations.

**(12)** “Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW of electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

**(13)** “Emissions unit” means any part of a stationary source which emits or would have the potential to emit any 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). Notwithstanding par. (a), a replacement unit, as defined in sub. (29s), is an existing emissions unit.

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

**(14)** “Fossil fuel-fired boiler” means a unit, or combination of units, which combusts fossil fuel, or receives heat from other fossil fuel-fired units, to produce steam by indirect heat transfer, and includes units that produce steam for electric generation. The heat input for the units includes any heat provided to the units from the combustion of fossil fuels in other units. The total heat input from fossil fuel-firing for a combination of units is the sum of the heat inputs from fossil fuel-firing for each unit.

**(15)** “Fossil fuel-fired electric plant” means one or more units that combust fossil fuel to produce electricity. The total heat input for a plant from fossil fuel-firing is the sum of the heat inputs from fossil fuel-firing for each combustion unit that is part of the plant.

**(16)** “Fugitive emissions” means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

**(17)** “Indian governing body” means the governing body of any tribe, band or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

**(18)** “Indian tribe” means any Indian tribe, band, nation or other organized group or community, including any Alaskan native village, which is federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

**(19)** “Lowest achievable emission rate” or “LAER” means, for any source, the more stringent rate of emissions based on the following:

(a) The most stringent emissions limitation which is contained in the implementation plan of any state for the class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that the limitation is not achievable.

(b) The most stringent emissions limitation which is achieved in practice by the class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emission rate for the new or modified emissions units within a stationary source. In no event may the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under a new source standard of performance which applies under ch. NR 440 or under 40 CFR part 60.

**(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<sub>10</sub> precursors, any significant net emissions increase of a PM<sub>10</sub> precursor is considered significant for PM<sub>10</sub>.

(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, or pursuant to a permit issued under 40 CFR Part 51 Appendix S,

40 CFR 52.21, or regulations approved pursuant to 40 CFR Part 51 subpart I.

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, or pursuant to a permit issued under 40 CFR Part 51 Appendix S, 40 CFR 52.21, or regulations approved pursuant to 40 CFR Part 51 subpart I.

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 this chapter, ch. NR 405, or 406 or under operation permits issued pursuant to ch. NR 407, or pursuant to a permit issued under 40 CFR Part 51 Appendix S, 40 CFR 52.21, or regulations approved pursuant to 40 CFR Part 51 subpart I.

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.

(21) "Major source" means the following:

(a) 1. Any stationary source of air contaminants which emits or has the potential to emit 100 tons per year (tpy) or more of any 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:

a. 70 tpy of PM<sub>10</sub>, or where applicable, a PM<sub>10</sub> precursor, in any serious nonattainment area for PM<sub>10</sub>.

b. 50 tpy of VOC in any serious nonattainment area for ozone.

c. 50 tpy of VOC in areas within ozone transport regions except for any severe or extreme nonattainment area for ozone.

d. 25 tpy of VOC in any severe nonattainment area for ozone.

e. 10 tpy of VOC in any extreme nonattainment area for ozone.

f. 50 tpy of carbon monoxide in any serious nonattainment area for carbon monoxide, where stationary sources contribute significantly to carbon monoxide levels in the area.

**Note:** If any serious nonattainment area for carbon monoxide is designated in the state, the department will make the determination of whether stationary sources contribute significantly to the carbon monoxide levels in accordance with rules or guidance issued by the U.S. environmental protection agency.

2. Any stationary source of nitrogen oxides identified under par. (b).

3. Any physical change that would occur at a stationary source not qualifying under subd. 1. or 2. as a major source, if the change would constitute a major source by itself.

(b) For the purposes of applying the requirements of s. NR 408.03 (5), a stationary source for which a complete construction permit application was submitted or was required to be submitted after November 15, 1992 is major for nitrogen oxides if it is located in any ozone nonattainment area or ozone transport region

and it emits, or has the potential to emit, nitrogen oxides as follows:

1. 100 tpy or more of nitrogen oxides in:

a. Any ozone nonattainment area classified as rural transport, marginal or moderate.

b. Any ozone nonattainment area classified as transitional, submarginal or an incomplete or no data area, that is located in any ozone transport region.

c. Areas classified under the Act as attainment or unclassified for ozone that are located in any ozone transport region.

