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Chapter NR 405

PREVENTION OF SIGNIFICANT DETERIORATION

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NR 405.01 Applicability; purpose. (1) APPLICABILITY. The provisions of this chapter apply to the construction of any new major stationary source or any project at an existing major stationary source located in an area designated as attainment or unclassifiable.

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

Note: Throughout the proposed rule, changes have been made which result in the provisions of this PSD rule differing from 40 CFR 51.166, the federal regulation on which it is based. In this rule, the term "air contaminant" is substituted for the term "pollutant" in the federal regulation and "department" for "the State", "the Governor" and "reviewing authority". The federal definition for "building, structure, facility or installation" is applied to the phrase "facility, building, structure, equipment, vehicle or action" – a similar term which appears in Wisconsin's statutory provisions on air pollution. In addition, cross references in the federal regulation have been changed in the rule to comparable provisions in Wisconsin's rule (e.g., "40 CFR Parts 60 and 61" has been changed to "chs. NR 440 and 447 to 449 and subch. IV of ch. NR 446"). Eliminated from the rule are provisions of the federal regulations which do not apply to the state's PSD program (i.e., provisions governing EPA approval of plan revisions).

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; correction in (2) made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1996, No. 492; CR 03-118: am. (1) and (2), Register June 2007 No. 618, eff. 7-1-07.

NR 405.02 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 405.18. Instead, subs. (2m) and (25f) shall apply for those purposes.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the air contaminant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(c) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

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

(a) The applicable standards as set forth in chs. NR 440 and 445 to 449 and under sections 111 and 112 of the Act (42 USC 7411 and 7412).

(b) The applicable emissions limitations, as set forth in chs. NR 400 to 499.

(c) The emissions rate specified as a federally enforceable permit condition.

(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 av-

erage rate, in tons per year, at which the emissions unit actually emitted the air contaminant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or, the date a complete permit application is received by the department for a permit required under ch. NR 406 or for a permit revision under ch. NR 407, whichever is earlier, except that the 10-year period may not include any period earlier than November 15, 1990.

1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns and malfunctions.

2. The average rate shall be adjusted downward to exclude any emissions in excess of an emission limitation that was legally enforceable during the consecutive 24-month period.

3. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had the major stationary source been required to comply with the limitation during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the administrator proposed or promulgated under 40 CFR part 63, the baseline actual emissions need only be adjusted if the state has taken credit for the emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of s. NR 408.06 (9).

4. For a regulated NSR air contaminant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated NSR air contaminant.

5. The average rate may not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for adjusting this amount if required by subds. 2. and 3.

(c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of the unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(d) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in par. (a), for other existing emissions units in accordance with the procedures contained in par. (b), and for a new emissions unit, in accordance with the procedures contained in par. (c).

(3) "Baseline area" means any intrastate area, and every part thereof, designated as attainment or unclassifiable under section 107 (d) (1) (A) (ii) or (iii) of the Act (42 USC 7407 (d) (1) (A) (ii) or (iii)) in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established equal to or greater than 1 $\mu g/m^3$ (annual average) for SO_2, NO_2, or PM_{10}, or equal to or greater than $0.3\mu g/m^3$ (annual average) for $PM_{2.5}$. Area redesignations under section 107 (d) (1) (A) (ii) or (iii) of the Act (42 USC 7407 (d) (1) (A) (ii) or (iii)) cannot intersect or be smaller than the area of impact of any major stationary source or major modification which either establishes a minor source baseline date or is subject to this chapter.

(4) (a) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each air contaminant for which a minor source baseline date is established and shall include:

1. The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in par. (b).

2. The allowable emissions of major stationary sources which commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(b) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increases:

1. Actual emissions from any major stationary source on which construction commenced after the major source baseline date.

2. Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

(6) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework 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.

(7) "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the Act which would be emitted from any proposed major stationary source or major modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts, and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including clean fuels, fuel cleaning or treatment or innovative fuel combination 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 445 to 449 and under sections 111 and 112 of the Act (42 USC 7411 and 7412). Emissions from any source utilizing clean fuels or any other means to comply with this subsection may not be allowed to increase above the levels that would have been required under this subsection as it existed prior to enactment of the 1990 clean air Act amendments on November 15, 1990. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(8) "Building, structure, facility or installation" or "facility, building, structure, equipment, vehicle or action" means all of the activities which emit or may emit a regulated NSR air contaminant, belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person, or persons under common control, except the activities of any vessel. Regulated NSR air contaminant emitting activities shall be considered as part of the same industrial

grouping if they are classified under the same 2-digit major group as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05.

(8m) "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 air 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.

(8s) "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.

(9) "Commence" as applied to construction of a major stationary 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.

(10) "Complete" means, in reference to an application for a permit, that the application contains all the information necessary 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.

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

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

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

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

(11m) "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 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.

(12) "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. (25k), is an existing emissions unit.

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

(15) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(16) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(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 reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of congress.

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) "Low terrain" means any area other than high terrain.

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

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

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

(b) A physical change or change in the method of operation does not include any of the following:

1. Routine maintenance, repair and replacement.

2. Use of an alternative fuel or raw material by reason of any order under sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (15 USC 791 to 798) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 USC 791a to 828c).

3. Use of an alternative fuel by reason of an order or rule under section 125 of the Act (42 USC 7425).

4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.

5. Use of an alternative fuel or raw material by a stationary source when one of the following applies:

a. The source was capable of accommodating the alternative fuel or raw material before January 6, 1975, unless the change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to this chapter or ch. NR 406 or 408 or under an operation permit issued pursuant to ch. NR 407, 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 the alternative fuel or raw material under any permit issued under this chapter or ch. NR 406, 407, or 408, 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 January 6, 1975 pursuant to this chapter, ch. NR 406, or 408 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 Part 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.

9. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated air contaminant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

10. The reactivation of a very clean coal-fired electric utility steam generating unit.

(c) This definition does not apply with respect to a particular regulated NSR air contaminant when the major stationary source is complying with the requirements under s. NR 405.18 for a PAL for that air contaminant. Instead, the definition at s. NR 405.18 (2) (e) shall apply.

(21m) "Major source baseline date" means:

(a) In the case of PM_{10} and sulfur dioxide, January 6, 1975.

(b) In the case of nitrogen dioxide, February 8, 1988.

(c) In the case of $PM_{2.5}$, October 20, 2010.

(22) (a) "Major stationary source" means:

1. Any of the following stationary sources of air contaminants which emits, or has the potential to emit, 100 tons per year or more of any air contaminant subject to regulation under the Act: Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation, as described by the 6-digit code of 312140 or 325193 in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05 (17)), fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants.

2. Notwithstanding the stationary source size specified in subd. 1., any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air contaminant subject to regulation under the act.

3. Any physical change that would occur at a stationary source not otherwise qualifying under this subsection as a major stationary source, if the change would constitute a major stationary source by itself.

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

(c) Volatile organic compounds exclude the compounds listed under s. NR 400.02 (162) unless the compound is subject to an emission limitation under chs. NR 440 and 447 to 449 and subch. IV of ch. NR 446.

(d) 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.

(22m) (a) "Minor source baseline date" means the earliest date after the trigger date on which the owner or operator of a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

1. In the case of PM_{10} and sulfur dioxide, August 7, 1977.

2. In the case of nitrogen dioxide, February 8, 1988.

3. In the case of $PM_{2.5}$, October 20, 2011.

(b) The minor source baseline date is established for each air contaminant for which increments or other equivalent measures have been established if:

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

2. In the case of a major stationary source, the air contaminant would be emitted in significant amounts or, in the case of a major modification, there would be a significant net emissions increase of the air contaminant.

(23) "Necessary preconstruction approvals or permits" means those permits or approvals required under chs. NR 400 to 499.

