Chapter NR 409
ACID RAIN PORTION OF OPERATION PERMITS

NR 409.01 Applicability; purpose; and scope.

(1) APPLICABILITY. (a) Each of the following emissions units is an affected unit and any source that includes such a unit shall be an affected source subject to the requirements of the acid rain program:

1. A unit listed in Table 1 of 40 CFR 73.10 (a).
2. An existing unit that is identified in Table 2 or 3 of 40 CFR 73.10 and any other existing utility unit, except a unit excluded under par. (b).
3. A utility unit, except a unit excluded under par. (b), that:
   a. Is a new unit.
   b. Did not serve a generator with a nameplate capacity greater than 25 MWe on November 15, 1990 but serves such a generator after November 15, 1990.
   c. Was a simple cycle combustion turbine on November 15, 1990 but adds or uses auxiliary firing after November 15, 1990.

   d. Was an exempt cogeneration facility under par. (b). 4. but during any 3 calendar year period after November 15, 1990 sold, to a utility power distribution system, an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe–hrs actual electric output, on a gross basis.
   e. Was an exempt qualifying facility as defined in s. NR 409.02.

   f. Was an exempt independent power production facility under par. (b). 6. but, at any time after the later of November 15, 1990 or the date the facility commences commercial operation, fails to meet the definition of independent power production facility.

   g. Was an exempt solid waste incinerator under par. (b). 7. but during any 3 calendar year period after November 15, 1990 consumes 20% or more of the total heat input, expressed on a Btu basis, as fossil fuel.

   (b) The following types of utility units are exempt from the requirements of this chapter and the acid rain program:

   1. A simple cycle combustion turbine that commenced operation before November 15, 1990.

   2. Any unit that commenced commercial operation before November 15, 1990 and that did not, as of November 15, 1990, and does not serve a generator with a nameplate capacity of greater than 25 MWe.

   3. Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not serve a generator that produces electricity for sale.

   4. A cogeneration unit which:
      a. For a unit that commenced construction on or prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 MWe–hrs actual electric output on an annual basis to any utility power distribution system for sale on a gross basis. If the purpose of construction is not known, it is presumed to be consistent with the actual operation from 1985 to 1987. However, if in any 3 calendar year period after November 15, 1990, the unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe–hrs actual electric output on a gross basis, that unit is an affected unit, subject to the requirements of this chapter and the acid rain program.

b. For a unit that commenced construction after November 15, 1990, supplies equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 MWe–hrs actual electric output on an annual basis to any utility power distribution system for sale on a gross basis. However, if in any 3 calendar year period after November 15, 1990, the unit sells to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe–hrs actual electric output on a gross basis, that unit is an affected unit, subject to the requirements of this chapter and the acid rain program.

5. A qualifying facility that:

   a. Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15% of its total planned net output capacity; and

   b. Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130% of the total planned net output capacity. If the emissions rates of the units are not the same, the administrator may exercise discretion to designate which units are exempt.

6. An independent power production facility that:

   a. Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15% of its total planned net output capacity; and

   b. Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130% of its total planned net output capacity. If the emissions rates of the units are not the same, the administrator may exercise discretion to designate which units are exempt.

7. A solid waste incinerator, if more than 80%, on a Btu basis, of the annual fuel consumed at the incinerator is other than fossil fuels. For a solid waste incinerator which began operation before January 1, 1985, the average annual fuel consumption of non–fossil fuels for calendar years 1985 to 1987 shall be greater than 80% for an incinerator to be exempt. For a solid waste incinerator which began operation after January 1, 1985, the average annual fuel consumption of non–fossil fuels for the first 3 years of operation shall be greater than 80% for an incinerator to be exempt. If, during any 3 calendar year period after November 15, 1990, the incinerator consumes 20% or more of the total heat input, expressed on a Btu basis, as fossil fuel, the incinerator is an affected source under this chapter and the acid rain program.
8. A unit that is not a utility unit.

9. A unit for which an exemption under s. NR 409.04, 409.05 or 409.055 is in effect. Although the unit is not an affected unit, the unit shall be subject to the requirements of s. NR 409.04, 409.05 or 409.055, as applicable to the exemption.

(c) For a determination of applicability, a certifying official of an owner or operator of any unit may petition the administrator under 40 CFR 72.6 (c). The administrator’s determination of applicability shall be binding upon the department, unless the petition is found to have contained significant errors or omissions.