2. 50 tpy or more of nitrogen oxides in any serious nonattainment area for ozone.

3. 25 tpy or more of nitrogen oxides in any severe nonattainment area for ozone.

4. 10 tpy or more of nitrogen oxides in any extreme nonattainment area for ozone.

(c) A stationary source that is major for VOC shall be considered major for ozone and subject to the requirements for ozone in this chapter.

(d) For purposes of implementing the requirements of s. NR 408.03 (4), a stationary source that is major for any PM<sub>10</sub> precursor shall be considered major for PM<sub>10</sub>.

(e) The fugitive emissions of a stationary source may not be included in determining, for any of the purposes of this chapter, whether it is a major source unless the source belongs to one of the following categories of stationary sources:

1. Carbon black plants (furnace process).

2. Coal cleaning plants (with thermal dryers).

3. Coke oven batteries.

4. Charcoal production plants.

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

6. Fuel conversion plants.

7. Fossil fuel-fired boilers (or combination thereof) totaling more than 250 million Btu per hour heat input.

8. Fossil fuel-fired electric plants of more than 250 million Btu per hour heat input.

9. Glass fiber manufacturing plants.

10. Hydrofluoric acid plants.

11. Iron and steel mills.

12. Kraft pulp mills.

13. Lime plants.

14. Municipal incinerators (or combinations thereof) capable of charging more than 50 tons of refuse per day.

15. Nitric acid plants.

16. Petroleum refineries.

17. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

18. Phosphate rock processing plants.

19. Portland cement plants.

20. Primary aluminum ore reduction plants.

21. Primary copper smelters.

22. Primary lead smelters.

23. Primary zinc smelters.

24. Secondary metal production plants.

25. Sintering plants.

26. Sulfuric acid plants.
27. Sulfur recovery plants.
28. Taconite ore processing plants.

29. Any other stationary source category regulated under section 111 or 112 of the Act (42 USC 7411 or 7412) before November 15, 1990.

(f) Mobile source emissions indirectly caused by a source which attracts mobile source activity may not be considered in determining whether the source is a major stationary source for the purposes of this chapter.

**(22)** “Necessary preconstruction approvals or permits” means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable state implementation plan.

**(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.

**(24)** (a) “Nonattainment area” means any area that does not meet the primary or secondary ambient air quality standard for a pollutant and that is designated nonattainment with respect to that pollutant by the administrator pursuant to section 107 (d) of the Act (42 USC 7407 (d)) or by the department pursuant to s. 285.23 (2), Stats.

(b) For certain pollutants, nonattainment areas are classified for the purpose of applying an attainment date or for other purposes, in accordance with procedures in the act. The following nonattainment area classifications have been established:

1. For ozone: rural transport, marginal, moderate, serious, severe and extreme.
2. For PM<sub>10</sub>: moderate and serious.
3. For carbon monoxide: moderate and serious.

**Note:** See 40 CFR part 81 for a listing of the specific areas.

(c) The classification with the lowest emission threshold under s. NR 407.02 (4) (c) 1. a. determines the major source or major modification threshold in an area classified as nonattainment for more than one ozone national ambient air quality standard, until the area is redesignated to attainment for a current standard or a redesignation substitute for a revoked standard has been approved by the EPA for the standard with the lowest emission threshold.

**Note:** The department maintains materials accessible to the public that show current Wisconsin nonattainment areas and summarizes the applicable permitting requirements for major sources of emissions within these areas.

**(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.

**(25)** “Ozone transport region” means any interstate transport region which has been established for ozone pursuant to section 176A of the Act (42 USC 7506a).

**(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.

**(26)** “PM<sub>10</sub> precursor” means, for the purposes of implementing the requirements of s. NR 408.03 (4), sulfur dioxide, nitrogen oxides or volatile organic compounds.

**(28)** “Potential to emit” means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operation limitation on the capacity of the source to emit a pollutant shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Limitations which can be considered in the determination of potential to emit include the application of air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed. Secondary emissions may not be counted in determining a source’s potential to emit.