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

1. The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to the methods contained in s. NR 405.025.

2. Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the

particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subdivision shall be determined as provided in sub. (2m), except that sub. (2m) (a) 3. and (b) 4. do not apply.

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the following:

1. The date 5 years before construction on the particular change commences.

2. The date that the increase from the particular change occurs.

(c) An increase or decrease in actual emissions is creditable only if all of the following are satisfied:

1. It is contemporaneous with the particular change.

2. The department has not relied on it in issuing a permit for the source under this chapter and the permit is in effect when the increase in actual emissions from the particular change occurs.

(d) An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides or particulate matter measured as PM_{10} which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(f) A decrease in actual emissions is creditable only to the extent that all of the following are satisfied:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.

2. It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.

3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit an air contaminant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(h) Section NR 405.02 (1) (a) does not apply for determining creditable increases and decreases.

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

(25) "Potential to emit" means the maximum capacity of a stationary source to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit an air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

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

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

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

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

(25f) (a) "Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR air contaminant in any one of the 5 years following the date the unit resumes regular operation after the project. If the project involves increasing the emissions unit's design capacity or the emissions unit's potential to emit the regulated NSR air contaminant, and full utilization of the emissions unit's capacity or potential would result in a significant net emissions increase, "projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR air contaminant in any one of the 10 years following the date the unit resumes regular operation after the project.

(b) 1. In determining the projected actual emissions before beginning actual construction, the owner or operator of the major stationary source shall do all of the following:

a. Consider all relevant information, including historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities and compliance plans under the approved state implementation plan.

b. Include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns and malfunctions.

2. In determining the projected actual emissions before beginning actual construction, the owner or operator shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under sub. (2m) and that are also unrelated to the particular project, including any increased utilization due to product demand growth.

(c) In lieu of using the method in par. (b), the owner or operator may elect to use the emissions unit's potential to emit, in tons per year, as defined under sub. (25).

(25g) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit meets all of the following criteria:

(a) It has not been in operation for the 2-year period prior to the enactment of the clean air Act amendments of 1990 on November 15, 1990, and the emissions from the unit continue to be carried in the department's emissions inventory at the time of enactment.

(b) It was as equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%.

(c) It is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation.

(d) It is otherwise in compliance with the requirements of the act.

(25i) "Regulated NSR air contaminant" means all of the following:

(a) Any air contaminant for which a national ambient air quality standard has been promulgated.

(ag) $PM_{2.5}$ emissions and PM_{10} 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.

(ar) Any air contaminant that is identified under this paragraph as a precursor to an air contaminant for which a national ambient air quality standard has been promulgated by the EPA, or that the EPA has determined to be a constituent or precursor to an air contaminant for which a national ambient air quality standard has been promulgated by the EPA. The precursors identified by the administrator are as follows:

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

2. Sulfur dioxide is a precursor to $PM_{2.5}$ in all attainment and unclassifiable areas.

3. Nitrogen oxides are precursors to $PM_{2.5}$ in all attainment and unclassifiable 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 $PM_{2.5}$ concentrations.

(b) Any air contaminant that is subject to any standard promulgated under section 111 of the Act (42 USC 7411).

(c) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act (42 USC 7671 to 7671q).

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

(25k) "Replacement unit" means an emissions unit for which all the criteria listed in pars. (a) to (d) are met. No creditable emission reductions may 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.

(25m) (a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the federal secretary of energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(b) Repowering shall also include any unit fired by oil or gas or both which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the federal department of energy.

(c) The department shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Act (42 USC 7651h).

(25s) "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 such period is more representative of normal source operations, considering the effect any such 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.

(26) "Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purposes of this chapter, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(27) (a) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the air contaminants in Table A, a rate of emissions that would equal or exceed any of the rates in Table A.

Table A
Pollutant and Emissions Rate

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_{10}: 15 tpy

5m. $PM_{2.5}$: 10 tpy, also 40 tpy of nitrogen oxides or 40 tpy of sulfur dioxide

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6. Ozone: 40 tpy of volatile organic compounds or nitrogen oxides

7. Lead: 0.60 tpy

8. Municipal solid waste landfill emissions (measured as non-methane organic compounds): 50 tpy

9. Fluorides: 3.0 tpy

10. Sulfuric acid mist: 7.0 tpy

11. Hydrogen sulfide (H_2S): 10 tpy

12. Total reduced sulfur (including H_2S): 10 tpy

13. Reduced sulfur compounds (including H_2S): 10 tpy

14. Municipal waste combustor (MWC) acid gases (measured as total sulfur dioxide and hydrogen chloride): 40 tpy

15. MWC metals (measured as particulate matter): 15 tpy

16. MWC organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.5×10^{-6} tpy

(c) "Significant" means any emissions rate in reference to a net emissions increase or the potential of a source to emit an air contaminant subject to regulation under the Act other than air contaminants listed in par. (a) or under section 112 (b) of the Act (42 USC 7412 (b)).

(d) Notwithstanding par. (a), "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 $\mu g/m^3$ (24-hour average).

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

(28) "Stationary source" means any building, structure, facility or installation which emits or may emit any air contaminant subject to regulation under the act.

(28m) "Subject to regulation under the Act" means, for any air contaminant, that the contaminant is subject to either a provision of the Act, or a nationally applicable regulation codified by the administrator in title 40, chapter I, subchapter C of the CFR, that requires actual control of the quantity of air emissions of the contaminant, and that the control requirement has taken effect and is operative to control, limit, or restrict the quantity of emissions of the contaminant released from the regulated activity.

(29) "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 plans for the state in which the project is located 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, January, 1987, No. 373, eff. 2-1-87; am. (27) (a) Register, December, 1988, No. 396, eff. 1-1-89; am. (intro.), (22) (c), (24) (d), (27) (b) and (28), cr. (22) (d), Register, May, 1992, No. 437, eff. 6-1-92; emerg. am. (7) and (27) (a) and (b), eff. 11-15-92; am. (intro.), (1) (c), (7), (8) and (27) (a), cr. (1) (d), (8m), (8s), (11m), (21) (b) 8. to 11., (24m), (25g), (25m), (25s) and (29), renum. (14) to be NR 400.02 (39m) and am., r. (27) (b), Register, May, 1993, No. 449, eff. 6-1-93; corrections in (1) (intro.) and (25g) (a) made under s. 13.93 (2m) (b) 7. and 6., Stats., Register, May, 1993, No. 449; am. (1) (b), (2) (a), (3) (intro.), (7), (21) (b) 6., (24) (d), (25m) (b), (c), Register, April, 1995, No. 472, eff. 5-1-95; am. (1) (d), (2) (intro.), (3) (intro.), (a), (4) (a) (intro.), 1. and 2., (b) 1. and 2., (7), (8), (12), (21) (intro.), (b) 3., 5. a. and b., 6., 8. a., (22) (a) 1. and 2., (24) (d), (25g) (d), (25m) (a) and (c), (25s) (intro.) and (a), (27) (c) and (28), r. (5), cr. (21m) and (22m), Register, December, 1995, No. 480, eff. 1-1-96; am. (3) (intro.), (7), (9) (intro.), (21) (b) 2., 3., 8 and 9. (intro.) (22m) (b) 1., (24) (b) (intro.), 1., (24m) (intro.), (25g) and (25m) (a), r. (3) (a), (b), Register, December, 1996, No., 492, eff. 1-1-97; am. (21) (b) (intro.), 5. and (22) (c), Register, October, 1999, No. 526, eff. 11-1-99; CR 01-081: am. (22) (c) Register September 2004 No. 585, eff. 10-1-04; CR 03-118: am. (1) (intro.), (a) to (c), (8), (11) and (12), r. (1) (d), (24m), (27) (a) 8., 17. and 18., cr. (2m), (11c), (11e), (11j), (20m), (24j), (25b), (25d), (25e), (25f), (25i) and (27m), r. and recr. (21) and (24), Register June 2007 No. 618, eff. 7-1-07; CR 06-109: cr. (27) (a) 8. Register May 2008 No. 629, eff. 6-1-08; CR 07-104: am. (12) (b) and (22) (a) 1., cr. (25k) Register July 2008 No. 631, eff. 8-1-08; CR 07-036: am. (22) (c) Register November 2008 No. 635, eff. 12-1-08; CR 10-050: am. (25k) (intro.), cr. (27) (a) 5m. Register November 2010 No. 659, eff. 12-1-10; EmR1046: emerg. cr. (28m), eff. 12-15-10; CR 10-144: cr. (28m) Register August 2011 No. 668, eff. 9-1-11; CR 13-070: am. (21) (b) 5. a., b., 6., (25i) (a), cr. (25i) (ag), (ar) Register July 2014 No. 703, eff. 8-1-14; CR 15-077: am. (3), (21) (a), (21m) (a), cr. (21m) (c), am. (22) (b), (22m) (a) 1., cr. (22m) (a) 3., am. (22m) (b) 1., (27) (a) 6. Register July 2016 No. 727, eff. 8-1-16.