(d) All references to 40 CFR part 72, 40 CFR part 73, 40 CFR part 74, 40 CFR part 75, 40 CFR part 76, 40 CFR part 77 and 40 CFR part 78 in this chapter mean those parts of the code of federal regulations as in effect on July 1, 1998, except that in the case of CFR appendices incorporated by reference in ch. NR 484, if a more recent date is specified in the applicable section of ch. NR 484, that date shall apply.

(2) PURPOSE. The purpose of this chapter is to establish certain general provisions and the acid rain portion of the operation permit program requirements for affected sources and affected units under the acid rain program, pursuant to title IV of the clean air act (42 USC 7651 to 7651o), 40 CFR part 72 and s. 285.65 (12), Stats.

(3) SCOPE. The regulations under this chapter set forth certain generally applicable provisions under the acid rain program. The regulations also set forth requirements for obtaining and revising the acid rain portion of an operation permit issued by the department. The requirements under this chapter supplement, and in some cases modify, the requirements under chs. NR 406 and 407 as such requirements apply to affected sources under the acid rain program.

History: Cr. Register, September, 1986, No. 369, eff. 10–1–86; am. (2), Register, May, 1992, No. 437, eff. 6–1–92; am. (1), Register, December, 1993, No. 458, eff. 1–1–94, renew. (1) to NR 406.15 (1), r. (2), cr. (1), (2), (3), Register, April, 1995, No. 472, eff. 5–1–95; cr. (1) (b) 9. and (d), (1) (c). Register, November, 1999, No. 527, eff. 12–1–99; correction in (2) made under s. 13.93 (2m) (b) 7., Stats., Register, November, 1999, No. 527.

NR 409.02 Definitions. The definitions contained in chs. NR 400, 406 and 407 and title IV of the act (42 USC 7651 to 7651o) apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(1) “Acid rain compliance option” means one of the methods of compliance used by an affected unit under the acid rain program as described in a compliance plan submitted and approved in accordance with s. NR 409.09 or regulations implementing section 407 of the act (42 USC 7651).

(2) “Acid rain emissions limitation” means:

(a) For the purposes of sulfur dioxide emissions:

1. The tonnage equivalent of the allowances authorized to be allocated to an affected unit for use in a calendar year under section 404 (a) (1) and (3) of the act (42 USC 7651c) or the basic phase II allowance allocations authorized to be allocated to an affected unit for use in a calendar year;

2. As adjusted:

a. By allowances allocated by the administrator pursuant to sections 403, 405 (a) (2) and (3), (b) (2), (c) (4), (d) (3) and (b) (2) and 406 of the act (42 USC 7651bh, 7651d and 7651e);

b. By allowances allocated by the administrator pursuant to subpart D of 40 CFR part 72; and thereafter

(c) By allowance transfers to or from the compliance sub-account for that unit that were recorded or properly submitted for recordation by the allowance transfer deadline as provided in 40 CFR 73.35, after deductions and other adjustments are made pursuant to 40 CFR 73.34 (c).

(b) For purposes of nitrogen oxides emissions, the applicable limitation under s. NR 409.065.

(3) “Acid rain emissions reduction requirement” means a requirement under the acid rain program to reduce the emissions of sulfur dioxide or nitrogen oxides from a unit to a specified level or by a specified percentage.

(4) “Acid rain portion of an operation permit” means the legally binding written document, or portion of an operation permit, issued by the department which specifies the acid rain program requirements applicable to an affected source and to the owners and operators and the designated representative of the affected source or the affected unit.

(5) “Actual SO\textsubscript{2} emissions rate” means the annual average sulfur dioxide emissions rate for the unit, expressed in lb/mmBtu, for the specified calendar year; provided that, if the unit is listed in the national allowance database (NADB), the “1985 actual SO\textsubscript{2} emissions rate” for the unit shall be the rate specified by the administrator in the NADB under the data field “SO\textsubscript{2}RTE.”

(7) “Allocate” or “allocation” means the initial crediting of an allowance by the administrator to an allowance tracking system unit account or general account.

(8) “Allowance deduction” or “deduct,” when referring to allowances, means the permanent withdrawal of allowances by the administrator from an allowance tracking system compliance subaccount to account for the number of tons of SO\textsubscript{2} emitted from an affected unit for the calendar year, for tonnage emissions estimates calculated for periods of missing data as provided in 40 CFR part 75, or for other allowance surrender obligations of the acid rain program.