**Note:** A permit limitation on emissions from any source, including a minor source which would otherwise be considered a major source, shall include adequate testing, monitoring and recordkeeping procedures in order to be considered a federally enforceable limitation.

**(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<sub>2</sub> or CO<sub>2</sub> 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).

**(29)** “Reasonable further progress” means annual incremental reductions in emissions of the relevant air pollutant required by part D of title I of the Act (42 USC 7501 to 7515) or may reasonably be required by the department or the administrator for the purpose of ensuring attainment of the applicable national ambient air quality standards in an area by the applicable statutory deadline.

**(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 identified under this paragraph as a precursor of a general air contaminant listed under par. (a) or (b), or that the EPA has determined to be 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 as part of regulation of the general air

contaminant. The precursors identified by the administrator are as follows:

1. Volatile organic compounds and nitrogen oxides are precursors to ozone in all ozone nonattainment areas.

2. Sulfur dioxide is a precursor to PM<sub>2.5</sub> in all PM<sub>2.5</sub> nonattainment areas.

3. Nitrogen oxides are presumed to be precursors to PM<sub>2.5</sub> in all PM<sub>2.5</sub> nonattainment areas, unless the department demonstrates to the administrator’s satisfaction or the EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to the area’s ambient PM<sub>2.5</sub> concentrations.

(d) PM<sub>2.5</sub> emissions and PM<sub>10</sub> emissions. As defined in s. NR 400.02 (123m) and (124), respectively, these terms include filterable emissions and gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures.

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

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

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

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

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

**(30)** “Representative actual annual emissions” means the average rate, in tons per year, at which the source is projected to emit a pollutant for the 2-year period after a physical change or change in the method of operation of a unit, or a different consecutive 2-year period within 10 years after that change, where the department determines that the period is more representative of normal source operations, considering the effect any change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the department shall:

(a) Consider all relevant information, including but not limited to, historical operational data, the company’s own representations, filings with the state or federal regulatory authorities, and compliance plans under title IV of the act.

(b) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit’s emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

**(31)** “Secondary emissions” means emissions which would occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself. For the purpose of this chapter, secondary emissions shall be specific, well defined, quantifiable and impact the same general area as the stationary source or

modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major source or major modification. Secondary emissions do not include tailpipe emissions from any source regulated under title II of the Act or any emissions from in-transit marine vessels.

**(32)** (a) “Significant” means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following, except as provided in pars. (b) to (h):

1. Carbon monoxide: 100 tons per year (tpy).
2. Nitrogen oxides: 40 tpy.
3. Sulfur dioxide: 40 tpy.
4. Particulate matter: 25 tpy.
5. PM<sub>10</sub>: 15 tpy.

5m. PM<sub>2.5</sub>: 10 tpy; 40 tpy for nitrogen oxides; and 40 tpy for sulfur dioxide.

6. Ozone: 40 tpy of VOC or 40 tpy of nitrogen oxides.
7. Lead: 0.60 tpy.

(b) Notwithstanding the significant emission rate for carbon monoxide under par. (a), a net increase in carbon monoxide emissions resulting from any physical change in, or change in the method of operation of, a stationary source in a serious nonattainment area for carbon monoxide is significant if the increase exceeds 50 tpy, provided stationary sources contribute significantly to carbon monoxide levels in that area.

**Note:** If any serious nonattainment area for carbon monoxide is designated in the state, the department will make the determination of whether stationary sources contribute significantly to the carbon monoxide levels in accordance with rules or guidance issued by the U.S. environmental protection agency.

(c) Notwithstanding the significant emissions rate for ozone under par. (a), a net increase in emissions of VOCs that would result from any physical change in, or change in the method of operation of, a stationary source for which a complete construction permit application was submitted or was required to be submitted after November 15, 1992 and which is located in a serious or severe nonattainment area for ozone is significant if the increase exceeds 25 tpy when aggregated with all creditable increases and decreases in emissions of that precursor from the source over any period of 5 consecutive years, which includes the calendar year in which the increase will occur.

(d) Notwithstanding the significant emissions rates for ozone under pars. (a) and (c), any increase in VOC emissions from any discrete operation, unit or other pollutant emitting activity at a major source of VOCs located in an extreme nonattainment area for ozone shall be considered significant.