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

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

(3) For projects that involve existing and new emissions units, any increase in actual emissions from a physical change or change in the method of operation at a stationary source shall equal the sum of the emissions increases for each emissions unit involved in the project, using the method specified in sub. (1) for existing emissions units and the method in sub. (2) for new emissions units.

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

NR 405.03 Restrictions on area classifications. (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated by the department:

(a) International parks.

(b) National wilderness areas which exceed 5,000 acres in size.

(c) National memorial parks which exceed 5,000 acres in size.

(d) National parks which exceed 6,000 acres in size.

(2) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this chapter.

(3) The following areas may be redesignated only as Class I or II:

(a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore.

(b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(4) The extent of the areas referred to in subs. (1) and (3) shall conform to any changes in the boundaries which have occurred subsequent to August 7, 1977.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; emerg. cr. (4), eff. 11-15-92; cr. (4), Register, May, 1993, No. 449, eff. 6-1-93.

NR 405.04 Exclusions from increment consumption. (1) All of the following concentrations shall be excluded in determining compliance with a maximum allowable increase:

(a) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 USC 791 to 798) over

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the emissions from such sources before the effective date of such an order.

(b) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act (16 USC 791a to 828c) over the emissions from such sources before the effective date of the plan.

(c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources.

(d) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(e) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, nitrogen dioxide or particulate matter from stationary sources which are affected by plan revisions approved by the administrator as meeting the criteria specified in sub. (4).

(2) No sources which have concentrations which are excluded from increment consumption under sub. (1) (a) and (b) may any longer have those concentrations excluded 5 years after the effective date of the order to which sub. (1) (a) refers or the plan to which sub. (1) (b) refers, whichever is applicable. If both such order and plan are applicable, no such exclusion may apply more than 5 years after the later of such effective dates.

(4) For purposes of excluding concentrations pursuant to sub. (1) (e), the administrator may approve a plan revision that:

(a) Specifies the time over which the temporary emissions increase of sulfur dioxide, nitrogen dioxide or particulate matter would occur. Such time is not to exceed 2 years in duration unless a longer time is approved by the administrator.

(b) Specifies that the time period for excluding certain contributions in accordance with par. (a) is not renewable.

(c) Allows no emissions increase from a stationary source which would do either of the following:

1. Impact a Class I area or an area where an applicable increment is known to be violated.

2. Cause or contribute to the violation of a national ambient air quality standard.

(d) Requires limitations to be in effect at the end of the time period specified in accordance with par. (a) which would insure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (1) (e), (2), (3) and (4) (a), Register, May,1992, No. 437, eff. 6-1-92; am. (1) (a) and (e), (4) (intro.) and (a), r. (3), Register, December, 1995, No. 480, eff. 1-1-96; am. (1) (intro.), (a), (b), (4) (c) (intro.), Register, December, 1996, No. 492, eff. 1-1-97.

NR 405.05 Redesignation. (1) All areas of the state, except as otherwise provided under s. NR 405.03, shall be designated either Class I, Class II, or Class III. Any designation other than Class II shall be subject to the redesignation procedures of this section. Any redesignation must be approved by the administrator as a revision to the applicable state implementation plan.

(2) The department may redesignate areas of the state Class I or Class II if the following criteria are met:

(a) At least one public hearing has been held in the area affected.

(b) Other states, Indian governing bodies, and federal land managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing.

(c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, is prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion.

(d) Prior to the issuance of notice respecting the redesignation of an area that includes any federal lands, the department shall provide written notice to the appropriate federal land manager and the federal land manager shall be allowed 30 days to confer with the department respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any federal land manager submits written comments and recommendations, the department shall publish a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the federal land manager).

(e) The department proposes the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which s. NR 405.03 refers may be redesignated as Class III if the following criteria are met:

(a) The redesignation meets the requirements of provisions established in accordance with sub. (2).

(b) The redesignation, except any established by an Indian governing body, is specifically approved by the department.

(c) The redesignation does not cause, or contribute to, a concentration of any air contaminant which exceeds any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard.

(d) Any permit application for any major stationary source or major modification subject to provisions established in accordance with s. NR 405.10, which can receive a permit only if the area in question is redesignated as Class III, and any material submitted as part of that application is available, insofar as is practicable, for public inspection prior to any public hearing on redesignation of any area as Class III.

(4) Lands within the exterior boundaries of Indian reservations may be redesignated only by the appropriate Indian governing body. The appropriate Indian governing body may submit to the administrator a proposal to redesignate areas Class I, Class II, or Class III provided that the following conditions are met:

(a) The Indian governing body has followed procedures equivalent to those required of the department under subs. (2) and (3) (c) and (d).

(b) Such redesignation is proposed after consultation with the state in which the Indian reservation is located and which border the Indian reservation.

(5) If the administrator disapproves a proposed redesignation, the classification of the area shall be that which was in effect prior to the disapproval of the redesignation.

(6) If the administrator disapproves any proposed area redesignation, the department or Indian governing body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the administrator.

Note: The time period provided for a federal land manager's comments in the federal regulations (not in excess of 60 days) is specified as 30 days in sub. (2) (d).

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (1), (4) (intro.), (5) and (6), Register, December, 1995, No. 480, eff. 1-1-96; am. (3) (intro.), (c), (4) (intro.), Register, December, 1996, No. 492, eff. 1-1-97.

NR 405.06 Stack heights. The degree of emission limitation required for control of any air contaminant under chs. NR 400 to 499 may not be affected in any manner by:

(1) So much of a stack height, not in existence before December 31, 1970, as exceeds good engineering practice, or

(2) Any other dispersion technique not implemented before then.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87.

NR 405.07 Review of major stationary sources and major modifications — source applicability and exemptions. (1) No major stationary source or major modification may begin actual construction unless the requirements of ss. NR 405.08 to 405.16 have been met.

(2) The requirements of ss. NR 405.08 to 405.16 shall apply to any major stationary source and any major modification with respect to each air contaminant that it would emit, except as this chapter would otherwise allow.

(3) The requirements of ss. NR 405.08 to 405.11 apply only to any major stationary source or major modification that would be constructed in an area which is designated as attainment or unclassifiable under section 107 (a) (1) (D) or (E) of the Act (42 USC 7407(a)(1)(D) or (E)).