(9) “Allowances held” or “hold allowances” means the allowances recorded by the administrator or submitted to the administrator for recordation in accordance with 40 CFR 73.50, in an allowance tracking system account.

(10) “Allowance tracking system” means the acid rain program system by which the administrator allocates, records, deducts and tracks allowances.

(11) “Allowance tracking system account” means an account in the allowance tracking system established by the administrator for purposes of allocating, holding, transferring and using allowances.

(12) “Allowance transfer deadline” means midnight of March 1 (or February 29 in a leap year) or, if March 1 (or February 29 in a leap year) is not a business day, midnight of the first business day thereafter and is the deadline by which allowances may be submitted for recordation in an affected unit’s compliance sub-account for the purposes of meeting the unit’s acid rain emissions limitation requirements for sulfur dioxide for the previous calendar year.

(12g) “Alternative contemporaneous annual emission limitation” means the maximum allowable NO\textsubscript{x} emission rate (on a pound per million BTU, annual average basis) assigned to an individual unit in a NO\textsubscript{x} emissions averaging plan pursuant to s. NR 409.065 (7).

(12m) “Alternative technology” means a control technology for reducing NO\textsubscript{x} emissions that is outside the scope of the definition of low NO\textsubscript{x} burner technology. Alternative technology does not include overfire air as applied to wall–fired boilers or separated overfire air as applied to tangentially fired boilers.

(12s) “Arch–fired boiler” means a dry bottom boiler with circular burners, or coal and air pipes, oriented downward and mounted on waterwalls that are at an angle significantly different from the horizontal axis and the vertical axis. This definition shall include only the following units: Holtwood unit 17, Hunlock unit 6, and Sunbury units 1A, 1B, 2A, and 2B. This definition shall exclude dry bottom turbo–fired boilers.

Note: Arch–fired boilers that are wet bottom boilers are specifically excluded from this definition.

(13) “Authorized account representative” means a responsible natural person who is authorized, in accordance with CFR...
part 73, to transfer and otherwise dispose of allowances held in an allowance tracking system general account; or, in the case of a unit account, the designated representative of the owners and operators of the affected unit.

(14) “Auxiliary firing” means combustion of a fuel that supplements the primary fuel, when more than 5% of an affected unit’s heat input is provided by the supplemental fuel.

(15) “Baseline”, for purposes of the acid rain program, means the annual average quantity of fossil fuel consumed by a unit, measured in millions of Btu’s for calendar years 1985 through 1987; provided that in the event that a unit is listed in the NADB, the baseline will be calculated for each unit–generator pair that includes the unit, and the unit’s baseline will be the sum of such unit–generator baselines. The unit–generator baseline shall be as provided in the NADB under the data field “BASE8587”, as adjusted by the outage hours listed in the NADB under the data field “OUTAGEHR” in accordance with the following equation:

Baseline = BASE8587 × [26280/(26280 – OUTAGEHR)] × [36/36 – months not on line] × 10^6,

where “months not on line” is the number of months during January 1985 through December 1987 prior to the commencement of firing for units that commenced firing in that period, i.e., the number of months, in that period, prior to the on–line month listed under the data field “BLRMRNOLN” and the on–line year listed in the data field “BLRYRNLN” in the NADB.

(16) “Basic phase II allowance allocations” means:

(a) For calendar years 2000 to 2009, allocations of allowances made by the administrator pursuant to sections 403 and 405 (b) (1), (3) and (4); (c) (1), (2), (3) and (5); (d) (1), (2), (4) and (5); (e); (f); (g) (1), (2), (3), (4) and (5); (h) (1), (i); and (j) of the act (42 USC 7651b and 7651d).

(b) For each calendar year beginning in 2010, allocations of allowances made by the administrator pursuant to sections 403 and 405 (b) (1), (3) and (4); (c) (1), (2), (3) and (5); (d) (1), (2), (4) and (5); (e); (f); (g) (1), (2), (3), (4) and (5); (h) (1) and (3); (i); and (j) of the act (42 USC 7651b and 7651d).

(17) “Boiler” means an enclosed fossil or other fuel–fired combustion device used to produce heat and to transfer heat to recirculating water, steam or any other medium.

(17m) “Cell burner boiler” means a wall–fired boiler that utilizes 2 or 3 circular burners combined into a single vertically oriented assembly that results in a compact, intense flame.