(e) Notwithstanding the significant emission rates for PM<sub>10</sub> under par. (a), a net increase in PM<sub>10</sub> emission resulting from a physical change in, or a change in the method of operation of, a stationary source in a serious nonattainment area for PM<sub>10</sub> is significant if the increase exceeds 10 tpy.

(f) For the purposes of applying the requirements of s. NR 408.03 (5) to major sources of nitrogen oxides for which a complete construction permit application was submitted or was required to be submitted after November 15, 1992 and which are located in ozone nonattainment areas or in ozone transport regions, the significant emission rates and other requirements for VOC in this subsection shall apply to nitrogen oxides emissions.

(g) For the purposes of applying the requirements of s. NR 408.03 (4) to a major source of a PM<sub>10</sub> precursor located in a moderate PM<sub>10</sub> nonattainment area, the significant emission rate for the PM<sub>10</sub> precursor is 15 tpy.

(h) For the purposes of applying the requirements of s. NR 408.03 (4) to a major source of a PM<sub>10</sub> precursor located in a serious PM<sub>10</sub> nonattainment area, the significant emission rate for the PM<sub>10</sub> precursor is 10 tpy.

**(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).

**(33)** “Temporary clean coal technology demonstration project” means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the state implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (21) (a) 1. intro., cr. (21) (f), Register, June, 1995, No. 474, eff. 7-1-95; am. (4), (5), (20) (e) 5. a. and b., (21) (intro.), Register, December, 1995, No. 480, eff. 1-1-96; am. (1)(b), (c), (4), (6), (8) (intro.), (20) (e) 2., 3., 8., 9. (intro.), (21) (b) 1. a., (e) 29., (23) (b) (intro.), 1., (24) (a), (b) 1., (25), (29), Register, December, 1996, No. 492, eff. 1-1-97; CR 01-081: am. (2) (a) and (4) Register September 2004 No. 585, eff. 10-1-04; CR 03-118: am. (1), (4), (5), (11), (13) and (21) (a) 1., cr. (2m), (11e), (11m), (11s), (13m), (24m), (25s), (28e), (28j), (28m), (28s), (29m) and (32m), r. and recr. (20) and (23), r. (27), Register June 2007 No. 618, eff. 7-1-07; CR 07-104: am. (13) (b) and (21) (e) 5., cr. (29s) Register July 2008 No. 631, eff. 8-1-08; CR 07-036: am. (2) (a) and (4) Register November 2008 No. 635, eff. 12-1-08; CR 10-050: cr. (32) (a) 5m, Register November 2010 No. 659, eff. 12-1-10; CR 13-070: am. (20) (e) 5. a., b., 6., renum. (29m) (c) to (c) (intro.) and am., cr. (29m) (c) 1. to 3., (d) Register July 2014 No. 703, eff. 8-1-14; CR 21-022: cr. (24) (c), am. (32) (a) 6. Register February 2022 No. 794, eff. 3-1-22.

#### 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.

**History:** CR 03-118: cr. Register June 2007 No. 618, eff. 7-1-07.

#### NR 408.03 Source applicability and exemptions.

**(1)** No person may begin actual construction of a major source or major modification to which the requirements of this chapter apply unless the person has a permit which states that the stationary source or modification will meet the requirements of ss. NR 408.04 to 408.10.

**(2)** The requirements of ss. NR 408.04 to 408.10 shall apply only to any new major source or major modification that is major for the pollutant, or the precursor of the pollutant, as applicable, for which an area is designated as nonattainment, or as an ozone transport region, as of the date the permit is issued, if the stationary source or modification would be constructed anywhere in the designated nonattainment area or ozone transport region.

**(3)** The requirements of ss. NR 408.04 to 408.10 shall apply with respect to any air contaminant for which an applicable

source is major and in the case of a modification, would result in a significant net emissions increase for that pollutant.

(4) The requirements of ss. NR 408.04 to 408.10 applicable to new major sources or major modifications of PM<sub>10</sub> shall also apply to each PM<sub>10</sub> precursor for which the source is a major source, except that the requirements do not apply where the administrator determines that the sources of PM<sub>10</sub> precursors do not significantly contribute to PM<sub>10</sub> levels which exceed the PM<sub>10</sub> ambient standards.