(4) A major source or major modification is exempt from the requirements of ss. NR 405.08 to 405.16 if any of the following apply:

(a) The source or modification would be a major stationary 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 such source does not belong to any of the following categories:

1. Coal cleaning plants (with thermal dryers).
2. Kraft pulp mills.
3. Portland cement plants.
4. Primary zinc smelters.
5. Iron and steel mills.
6. Primary aluminum ore reduction plants.
7. Primary copper smelters.
8. Municipal incinerators capable of charging more than 250 tons of refuse per day.
9. Hydrofluoric, sulfuric, or nitric acid plants.
10. Petroleum refineries.
11. Lime plants.
12. Phosphate rock processing plants.
13. Coke oven batteries.
14. Sulfur recovery plants.
15. Carbon black plants (furnace processes).
16. Primary lead smelters.
17. Fuel conversion plants.
18. Sintering plants.
19. Secondary metal production plants.
20. Chemical process plants. The chemical processing plants category does not include ethanol production facilities that produce ethanol by natural fermentation, as described by the 6-digit code of 312140 or 325193 in the North American Industry Classification System United States, 2007, incorporated by reference in s. NR 484.05 (17).
21. Fossil fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input.
22. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
23. Taconite ore processing plants.
24. Glass fiber processing plants.
25. Charcoal production plants.
26. Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input.
27. Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act (42 USC 7411 or 7412).

(b) The major source or major modification is a portable stationary source which has previously received a permit under requirements in ss. NR 405.08 to 405.16 and all of the following conditions are met:

1. The source proposes to relocate and emissions of the source at the new location would be temporary.
2. The emissions from the source would not exceed its allowable emissions.
3. The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated.
4. Reasonable notice is given to the department prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the department not less than 30 days in advance of the proposed relocation unless a different time duration is previously approved by the department.

(5) The requirements of ss. NR 405.08 to 405.16 do not apply to a major stationary source or major modification with respect to a particular air contaminant if the owner or operator demonstrates that, as to that air contaminant, the source or modification is located in an area designed as nonattainment under section 107 of the Act (42 USC 7407).

(6) The requirements contained in ss. NR 405.09, 405.11, and 405.13 do not apply to a proposed major stationary source or major modification with respect to a particular air contaminant, if the allowable emissions of that air contaminant from a new source, or the net emissions increase of that air contaminant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

(7) The requirements contained in ss. NR 405.09, 405.11, and 405.13 as they relate to any maximum allowable increase for a Class II area do not apply to a modification of a major stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each air contaminant from the modification after the application of best available control technology would be less than 50 tons per year.

(8) The department may exempt a proposed major stationary source or major modification from the requirements of s. NR 405.11 with respect to monitoring for a particular air contaminant if one of the following applies:

(a) The emissions increase of the air contaminant from a new stationary source or the net emissions increase of the air contaminant from a major modification would cause, in any area, air quality impacts less than the following amounts:

1. Carbon monoxide — 575 $\mu g/m^3$, 8-hour average.
2. Nitrogen dioxide — 14 $\mu g/m^3$, annual average.
3. PM_{10} — 10 $\mu g/m^3$, 24-hour average.

3m. $PM_{2.5}$ – 0 $\mu g/m^3$.

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

4. Sulfur dioxide — 13 $\mu g/m^3$, 24-hour average.
5. Ozone.

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

6. Lead — 0.10 $\mu g/m^3$, 3-month average.

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7. Mercury — 0.25 μg/m^3, 24-hour average.
8. Beryllium — 0.0010 μg/m^3, 24-hour average.
9. Fluorides — 0.25 μg/m^3, 24-hour average.
10. Vinyl chloride — 15 μg/m^3, 24-hour average.
11. Total reduced sulfur — 10 μg/m^3, 1-hour average.
12. Hydrogen sulfide — 0.20 μg/m^3, 1-hour average.
13. Reduced sulfur compounds — 10 μg/m^3, 1-hour average.

(b) The concentrations of the air contaminant in the area that the source or modification would affect are less than the concentrations listed in par. (a).

(c) The air contaminant is not listed in par. (a).

Note: The advance notice requirement for relocation of a portable source in the federal regulations (not less than 10 days advance notice) has been changed to not less than 30 days in sub. (4) (b).

(9) (a) Beginning January 2, 2011, emissions of greenhouse gases at a stationary source shall only be subject to regulation under the Act if the stationary source is any of the following:

1m. A new major stationary source for a regulated NSR contaminant other than GHG, which will emit or will have the potential to emit 75,000 tpy or more of GHG on a carbon dioxide equivalent basis.

2m. An existing major stationary source for a regulated NSR contaminant other than GHG, which will have an emissions increase of a regulated NSR contaminant other than GHG, and an emissions increase of 75,000 tpy or more of GHG on a carbon dioxide equivalent basis.

Note: The department intends to regulate GHG consistent with the 40 CFR 51.166 (June 3, 2010). In the event of litigation or congressional action which impacts the federal regulations, the department will commence rulemaking to remain consistent with the resulting federal regulations.

(b) For purposes of this subsection, emissions of GHG on a carbon dioxide equivalent basis shall be determined by multiplying the mass amount of emissions, in tons per year, for each of the constituent gases in the pollutant GHG by the associated global warming potential for the gas in Table B, and then summing the products obtained.

Table B
Global Warming Potentials (GWP)

	Greenhouse Gas	Chemical Abstract Service Number[1]	Chemical Formula	GWP
	(a)	(b)	(c)	(d)
1.	Carbon dioxide	124-38-9	CO_2	1
2.	Methane	74-82-8	CH_4	21
3.	Nitrous oxide	10024-97-2	N_2O	310
4.	HFC-23	75-46-7	CHF_3	11,700
5.	HFC-32	75-10-5	CH_2F_2	650
6.	HFC-41	593–53–3	CH_3F	150
7.	HFC-125	354-33-6	C_2HF_5	2,800
8.	HFC-134	359–35–3	$C_2H_2F_4$	1,000
9.	HFC-134a	811-97-2	CH_2FCF_3	1,300
10.	HFC-143	430–66–0	$C_2H_3F_3$	300
11.	HFC-143a	420-46-2	$C_2H_3F_3$	3,800
12.	HFC-152	624–72–6	CH_2FCH_2F	53
13.	HFC-152a	75-37-6	CH_3CHF_2	140
14.	HFC-161	353–36–6	CH_3CH_2F	12
15.	HFC-227ea	431-89-0	C_3HF_7	2,900
16.	HFC-236cb	677–56–5	$CH_2FCF_2CF_3$	1,340
17.	HFC-236ea	431-63-0	CHF_2CHFCF_3	1,370
18.	HFC-236fa	690-39-1	$C_3H_2F_6$	6,300
19.	HFC-245ca	679–86–7	$C_3H_3F_5$	560
20.	HFC-245fa	460–73–1	$CHF_2CH_2CF_3$	1,030
21.	HFC-365mfc	406–58–6	$CH_3CF_2CH_2CF_3$	794
22.	HFC-43-10mee	138495-42-8	$CF_3CFHCFHCF_2CF_3$	1,300
23.	Sulfur hexafluoride	2551-62-4	SF_6	23,900
24.	Trifluoromethyl sulphur pentafluoride	373-80-8	SF_5CF_3	17,700
25.	Nitrogen trifluoride	7783–54–2	NF_3	17,200
26.	PFC-14 (Perfluoromethane)	75-73-0	CF_4	6,500
27.	PFC-116 (Perfluoroethane)	76-16-4	C_2F_6	9,200
28.	PFC-218 (Perfluoropropane)	76-19-7	C_3F_8	7,000
29.	Perfluorocyclopropane	931–91–9	$C\text{-}C_3F_6$	17,340
30.	PFC-3-1-10 (Perfluorobutane)	355-25-9	C_4F_{10}	7,000
31.	Perfluorocyclobutane	115-25-3	$C\text{-}C_4F_8$	8,700
32.	PFC-4-1-12 (Perfluoropentane)	678-26-2	C_5F_{12}	7,500
33.	PFC-5-1-14 (Perfluorohexane)	355-42-0	C_6F_{14}	7,400
34.	PFC–9–1–18	306–94–5	$C_{10}F_{18}$	7,500
35.	HCFE–235da2 (Isoflurane)	26675–46–7	$CHF_2OCHClCF_3$	350
36.	HFE–43–10pccc (H–Galden 1040x)	E1730133	$CHF_2OCF_2OC_2F_4OCHF_2$	1,870
37.	HFE–125	3822–68–2	CHF_2OCF_3	14,900
38.	HFE–134	1691–17–4	CHF_2OCHF_2	6,320
39.	HFE–143a	421–14–7	CH_3OCF_3	756
40.	HFE–227ea	2356–62–9	$CF_3CHFOCF_3$	1,540
41.	HFE–236ca12 (HG–10)	78522–47–1	$CHF_2OCF_2OCHF_2$	2,800
42.	HFE–236ea2 (Desflurane)	57041–67–5	$CHF_2OCHFCF_3$	989