(18) “Certificate of representation” means the completed and signed submission required by 40 CFR 72.20, for certifying the appointment of a designated representative for an affected source or a group of identified affected sources authorized to represent the owners and operators of the sources and of the affected units at the sources with regard to matters under the acid rain program.

(19) “Clean coal technology” means 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 secretary of the U.S. department 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.

(20) “Coal–fired” means, except for the purposes of applying s. NR 409.065, the combustion of fuel consisting of coal or any coal–derived fuel, except a coal–derived gaseous fuel with a sulfur content no greater than natural gas, alone or in combination with any other fuel, where a unit is coal–fired if it uses coal or coal–derived fuel as its primary fuel, expressed in mmBtu; provided that, if the unit is listed in the NADB, the primary fuel is the fuel listed in the NADB under the data field “PRIMEFUEL”.

(20m) “Coal–fired utility unit” means a utility unit in which the combustion of coal (or any coal–derived fuel) on a Btu basis exceeds 50.0% of its annual heat input during the following calendar year: for Phase I units, in calendar year 1990; and, for Phase II units, in calendar year 1995 or, for a Phase II unit that did not combust any fuel that resulted in the generation of electricity in calendar year 1995, in any calendar year during the period 1990–1995. For the purposes of s. NR 409.065, this definition shall apply notwithstanding the definition of “coal–fired” in sub. (20).

(21) “Cogeneration unit” means a unit that has equipment used to produce electric energy and forms of useful thermal energy, such as heat or steam, for industrial, commercial, heating or cooling purposes, through the sequential use of energy.

(21m) “Combustion controls” means technology that minimizes NOx formation by staging fuel and combustion air flows in a boiler. This definition shall include low NOx burners, overfire air or low NOx burners with overfire air.

(22) “Commence commercial operation” means to have begun to generate electricity for sale, including the sale of test generation.

(23) “Commence construction” means that an owner or operator has either undertaken a continuous program of construction or has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction.

(24) “Commence operation” means to have begun any mechanical, chemical or electronic process, including startup of an emissions control technology or emissions monitor or of a unit’s combustion chamber.

(25) “Common stack” means the exhaust of emissions from 2 or more units through a single flue.

(26) “Compensating unit” means a unit that is not otherwise subject to acid rain program emissions limitations or emissions reduction requirements during phase I and that is designated as a phase I unit in a reduced utilization plan under 40 CFR 72.43, provided that a unit that is not an affected unit under the acid rain program may not be a compensating unit.

(27) “Compliance certification” means a submission to the administrator or department that is required by this chapter, by 40 CFR part 72, 73, 75, 77 or 78 or by regulations implementing section 407 or 410 of the act (42 USC 7651f and 7651i) to report an affected source or an affected unit’s compliance or non–compliance with a provision of the acid rain program and that is signed and verified by the designated representative in accordance with subparts B and I of 40 CFR part 72, s. NR 409.13 and the acid rain program regulations generally.

(28) “Compliance option”, for purposes of the acid rain program, means any of the 4 strategies specified in 40 CFR 72.40 to 72.44 for complying with the acid rain program. Subpart D lists 4 options: phase I substitution plans, phase I extension plans, phase I reduced utilization plans and phase II repowering extensions.

(29) “Compliance plan”, for purposes of the acid rain program, means the document submitted to the department for an affected source in accordance with the acid rain portion of an operation permit application under this chapter and 40 CFR 72.30 to 72.33, specifying the methods, including one or more compliance options under this chapter, 40 CFR 72.40 to 72.44 or regulations implementing section 407 of the act (42 USC 7651d), by which each affected unit at the source will meet the applicable emissions limitations and emissions reduction requirements of the acid rain program.
(30) “Compliance subaccount” means the subaccount in an affected unit’s allowance tracking system account, established pursuant to 40 CFR 73.31 (a) or (b), in which are held, from the date that allowances for the current calendar year are recorded under 40 CFR 73.34 (a) until December 31, allowances available for use by the unit in the current calendar year and, after December 31 until the date that deductions are made under 40 CFR 73.35 (b), allowances available for use by the unit in the preceding calendar year, for the purpose of meeting the unit’s acid rain emissions limitation for sulfur dioxide.

(31) “Compliance use date” means the first calendar year for which an allowance may be used for purposes of meeting a unit’s acid rain emissions limitation for sulfur dioxide.

(32) “Construction” means fabrication, erection or installation of an affected unit or any portion of an affected unit.