(5) The requirements of ss. NR 408.04 to 408.10 applicable for new major sources or major modifications of VOC shall apply to nitrogen oxides emissions from new major sources or major modifications of nitrogen oxides, except that the requirements do not apply if the administrator determines, when the administrator approves a plan, plan revision or petition under provisions of section 182 (f) of the Act (42 USC 7511a(f)), that the statutory requirements of section 182 (f) do not apply.

(6) For any major modification which results in a significant net emissions increase of VOCs in a serious or severe nonattainment area for ozone, if the source's potential to emit is less than 100 tpy of VOCs, the requirements of ss. NR 408.04 to 408.10 will not apply with respect to the VOCs if the owner or operator of the source elects to offset the increase in VOC emissions by a greater reduction in emissions of VOCs from other operations, units or activities within the source, at an internal offset ratio of at least 1.3 to 1.

(7) Notwithstanding the requirements for offsets under s. NR 408.06, emission offsets for an increase in the emissions of VOCs will not be required for a major modification which results in a significant increase in VOC emissions in an extreme nonattainment area for ozone if the modification consists of the installation of equipment required to comply with the applicable implementation plan, permit or provision under the act.

(8) The provisions of this chapter do not apply to a source or modification that would be a major source or major modification only if fugitive emissions to the extent quantifiable are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the source categories contained in s. NR 408.02 (21) (e).

(9) For attainment or unclassifiable areas within an ozone transport region, the permitting requirements of both ch. NR 405 and this chapter shall apply and where requirements conflict or overlap, the more stringent requirements shall prevail.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (5), Register, December, 1996, No. 492, eff. 1-1-97.

**NR 408.04 Control technology review.** (1) A major source or major modification shall meet each applicable emission limitation under this chapter and each applicable emission standard or standard of performance under chs. NR 440 and 447 to 449 and subch. IV of ch. NR 446.

(2) A new major source shall apply the lowest achievable emission rate for each pollutant subject to the provisions of this chapter that it would have the potential to emit in an amount which makes the source a major source. This provision applies to each new emissions unit at which emission increases would occur.

(3) A major modification shall apply the lowest achievable emission rate for each pollutant subject to the requirements of this chapter for which it would result in a significant net emissions increase at the source. This requirement applies to each emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of the lowest achievable emission rate shall be reviewed and modified as appropriate at the latest reasonable time which occurs no more than 18 months prior to commencement of construction of each independent phase of the project. At the time of the review, the owner or operator of the affected stationary source may be required to demonstrate the adequacy of any previous determination of the lowest achievable emission rate for the source.

(5) In the case of any major modification which results in a significant net emissions increase in VOC emissions in a serious or severe nonattainment area for ozone, if the modification occurs at a source which emits or has the potential to emit 100 tons or more of the VOCs per year, the requirements of sub. (3), concerning compliance with the lowest achievable emission rate, will not apply if the owner or operator of the source elects to offset the increase of emissions of the VOCs by a greater reduction in emissions of VOCs from other operations, units or pollutant emitting activities within the source at an internal offset ratio of at least 1.3 to 1.

(6) In the case of any major modification which results in a significant net emissions increase in VOC emissions in a serious or severe nonattainment area for ozone, if the source's potential to emit is less than 100 tpy of VOCs, the source shall be required to comply with BACT as a substitute for the LAER otherwise required under sub. (3).

(7) The department shall, for each new major source and major modification, submit to the U.S. environmental protection agency, within 60 days of issuance of the construction permit, all information on the emissions prevention or control technology for the new major source or major modification.

**Note:** The data submitted by the department will be included in the U.S. environmental protection agency's RACT/BACT/LAER Clearinghouse.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; CR 01-081: am. (1) Register September 2004 No. 585, eff. 10-1-04; CR 07-036: am. (1) Register November 2008 No. 635, eff. 12-1-08.