Table B
Global Warming Potentials (GWP)

	Greenhouse Gas	Chemical Abstract Service Number[1]	Chemical Formula	GWP
	(a)	(b)	(c)	(d)
43.	HFE–236fa	20193–67–3	$CF_3CH_2OCF_3$	487
44.	HFE–245cb2	22410–44–2	$CH_3OCF_2CF_3$	708
45.	HFE–245fa1	84011–15–4	$CHF_2CH_2OCF_3$	286
46.	HFE–245fa2	1885–48–9	$CHF_2OCH_2CF_3$	659
47.	HFE–254cb2	425–88–7	$CH_3OCF_2CHF_2$	359
48.	HFE–263fb2	460–43–5	$CF_3CH_2OCH_3$	11
49.	HFE–329mcc2	67490–36–2	$CF_3CF_2OCF_2CHF_2$	919
50.	HFE–338mcf2	156053–88–2	$CF_3CF_2OCH_2CF_3$	552
51	HFE–338pcc13 (HG–01)	188690–78–0	$CHF_2OCF_2CF_2OCHF_2$	1,500
52.	HFE–347mcc3	28523–86–6	$CH_3OCF_2CF_2CF_3$	575
53.	HFE–347mcf2	E1730135	$CF_3CF_2OCH_2CHF_2$	374
54.	HFE–347pcf2	406–78–0	$CHF_2CF_2OCH_2CF_3$	580
55.	HFE–356mec3	382–34–3	$CH_3OCF_2CHFCF_3$	101
56.	HFE–356pcc3	160620–20–2	$CH_3OCF_2CF_2CHF_2$	110
57.	HFE–356pcf2	E1730137	$CHF_2CH_2OCF_2CHF_2$	265
58.	HFE–356pcf3	35042–99–0	$CHF_2OCH_2CF_2CHF_2$	502
59.	HFE–365mcf3	378–16–5	$CF_3CF_2CH_2OCH_3$	11
60.	HFE–374pc2	512–51–6	$CH_3CH_2OCF_2CHF_2$	557
61.	HFE–449sl (HFE–7100) Chemical blend	163702–07–6 163702–08–7	$C_4F_9OCH_3$ $(CF_3)_2CFCF_2OCH_3$	297
62.	HFE–569sf2 (HFE–7200) Chemical blend	163702–05–4 163702–06–5	$C_4F_9OC_2H_5$ $(CF_3)_2CFCF_2OC_2H_5$	59
63.	Sevoflurane	28523–86–6	$CH_2FOCH(CF_3)_2$	345
64.	HFE–356mm1	13171–18–1	$(CF_3)_2CHOCH_3$	27
65.	HFE–338mmz1	26103–08–2	$CHF_2OCH(CF_3)_2$	380
66.	(Octafluorotetramethylene) hydroxymethyl group	NA	$X\text{-}(CF_2)_4CH(OH)\text{-}X$	73
67.	HFE–347mmy1	22052–84–2	$CH_3OCF(CF_3)_2$	343
68.	Bis (trifluoromethyl)-methanol	920–66–1	$(CF_3)_2CHOH$	195
69.	2,2,3,3,3-pentafluoropropanol	422–05–9	$CF_3CF_2CH_2OH$	42
70.	PFPMIE	NA	$CF_3OCF(CF_3)CF_2OCF_2OCF_3$	10,300

[1] The Chemical Abstract Service or CAS numbers refer to the unique chemical abstracts service registry number assigned to a specific chemical, isomer or mixture of chemicals or isomers and recorded in the CAS chemical registry system by the Chemical Abstracts Service, PO Box 3012, Columbus OH 42310, phone: 1-614-447-3600.

Note: The GWPs in Table B are based upon the GWPs codified by the EPA at 40 CFR part 98, Subpart A, Table A-1, as of October 22, 2010.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; corrections in (6) to (8) made under s. 13.93 (2m) (b) 7., Stats., Register, April, 1988, No. 388; am. (8) (a) 3., Register, April, 1995, No. 472, eff. 5-1-95; am. (1), (4) (intro.), (5) and (6), Register, December, 1995, No. 480, eff. 1-1-96; am. (3), (5), (8) (intro.), (a) 6., 8, 12, renum. (4) (b) and (c) to be (4) (a) and (b) and am. (4) (a) 27., (b) (intro.), Register, December, 1996, No. 492, eff. 1-1-97; am. (8) (a) 9., Register, October, 1999, No. 526, eff. 11-1-99; CR 07-104: am. (4) (a) 20. Register July 2008 No. 631, eff. 8-1-08; CR 10-050: cr. (8) (a) 3m. Register November 2010 No. 659, eff. 12-1-10; EmR1046: emerg. cr. (9), eff. 12-15-10; CR 10-144: cr. (9) Register August 2011 No. 668, eff. 9-1-11; 2015 Wis. Act 33: consol. (9) (a) (intro.) and (9) (a) 1. and renum. to (9) (a) (intro.) and am., renum. (9) (a) 1. a. and b. to (9) (a) 1m. and 2m., r. (9) (a) 2. Register July 2015 No. 715, eff. 8-1-15; CR 15-077: am. (8) (a) 3m. Register July 2016 No. 727, eff. 8-1-16.

NR 405.08 Control technology review. (1) A major stationary source or major modification shall meet each applicable emissions limitation under chs. NR 400 to 499 and under sections 111 and 112 of the Act (42 USC 7411 and 7412).

(2) A new major stationary source shall apply best available control technology for each air contaminant that it would have the potential to emit in significant amounts.

(3) A major modification shall apply best available control technology for each air contaminant for which it would be a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the air contaminant 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 best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (1), Register, April, 1995, No. 472, eff. 5-1-95; am. (3), Register, December, 1995, No. 480, eff. 1-1-96.

NR 405.09 Source impact analysis. The owner or operator of the proposed major source or major modification shall demonstrate that allowable emission increases from the proposed major source or major modification, in conjunction with all other applicable emissions increases or reduction, including secondary emissions, would not cause or contribute to air pollution in violation of either of the following:

(1) Any national ambient air quality standard in any air quality control region.

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (intro.), Register, December, 1996, No. 492, eff. 1-1-97.

NR 405.10 Air quality models. (1) All estimates of ambient concentrations required under this chapter shall be based on the applicable air quality models, data bases, and other re-

quirements specified in the Guideline on Air Quality Models (Revised) in Appendix W of 40 CFR part 51, incorporated by reference in s. NR 484.04.

(2) Where an air quality impact model specified in the Guideline on Air Quality Models in Appendix W of 40 CFR part 51 is inappropriate, the model may be modified or another model substituted.

(3) A substitution or modification of a model shall be subject to the public comment procedures set forth in s. NR 405.15.