(32g) “Customer” means a purchaser of electricity not for purposes of transmission or resale.

(32m) “Cyclone boiler” means a boiler with one or more water-cooled horizontal cylindrical chambers in which coal combustion takes place. The horizontal cylindrical chamber or chambers are attached to the bottom of the furnace. One or more cylindrical chambers are arranged either on one furnace wall or on 2 opposed furnace walls. Gaseous combustion products exiting from the chamber or chambers turn 90° to go up through the boiler while coal ash exits the bottom of the boiler as a molten slag.

(32s) “Demonstration period” means a period of time of not less than 15 months, approved under s. NR 409.065 (6), for demonstrating that the affected unit cannot meet the applicable emission limitation under s. NR 409.065 (2), (3) or (4) and establishing the minimum NOx emission rate that the unit can achieve during long-term load dispatch operation.

(33) “Designated representative” means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with subpart B of 40 CFR part 72, to represent and legally bind each owner and operator, as a matter of federal or state law, in matters pertaining to the acid rain program and acid rain portion of the operation permit program. Whenever the term “designated representative” is used in this chapter, the term shall also be construed to include the alternate designated representative.

Note: Whenever the term “responsible official” is used in 40 CFR part 70, chs. NR 406 and 407, or in any other regulations implementing title V of the act, it shall be deemed to refer to the “designated representative” with regard to all matters under the acid rain program.

(34) “Diesel fuel” means a low sulfur fuel oil of grades 1−D or 2−D, as defined in ASTM D975−02, incorporated by reference in s. NR 484.10 (13).

(35) “Direct public utility ownership” means direct ownership of equipment and facilities by one or more corporations, the principal business of which is sale of electricity to the public at retail. Percentage ownership of equipment and facilities shall be measured on the basis of book value.

(35h) “Dry bottom” means having a furnace bottom temperature below the ash melting point and bottom ash removal as a solid.

(35p) “Economizer” means the lowest temperature heat exchange section of a utility boiler where boiler feed water is heated by the flue gas.

(36) “Emissions” means air contaminants exhausted from an affected unit or affected source into the atmosphere, as measured, recorded and reported to the administrator and the department by the designated representative and as determined by the administrator and the department, in accordance with the emissions monitoring requirements of 40 CFR part 75.

(37) “Excess acid rain emissions” means:
(a) Any tonnage of sulfur dioxide emitted by an affected unit during a calendar year that exceeds the emissions limitation in the acid rain program for sulfur dioxide for the unit;
(b) Any tonnage of nitrogen oxides emitted by an affected unit during a calendar year that exceeds the annual tonnage equivalent of the emissions limitation in the acid rain program for nitrogen oxides applicable to the affected unit taking into account the unit’s heat input for the year.

(38) “Excess emission offset requirement” means a requirement to reduce excess acid rain emissions pursuant to 40 CFR 77.1 to 77.6 by offsetting excess emissions of sulfur dioxide that have occurred at an affected unit in any calendar year.

(39) “Existing unit” means a unit, including a unit subject to new source performance standards, section 111 of the act (42 USC 7411), that commenced commercial operation before November 15, 1990 and that on or after November 15, 1990 served a generator with a nameplate capacity of greater than 25 MWe. The term existing unit does not include simple cycle combustion turbines or any unit that on or after November 15, 1990 served only generators with a nameplate capacity of 25 MWe or less. Any existing unit that is modified, reconstructed or repowered after November 15, 1990 shall continue to be an existing unit.

(39m) “Flue gas” means the gaseous combustion products arising from the combustion of fossil fuel in a utility boiler.

(40) “Gas−fired” means the combustion of natural gas or a coal−derived gaseous fuel with a sulfur content no greater than natural gas, for at least 90% of the average annual heat input during the previous 3 calendar years and for at least 85% of the annual heat input in each of those calendar years; and any fuel, other than coal or any other coal−derived fuel, for the remaining heat input, if any.

(41) “General account” means an allowance tracking system account that is not a unit account.

(42) “Generator” means a device that produces electricity and was or would have been required to be reported as a generating unit pursuant to the United States department of energy form 860—1990 edition.

(43) “Generator output capacity” means the full-load continuous rating of a generator under specific conditions as designed by the manufacturer.

(43h) “Group 1 boiler” means a tangentially-fired boiler or a dry bottom wall-fired boiler that is not a cell burner boiler.