**NR 408.05 Reasonable further progress.** (1) By the time the proposed major source or major modification is to commence operation, sufficient offsetting emissions shall be in effect such that the total emissions from existing sources in the area, from new or modified sources which are not major sources and from the proposed source will be sufficiently less than total emissions from existing sources prior to the application for the permit to construct or modify so as to represent, when considered together with the plan provisions required under section 172 of the Act (42 USC 7502), reasonable further progress.

(2) For the purposes of satisfying the requirements of sub. (1):

(a) The determination of total emissions at both the time prior to the application for a permit subject to the requirements of this chapter and the time the permitted source or modification would commence operation, shall be made in a manner consistent with the assumptions in the applicable state implementation plan approved by the administrator concerning baseline emissions for the demonstration of reasonable further progress and attainment of the national ambient air quality standards for the particular pollutant subject to review under this chapter.

(b) To demonstrate reasonable further progress a new or modified source subject to review under this chapter shall obtain offsets in an amount equal to or greater than the amount specified by the applicable offset ratio. If an offset ratio is not specified, the offset ratio shall be at least 1 to 1.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (1), Register, December, 1996, No. 492, eff. 1-1-97.



**NR 408.06 Emissions offsets. (1)** To be eligible for use under this chapter, emissions offsets shall meet all of the following criteria:

(a) Except as provided in par. (cm), offsets shall be of the same air contaminant class, that is, volatile organic compounds, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, or lead.

(b) Offsets for particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead shall be in a time frame compatible with the applicable air quality standard.

(c) Offsets for volatile organic compounds and nitrogen oxides, where applicable, shall be quantified on an annual basis. In addition, the source shall submit emission estimates in a time frame consistent with the air quality standard for ozone.

**Note:** The time frame for the air quality standard for each pollutant is given in s. NR 404.04.

(cm) PM<sub>2.5</sub> emission increases may be offset by decreases in nitrogen oxides or sulfur dioxide emissions, that are otherwise creditable, at a ratio of 40 tpy of sulfur dioxide for each ton of direct PM<sub>2.5</sub> emissions and 200 tpy of nitrogen oxides for each ton of direct PM<sub>2.5</sub> emissions.

(d) Offsets shall result in a net air quality benefit.

**Note:** The term “net air quality benefit” will be interpreted based on EPA’s December 4, 1986 Emission Trading Policy Statement, incorporated by reference in s. NR 484.06, until revised by EPA or until the term is defined by the department.

(e) The emission reductions used as offsets shall be generated after the date used as a baseline or shall be included in the baseline for the portion of the latest state implementation plan which relates to the nonattainment status of the area. Emission reductions occurring before August 7, 1977 may not be used as offsets.

(f) The assumptions used to calculate the offset shall be consistent with the assumptions used to develop the area’s implementation plan.

(g) Offsets shall be surplus, permanent, quantifiable and federally enforceable at the time of their use.

**(2)** Prior to the issuance of a permit under this chapter, federally enforceable emissions offsets shall be obtained from the same source or other sources in the same nonattainment area, except that the emissions offsets may be obtained from a source in another nonattainment area if both of the following apply:

(a) The other area has an equal or higher nonattainment classification than the area in which the source is located.

(b) Emissions from the other area contribute to a violation of a national ambient air quality standard in the nonattainment area in which the proposed new or modified source would be constructed.

**(3)** The total annual tonnage of emissions of any applicable air contaminant allowed from the proposed new source, or net emissions increase from the modification, shall be offset by an equal or greater reduction, as applicable, in the actual emissions of the air contaminant from the same or other sources.

**(4)** In meeting the requirements of sub. (3) for ozone nonattainment areas classified under section 182 of the Act (42 USC 7511a), the ratio of total actual emission reductions of VOCs, and nitrogen oxides where applicable, to the net emissions increase for the same air contaminant class shall be as follows:

(a) In any rural transport or marginal nonattainment area for ozone: at least 1.1 to 1.

(b) In any moderate nonattainment area for ozone: at least 1.15 to 1.

(c) In any serious nonattainment area for ozone: at least 1.2 to 1.

(d) In any severe nonattainment area for ozone: at least 1.3 to 1.

(e) In any extreme nonattainment area for ozone: at least 1.5 to 1.