(4) Written approval of the administrator shall be obtained for any modification or substitution.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (1) and (5), Register, April, 1988, No. 388, eff. 5-1-88; am. (1) and (5), r. (6), Register, May, 1992, No. 437, eff. 6-1-92; am. (1) to (3), r. (5), Register, April, 1995, No. 472, eff. 5-1-95; am. (4), Register, December, 1995, No. 480, eff. 1-1-96.

NR 405.11 Air quality analysis. (1) PREAPPLICATION ANALYSIS. (a) Any application for a permit under this chapter shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following air contaminants:

1. For the major source, each air contaminant that it would have the potential to emit in a significant amount.

2. For the major modification, each air contaminant for which it would result in a significant net emissions increase.

(b) For any air contaminant for which no national ambient air quality standard exists, the analysis shall contain such air quality monitoring data as the department determines is necessary to assess ambient air quality for that air contaminant in any area that the emissions of that air contaminant would affect.

(c) For any air contaminant for which a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that air contaminant would cause or contribute to a violation of the standard or any maximum allowable increase.

(d) In general, the continuous air monitoring data that is required shall be gathered over a period of one year and shall represent the year preceding receipt of the application, except that, if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than 4 months), the data that is required shall be gathered over at least that shorter period.

(e) The owner or operator of a proposed major stationary source or major modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51, Appendix S, section IV, incorporated by reference in s. NR 484.04, may provide post-approval monitoring data for ozone in lieu of providing pre-construction data as required under this section.

(2) POST-CONSTRUCTION MONITORING. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the department determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) OPERATION OF MONITORING STATIONS. The owner or operator of a major stationary source or a major modification shall meet the requirements of Appendix B to 40 CFR part 58, incorporated by reference in s. NR 484.04, during the operation of monitoring stations for purposes of satisfying this section.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (1) (b), (c), (e) and (3), r. (4), Register, May, 1992, No. 437, eff. 6-1-92; am. (1) (e) and (3), Register, December, 1995, No. 480, eff. 1-1-96.

NR 405.12 Source information. (1) The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with this chapter.

(2) Such information shall include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the major source or major modification, including specifications and drawings showing its design and plant layout.

(b) A detailed schedule for construction of the major source or major modification.

(c) A detailed description as to what system of continuous emission reduction is planned by the major source or major modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied.

(3) The owner or operator shall also provide information on all of the following:

(a) The air quality impact of the major source or major modification, including meteorological and topographical data necessary to estimate such impact.

(b) The air quality impacts and the nature and extent of any or all general, commercial, residential, industrial and other growth which has occurred since August 7, 1977, in the area the major source or major modification would affect.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (3) (intro.), Register, December, 1996, No. 492, eff. 1-1-97.

NR 405.13 Additional impact analyses. (1) The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the major source or major modification and general commercial, residential, industrial and other growth associated with the major source or major modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general, commercial, residential, industrial and other growth associated with the major source or major modification.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87.

NR 405.14 Sources impacting federal Class I areas — additional requirements. (1) NOTICE TO EPA. The department shall transmit to the administrator a copy of each permit application relating to a major stationary source or major modification and provide notice to the administrator of every action related to the consideration of such permit.

(2) FEDERAL LAND MANAGER. The federal land manager and the federal official charged with direct responsibility for management of Class I lands have an affirmative responsibility to protect the air quality related values (including visibility) of any such lands and to consider, in consultation with the administrator, whether a proposed source or modification would have an adverse impact on such values.

(3) DENIAL — IMPACT ON AIR QUALITY RELATED VALUES. The department shall allow the federal land manager of any Class I lands the opportunity to present to the department after the department's preliminary determination required under procedures developed in accordance with s. NR 405.16, a demonstration that the emissions from the proposed major source or major modification would have an adverse impact on the air quality related values (including visibility) of any federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum

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allowable increases for a Class I area. If the department concurs with such demonstration, the permit may not be issued.

(4) CLASS I VARIANCES. The owner or operator of a proposed major source or major modification may demonstrate to the federal land manager that the emissions from the source would have no adverse impact on the air quality-related values, including visibility, of these lands, notwithstanding that the change in air quality resulting from emissions from the source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with this demonstration and so certifies to the department, the department may, provided that applicable requirements of this chapter are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of particulate matter measured as PM_{10}, sulfur dioxide and nitrogen dioxide would not exceed the following maximum allowable increases over minor source baseline concentration for these air contaminants.

Pollutant	Maximum allowable increase ($\mu g/m^3$)
PM_{10}	
Annual arithmetic mean	17
24-hour maximum	30
Sulfur dioxide	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen dioxide	
Annual arithmetic mean	25

(5) SULFUR DIOXIDE VARIANCE BY DEPARTMENT WITH FEDERAL LAND MANAGER'S CONCURRENCE. (a) The owner or operator of a proposed major source or major modification which cannot be approved under procedures developed pursuant to sub. (4) may demonstrate to the department that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of 24-hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this subsection would not adversely affect the air quality related values of the area (including visibility).

(b) The department, after consideration of the federal land manager's recommendation (if any) and subject to his or her concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase.

(c) If such variance is granted, the department shall issue a permit to such major source or major modification in accordance with provisions developed pursuant to sub. (7), provided that the applicable requirements of this chapter are otherwise met.

(6) VARIANCE BY THE DEPARTMENT WITH THE CONCURRENCE OF THE PRESIDENT OF THE UNITED STATES. (a) The recommendations of the department and the federal land manager shall be transferred to the president in any case where the department recommends a variance in which the federal land manager does not concur.

(b) The president may approve the department's recommendation if he or she finds that such variance is in the national interest.

(c) If such a variance is approved, the department shall issue a permit in accordance with provisions developed pursuant to the requirements of sub. (7), provided that the applicable requirements of this chapter are otherwise met.

(7) EMISSION LIMITATIONS FOR PRESIDENTIAL DENIAL OR DEPARTMENTAL VARIANCE. In the case of a permit issued under procedures developed pursuant to sub. (5) or (6), the major source or major modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the major source or major modification would not, during any day on which the otherwise applicable maximum allowable increases are exceeded, cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increase for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period.

Maximum Allowable SO_2 Increase ($\mu g/m^3$)

Period of exposure	Terrain areas	
	Low	High
24-hour maximum	36	62
3-hour maximum	130	221

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (4) and (7), Register, May, 1992, No. 437, eff. 6-1-92; am. (4), Register, April, 1995, No. 472, eff. 5-1-95; am. (1), (2) and (4), Register, December, 1995, No. 480, eff. 1-1-96; am. (7), Register, December, 1996, No. 492, eff. 1-1-97.

NR 405.15 Public participation. (1) The department shall notify all applicants within 20 days as to the completeness of the application or any deficiency in the application or information submitted. In the event of such 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 whether construction should be approved, approved with conditions, or disapproved.

(b) Make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant 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 region in which the proposed source would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for comment at a public hearing, as well as written public comment.

(d) Send a copy of the notice of public comment to the applicant, the administrator and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: 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 major source or major 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 hearing 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 made available pre-construction information relating to the proposed major source or major modification.

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

(h) Notify the applicant in writing of the final determination and make such notification available for public inspection at the

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same location where the department made available pre-construction information and public comments relating to the source.

Note: The requirement that a final permit determination be accomplished within one year of receipt of a permit application in the federal regulations has been changed to within 205 business days of receipt of application in this subsection.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (2) (d), Register, December, 1995, No. 480, eff. 1-1-96; am. (2) (intro), Register, August, 2000, No. 536, eff. 9-1-00.

NR 405.16 Source obligation. (1) Approval to construct does not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the chs. NR 400 to 499 and any other requirements under local, state or federal law.

(2) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit an air contaminant such as a restriction on hours of operation, then the requirements of ss. NR 405.08 to 405.17 shall apply to the source or modification as though construction had not yet commenced on the major source or major modification.

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

(a) Before beginning actual construction of the project, document and maintain a record of all of the following:

1. A description of the project.

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 405.02 (24) (a) that was used to determine that the project is not a major modification for any regulated NSR air contaminant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under s. NR 405.02 (25f) (b) 2. and an explanation why the amount was excluded, and any netting calculations, if applicable.

(b) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, provide a copy of the information in par. (a) to the department. Nothing in this paragraph shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.

(c) If the owner or operator excludes emissions from the calculation of projected actual emissions under s. NR 405.02 (25f) (b) 2. and the difference between projected actual emissions and baseline actual emissions exceeds the level that is considered to be significant for the air contaminant prior to the exclusion of emissions from the calculation of projected actual emissions under s. NR 405.02 (25f) (b) 2., before beginning actual construction, provide a copy of the information in par. (a) to the department. Nothing in this paragraph shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.

(d) Monitor the emissions of any regulated NSR air contaminant that could increase as a result of the project and that is emitted by any emissions unit identified in par. (a) 2. and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR air contaminant at the emissions unit.

(e) If the unit is an existing electric utility steam generating unit, submit a report to the department within 60 days after the end of each year during which records must be generated under par. (d) setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(f) If the unit is an existing unit other than an electric utility steam generating unit, submit a report to the department if the annual emissions, in tons per year, from the project identified in par. (a), exceed the baseline actual emissions, as documented and maintained pursuant to par. (d) by a significant amount, as defined in s. NR 405.02 (27), for that regulated NSR air contaminant, and if the emissions differ from the preconstruction projection that was provided to the department pursuant to par. (c). The report shall be submitted to the department within 60 days after the end of the year. The report shall contain all of the following:

1. The name, address and telephone number of the major stationary source.

2. The annual emissions as calculated pursuant to par. (a) 3.

3. Any other information that the owner or operator wishes to include in the report, e.g., an explanation as to why the emissions differ from the preconstruction projection.

(4) The owner or operator of the source shall make the information required to be documented and maintained pursuant to sub. (3) available for inspection, upon request by the department or the general public.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; CR 03-118: cr. (3) and (4), Register June 2007 No. 618, eff. 7-1-07.

NR 405.17 Innovative control technology. (1) An owner or operator of a proposed major stationary source or major modification may request the department to approve a system of innovative control technology.

(2) The department may, with the consent of the governor of any other affected state, determine that the major source or major modification may employ a system of innovative control technology if all of the following conditions are met:

(a) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under s. NR 405.08 (2) no later than 3 years from the time of start-up or 6 years from the date of permit issuance.

(c) The source or modification would meet the requirements equivalent to those in ss. NR 405.08 and 405.09 based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified in par. (b).

(d) The major source or major modification would not before the date specified do any of the following:

1. Cause or contribute to any violation of an applicable national ambient air quality standard.

2. Impact any Class I area.

3. Impact any area where an applicable increment is known to be violated.

(e) All other applicable requirements including those for public participation have been met.

(3) The department shall withdraw any approval to employ a system of innovative control technology made under this section, if any of the following occurs:

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(a) The proposed system fails by the specified date in sub. (2) (b) to achieve the required continuous emissions reduction rate.

(b) The proposed system fails before the specified date in sub. (2) (b) so as to contribute to an unreasonable risk to public health, welfare, or safety.

(c) The department decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare or safety.

(4) If a major source or major modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with sub. (3), the department may allow the source of modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

Note: The deadline for achieving the required continuous emissions reduction through innovative control technology in the federal regulations (not later than 4 years from the time of startup or 7 years from permit issuance) has been changed to no later than 3 years from time of startup or 6 years from the date of permit issuance in sub. (2) (b).

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (2) (intro.), (d) (intro.), (3) (intro.), Register, December, 1996, No. 492, eff. 1-1-97.

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

(b) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in this section and complies with the PAL permit:

1. Is not a major modification for the PAL regulated air contaminant.

2. Does not have to be approved under this chapter.

3. Is not subject to the provisions in s. NR 405.16 (2).

(c) Except as provided under par. (b) 3., a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations and work practice requirements that were established prior to the effective date of the PAL.

(2) DEFINITIONS. The following definitions apply to terms used in this subsection for the purpose of developing and implementing PALs consistent with this section.

(a) "Allowable emissions" has the meaning given in s. NR 405.02 (2), except as this definition is modified according to both of the following:

1. The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

2. An emissions unit's potential to emit shall be determined using the definition in s. NR 405.02 (25), except that the words "or enforceable as a practical matter" should be added after "federally enforceable".

(b) "Major emissions unit" means either of the following:

1. Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL regulated air contaminant in an attainment area.

2. Any emissions unit that emits or has the potential to emit the PAL regulated air contaminant in an amount that is equal to or greater than the major source threshold for the PAL regulated air contaminant as defined by the Act for nonattainment areas.

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

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

(d) "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.

(e) "PAL major modification" means, notwithstanding s. NR 405.02 (21) and (24), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL regulated air contaminant at a level equal to or greater than the PAL.

(f) "PAL permit" means the construction permit issued by the department that establishes a PAL for a major stationary source.

(g) "PAL regulated air contaminant" means the regulated NSR air contaminant for which a PAL is established at a major stationary source.

(h) "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL regulated air contaminant in an amount that is equal to or greater than the significant level, as defined in s. NR 405.02 (27) or in the Act, whichever is lower, for that PAL regulated air contaminant, but less than the amount that would qualify the unit as a major emissions unit.

(i) "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL regulated air contaminant in an amount less than the significant level for that PAL regulated air contaminant, as defined in s. NR 405.02 (27) or in the Act, whichever is lower.

(3) PERMIT APPLICATION REQUIREMENTS. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit all of the following information to the department for approval:

(a) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations or work practices apply to each unit.

(b) Calculations of the baseline actual emissions with supporting documentation. Baseline actual emissions shall include emissions associated not only with operation of the unit, but also emissions associated with startups, shutdowns and malfunctions.

(c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by sub. (13) (a).

(4) GENERAL REQUIREMENTS FOR ESTABLISHING PALS. (a) The department may establish a PAL in a permit for a major stationary source if all of the following requirements are met:

1. The PAL imposes an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL. For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

2. The PAL is established in a PAL permit that meets the public participation requirements in sub. (5).

3. The PAL permit contains all the requirements of sub. (7).

4. The PAL includes fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL regulated air contaminant at the major stationary source.

5. The PAL shall regulate emissions of only one air contaminant.

6. The PAL has a PAL effective period of 10 years.

7. The owner or operator of the major stationary source with a PAL complies with the monitoring, recordkeeping and reporting requirements provided in subs. (12) to (14) for each emissions unit under the PAL through the PAL effective period.

8. The department determines that the requirements of s. 285.63, Stats., and, if applicable, s. 285.64, Stats., are met.

(b) At no time during or after the PAL effective period are emissions reductions of a PAL regulated air contaminant that occur during the PAL effective period creditable as decreases for purposes of offsets under ch. NR 408 unless the PAL is reduced by the amount of the emissions reductions and the reductions would be creditable in the absence of the PAL.

(5) PUBLIC PARTICIPATION REQUIREMENTS FOR PALS. PALs shall be established, renewed or increased, through a procedure that is consistent with s. NR 405.15. This includes the requirement that the department provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The department shall address all material comments before taking final action on the permit.

(6) SETTING THE 10-YEAR PAL LEVEL. (a) The PAL level shall be established as the sum of the baseline actual emissions, as defined in s. NR 405.02 (2m), of the PAL regulated air contaminant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL regulated air contaminant under s. NR 405.02 (27) or the Act, whichever is lower.

(b) When establishing the PAL level, only one consecutive 24-month period may be used to determine the baseline actual emissions for all existing emissions units for each PAL regulated air contaminant.

(c) A different consecutive 24-month period may be used for each different PAL regulated air contaminant.