**(5)** Within an ozone transport region, for any area designated as ozone attainment, unclassifiable, or rural transport or marginal nonattainment, the ratio of total actual emissions reductions of VOCs, and nitrogen oxides where applicable, to the net emissions increase for the same air contaminant class shall be at least 1.15 to 1.

**(6)** A major modification which has a significant net emissions increase of VOCs, or nitrogen oxides where applicable, which is located in an extreme nonattainment area for ozone will be considered to comply with the offset requirements under s. NR 408.05 if the owner or operator of the source elects to offset the proposed emissions increase of VOCs, and nitrogen oxides where applicable, by a greater reduction in actual emissions from other discrete operations, units or pollutant emitting activities within the source at an internal offset ratio at least 1.3 to 1.

**(7) (a)** Emissions reductions achieved by shutting down an existing source or curtailing production or operating hours below baseline levels may be generally credited if:

1. The reductions are surplus, permanent, quantifiable and federally enforceable.

2. The area has a U.S. environmental protection agency approved state implementation plan, except as provided in par. (b).

3. The source notifies the department in writing prior to the date the shut down or curtailment occurs. The notification shall include documentation of the type and quantity of emission reduction credit to be generated.

4. The shutdown or curtailment occurs on or after the date specified for this purpose in the state implementation plan, and if the date specified is on or after the date of the most recent emissions inventory used in the plan’s demonstration of attainment. The department may consider a prior shutdown or curtailment to have occurred after the date of its most recent emissions inventory, if the inventory explicitly includes as current existing emissions the emissions from the previously shut down or curtailed sources. However, no credit is available for shutdowns which occurred prior to August 7, 1977.

(b) The emission reductions described in par. (a) may be credited in the absence of a U.S. environmental protection agency approved state implementation plan only if the shutdown or curtailment occurs on or after the date the construction permit application is filed or if the applicant can establish that the proposed new source is a replacement for the shut down or curtailed source, and the cutoff date provisions of par. (a) 4. are observed.

**(8)** No emissions reduction credit may be allowed for reductions in any organic compound specifically excluded from the definition of “VOC” in s. NR 400.02 (162).

**(9)** Credit for an emissions reduction may be claimed to the extent that 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. Incidental emissions reductions which are not otherwise required under the Act or chs. NR 400 to 499 may be creditable as emissions reductions for such purposes if the emissions reductions meet the applicable requirements of subs. (1) and (2).

**(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.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (4) (intro.), (a), (5), Register, December, 1996, No. 492, eff. 1-1-97; am. (2) (intro.), (a) and (8), Register, October, 1999, No. 526, eff. 11-1-99; CR 03-118; cr. (10) Register June 2007

No. 618, eff. 7-1-07; CR 10-050: cr. (1) (cm) Register November 2010 No. 659, eff. 12-1-10; CR 13-070: am. (1) (a) Register July 2014 No. 703, eff. 8-1-14.

**NR 408.07 Source impact analysis.** The applicant for a permit under this chapter shall demonstrate to the satisfaction of the department that all of the following conditions are met:

(1) The emissions offsets required under s. NR 408.06, when considered in conjunction with the proposed emissions increase, will have a net air quality benefit in the affected area, as required under s. NR 408.06 (1) (d).

(2) The emissions from the proposed new major source or major modification, when considered in conjunction with the emissions offsets required under s. NR 408.06, will not contribute to nonattainment in, or interfere with maintenance by, any other state with respect to any national primary or secondary ambient air quality standard.

(3) The emissions from the proposed new major source or major modification, when considered in conjunction with the emissions offsets required under s. NR 408.06, will not interfere with measures required to be included in the applicable implementation plan for any other state under a program for the prevention of significant deterioration or for the protection of visibility.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (intro.), Register, December, 1996, No. 492, eff. 1-1-97.

**NR 408.08 Additional conditions for approval.** For the department to approve a permit required or allowed under s. 285.60, Stats., and this chapter the following criteria shall be met:

(1) All major sources owned or operated by the owner or operator of the proposed source, or by any entity controlling, controlled by, or under common control with the owner or operator, in the state are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emissions limitations and standards under the Act and chs. NR 400 to 499.