(d) Emissions associated with units that were permanently shut down after the 24-month period established under par. (b) shall be subtracted from the PAL level.

(e) 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_x 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 ch. NR 408.

c. Revise the PAL to reflect an increase in the PAL as provided under sub. (11).

2. The department may reopen and revise the PAL permit to do any of the following:

a. Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date.

b. Reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the department may impose on the major stationary source.

c. Reduce the PAL if the department determines that a reduction is necessary to avoid causing or contributing to a violation of an NAAQS or a PSD increment violation, or to an adverse impact on an AQRV that has been identified for a federal class I area by a federal land manager and for which information is available to the general public.

3. Except for the permit reopening in subd. 1. a. for the correction of typographical or calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with the public participation requirements of sub. (5).

(9) EXPIRATION OF A PAL. Any PAL that is not renewed in accordance with the procedures in sub. (10) shall expire at the end of the PAL effective period, and the following requirements shall apply:

(a) For each emissions unit, or each group of emissions units, that existed under the PAL, the owner or operator shall comply with an allowable emission limitation under a revised permit established according to the following procedures:

1. Within the time frame specified for PAL renewals in sub.

(10) (b), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit, or each group of emissions units, if a grouping is more appropriate as determined by the department, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under sub. (10) (e), the distribution shall be made as if the PAL had been adjusted.

2. Based upon the information submitted under subd. 1., the department shall determine whether and how the PAL allowable emissions will be distributed and issue a revised permit under s. NR 406.035 incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate.

(b) The owner or operator of each emissions unit or group of emissions units shall comply with the allowable emission limitation on a 12-month rolling basis. The department may approve the use of monitoring systems, such as source testing, or emission factors, other than CEMS, CERMS, PEMS or CPMS, to demonstrate compliance with the allowable emission limitation.

(c) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under par. (a) 2., the owner or operator shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

(d) Any physical change or change in the method of operation at the major stationary source shall be subject to the requirements of this chapter if the change constitutes a major modification.

(e) The owner or operator shall continue to comply with any state or federal applicable requirements, such as BACT, RACT or NSPS, that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to s. NR 405.16 (2), but were eliminated by the PAL in accordance with the provisions in sub. (1) (b) 3.

(10) RENEWAL OF A PAL. (a) The department shall follow the procedures specified in sub. (5) in approving any request to renew a PAL and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During the public review, any person may propose a PAL level for the source for consideration by the department.

(b) The owner or operator shall submit a timely application to the department to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of expiration of the PAL. If the owner or operator submits a complete application to renew the PAL within this time period, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(c) The application to renew a PAL permit shall contain all of the following information:

1. The information required in sub. (3) (a) to (c).

2. A proposed PAL level.

3. The sum of the potential to emit of all emissions units under the PAL, with supporting documentation.

4. Any other information the owner or operator wishes the department to consider in determining the appropriate level for renewing the PAL.

(d) In determining whether and how to adjust the PAL, the department shall consider the options outlined in subds. 1. and 2. However, in no case may any adjustment fail to comply with subd. 3. The adjustment options, and requirements, are as follows:

1. If the emissions level calculated in accordance with sub. (6) is equal to or greater than 80% of the existing PAL level, the department may renew the PAL at the same level without considering the factors set forth in subd. 2.

2. The department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the department in a written rationale.

3. Notwithstanding subds. 1. and 2., if the potential to emit of the major stationary source is less than the PAL, the department shall adjust the PAL to a level no greater than the potential to emit of the source. The department may not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of sub. (11).

(e) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period, and if the department has not already adjusted for the requirement, the PAL shall be adjusted at the time of PAL renewal or operation permit renewal, whichever occurs first.

(11) INCREASING A PAL DURING THE PAL EFFECTIVE PERIOD. (a) The department may increase a PAL level only if the owner or operator complies with all of the following provisions:

1. The owner or operator shall submit a complete application to request an increase in the PAL level for a PAL major modification. The application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

2. As part of this application, the owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units under the PAL assuming application of BACT-equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units, exceeds the PAL. The level of control that would result from BACT-equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. The assumed control level for that emissions unit shall be equal to the level of BACT or LAER that currently applies to that emissions unit.

3. The owner or operator obtains a major NSR permit for all emissions units identified in subd. 1., regardless of the magnitude of the emissions increase from them. These emissions units shall comply with any emissions control requirements resulting from the major NSR process, for example, BACT, even though they have also become subject to the PAL or continue to be subject to the PAL.

(b) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL regulated air contaminant.

(c) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT-equivalent controls as determined in accordance with par. (a) 2., plus

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the sum of the baseline actual emissions of the small emissions units.

(d) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of sub. (5).

(12) MONITORING REQUIREMENTS FOR PALS. (a) 1. Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL regulated air contaminant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by any authorized system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

2. Except as provided for in subd. 3., the PAL monitoring system shall employ one or more of the 4 general monitoring approaches meeting the minimum requirements in par. (b) and shall be approved by the department.

3. Notwithstanding subd. 2., the owner or operator may employ an alternative monitoring approach that meets subd. 1. if approved by the department.

4. Failure to use a monitoring system that meets the requirements of this subsection renders the PAL invalid.

(b) The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in pars. (c) to (i):

1. Mass balance calculations for activities using coatings or solvents.

2. CEMS.

3. CPMS or PEMS.

4. Emission factors.

(c) An owner or operator using mass balance calculations to monitor PAL regulated air contaminant emissions from activities using coating or solvents shall do all of the following:

1. Provide a demonstrated means of validating the published content of the PAL regulated air contaminant that is contained in or created by all materials used in or at the emissions unit.

2. Assume that the emissions unit emits all of the PAL regulated air contaminant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process.

3. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from the material, use the highest value of the range to calculate the PAL regulated air contaminant emissions unless the department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(d) An owner or operator using CEMS to monitor PAL regulated air contaminant emissions shall ensure that the CEMS does both of the following:

1. Complies with applicable performance specifications found in 40 CFR part 60, appendix B incorporated by reference in s. NR 484.04 (21).

2. Samples, analyzes and records data at least every 15 minutes while the emissions unit is operating.

(e) An owner or operator using CPMS or PEMS to monitor PAL regulated air contaminant emissions shall ensure that the CPMS or PEMS does both of the following:

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 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.

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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.

NR 405.19 Forest County Potawatomi Class I area.

(1) For any new major source or major modification of an existing source, the Forest County Potawatomi Community shall have the opportunity to present to the department, within no more than 75 days of receipt of a complete permit application by the department, a demonstration that the emissions from the proposed new major source or major modification would have an adverse impact on the established air quality related values of the FCPC Class I area.

(2) New major sources or major modifications of existing sources wholly or partially locating or located within a radius of 22.25 miles from the geographic center of the FCPC Class I area, as identified in s. NR 400.02 (66m), are subject to an increment analysis and limited to the maximum allowable increase levels of a Class I area.

(3) New major sources or major modifications of existing sources locating or located wholly outside the area defined in sub. (2) are subject to an increment analysis and maximum allowable increase levels of a Class II area.

Note: The relationship between the State of Wisconsin and the Forest County Potawatomi Community with regard to the FCPC Class I area is established in a 1999 Class I Final Agreement. The geographic center of the FCPC Class I area was determined by finding the center of a rectangle placed around the outer most portions of the Class I area. The 22.25-mile radius was determined by adding 10 miles to the distance of the outermost portion of the FCPC Class I area from the geographic center of the FCPC Class I area. A map developed by the Department and the Forest County Potawatomi Community shows the approximate 22.25-mile radius for the FCPC Class I area. The Final Agreement, map, and information on established air quality related values for the Class I area are available from the Department upon request, or may be found on the Department's web site.

History: CR 10-048: cr. Register November 2010 No. 659, eff. 12-1-10.