(2) By means of an analysis of alternative sites, sizes, production processes and environmental control techniques for proposed new or modified stationary source, the owner or operator of the proposed stationary source or modification can demonstrate to the satisfaction of the department that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

(3) The administrator has not determined that the applicable implementation plan is not being adequately implemented for the nonattainment area in which the proposed stationary source or modification is to be constructed in accordance with the requirements of part D of title I of the Act (42 USC 7501 to 7515).

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (3), Register, December, 1996, No. 492, eff. 1-1-97; correction made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1996, No. 492.

**NR 408.09 Permit application review; public participation.** (1) The department shall notify all applicants within 20 days as to the completeness of the construction permit application or any deficiency in the application or information submitted. In the event of a deficiency, the date of receipt of the application shall be the date on which the department received all required information.

(2) Within 205 business days after receipt of a complete application, the department shall:

(a) Make a preliminary determination as to whether construction should be approved, approved with conditions or disapproved.

(b) Make available in at least one location in each area in which the proposed source would be constructed a copy of all **Published under s. 35.93, Stats. Updated on the first day of each month.**

materials the applicant has submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(c) Notify the public, by advertisement in a newspaper of general circulation in each area in which the proposed source would be constructed, of the application, the preliminary determination, a description of the amount and location of emission reductions that will offset the emissions increase from the new source, or significant net emissions increase from the modification; the determination of lowest achievable emission rate; and the opportunity for comment at a public hearing as well as for written public comment.

(d) Send a copy of the notice of the opportunity for public comment to the applicant, the administrator of the U.S. environmental protection agency, region 5, and officials and agencies having jurisdiction over the location where the proposed construction would occur, including any other state or local air pollution control agencies, the chief executives of the city and county where the source would be located, any comprehensive regional land use planning agency, and any state, federal land manager or Indian governing body whose lands may be affected by emissions from the source or modification.

(e) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required and other appropriate considerations.

(f) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearings in making a final decision on the approvability of the application. The department shall make all comments available for public inspection in the same locations where the department earlier made available preconstruction information relating to the proposed source or modification.

(g) Make a final determination as to whether construction should be approved, approved with conditions or disapproved.

(h) Notify the applicant in writing of the final determination and make the notification available for public inspection at the same locations where the department earlier made available preconstruction information and public comments relating to the source.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (2) (intro.), Register, August, 2000, No. 536, eff. 9-1-00.

**NR 408.10 Source obligation.** (1) Any owner or operator who constructs or operates a stationary source or modification not in accordance with the application submitted under this chapter or with the terms of any approval to construct, or any owner or operator of a stationary source or modification subject to this chapter who commences construction after June 1, 1993 without applying for and receiving approval as described in this chapter, shall be subject to enforcement action and penalties as provided in ch. NR 494.

(2) The approval to construct or modify a stationary source shall become invalid 18 months after the date a construction permit is issued by the department unless the permit specifies otherwise. The department may extend the 18 month period upon a satisfactory showing that an extension is justified unless otherwise specified in the construction permit.

(3) The approval to construct does not relieve any owner or operator of the responsibility to comply fully with applicable provision of chs. NR 400 to 499 or any other requirements under local, state or federal law.

(4) At the time that a particular source or modification becomes a major source or major modification solely by virtue of a relaxation in any enforceable limitation which was established af-

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ter August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of ss. NR 408.04 to 408.09 and this section shall apply to the source or modification as though construction has not yet commenced on the source or modification.

(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.
2. 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

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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.

**History:** Cr. Register, May, 1993, No. 449, eff. 6-1-93; am. (4), Register, December, 1996, No. 492, eff. 1-1-97; CR 03-118: cr. (5) and (6), Register June 2007 No. 618, eff. 7-1-07.

**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<sub>x</sub> 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 of issuance of the PAL permit.

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fective 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.

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

(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 PAL.

**(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 deter-

mined 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.

(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) (c) 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.

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(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:

1. 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.

2. 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 July 1, 2007.

**History:** CR 03-118: cr. Register June 2007 No. 618, eff. 7-1-07; CR 07-104: am. (6) (e) Register July 2008 No. 631, eff. 8-1-08.