(43p) “Group 2 boiler” means a wet bottom wall−fired boiler, a cyclone boiler, a boiler applying cell burner technology, a vertically fired boiler, an arch−fired boiler, or any other type of utility boiler, such as a fluidized bed or stoker boiler, that is not a Group 1 boiler.

(44) “Heat input” means the product, expressed in mmBtu/time, of the gross calorific value of the fuel, expressed in Btu/lb, and the fuel feed rate into the combustion device, expressed in mass of fuel/time, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

(44m) “Incidental electricity sales” means the total annual sales of electricity produced by a generator that do not exceed 10% of the nameplate capacity of that generator times 8,760 hours per year and do not exceed 10% of the actual annual electric output of that generator.

(45) “Independent power production facility” means a source that:
(a) Is nonrecourse project financed, as defined by the secretary of energy at 10 CFR part 715;
(b) Is used for the generation of electricity, 80% or more of which is sold at wholesale;
(c) Is a new unit required to hold allowances under title IV of the act (42 USC 7651 to 7651o); and

(d) Does not have direct public utility ownership of the equipment comprising the facility which exceeds 50%.  

(46) “Life-of-the-unit, firm power contractual arrangement” means a unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy generated by any specified generating unit and pays its proportional amount of the unit’s total costs, pursuant to a contract:

(a) For the life of the unit;

(b) For a cumulative term of no less than 30 years, including contracts that permit an election for early termination; or

(c) For a period equal to or greater than 25 years or 70% of the economic useful life of the unit determined as of the time the unit was built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

(46h) “Low NOx burners” or “low NOx burner technology” means commercially available combustion modification NOx controls that minimize NOx formation by introducing coal and its associated combustion air into a boiler such that initial combustion occurs in a manner that promotes rapid coal devolatilization in a fuel-rich, i.e., oxygen deficient, environment and introduces additional air to achieve a final fuel−lean, i.e., oxygen rich, environment to complete the combustion process. This definition shall include the staging of any portion of the combustion air using air nozzles or registers located inside any waterwall hole that includes a burner. This definition shall exclude the staging of any portion of the combustion air using air nozzles or ports located outside any waterwall hole that includes a burner, commonly referred to as NOx ports or separated overfire air ports.

(46p) “Maximum continuous steam flow at 100% of load” means the maximum capacity of a boiler as reported in item 3 (Maximum Continuous Steam Flow at 100% Load in thousand pounds per hour), Section C (design parameters), Part III (boiler information) of the U.S. department of energy’s Form EIA−767 for 1995.

Note: Copies of DOE’s Form EIA−767 may be obtained for personal use from: DOE/EIA
Office of Coal, Nuclear, Electric and Alternative Fuels
Electric Power Division
1000 Independence Avenue SW
Washington DC 20585−0050

(47) “Nameplate capacity” means the maximum electrical generating output, expressed in megawatts of electricity, that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the NADB under the data field “NAMECAP” if the generator is listed in the NADB or as measured in accordance with the United States department of energy standards if the generator is not listed in the NADB.

(48) “National allowance data base” or “NADB” means the data base established by the administrator under section 402 (4) (C) of the act (42 USC 7651a(4) (c)).

(49) “New unit” means a unit that commences commercial operation on or after November 15, 1990, including any unit that serves a generator with a nameplate capacity of 25 MWe or less or that is a simple cycle combustion turbine.

(49m) “Non−plug−in combustion controls” means the replacement, in a cell burner boiler, of the portions of the waterwalls containing the cell burners by new portions of the waterwalls containing low NOx burners or low NOx burners with overfire air.

(50) “Offset plan”, for purposes of the acid rain program, means a plan pursuant to 40 CFR 77.1 to 77.6 for offsetting excess emissions of sulfur dioxide that have occurred at an affected unit in any calendar year.

(51) “Oil−fired” means the combustion of fuel oil for more than 10% of the average annual heat input during the previous 3 calendar years or for more than 15% of the annual heat input in any one of those calendar years; and any solid, liquid or gaseous fuel, other than coal or any other coal−derived fuel, except a coal−de−

ved gaseous fuel with a sulfur content no greater than natural gas, for the remaining heat input, if any.

(51g) “Operating period” means a period of time of not less than 3 consecutive months and that occurs not more than one month prior to applying for an alternative emission limitation demonstration period under s. NR 409.065 (6), during which the owner or operator of an affected unit that cannot meet the applicable emission limitation:

(a) Operates the installed NOx emission controls in accordance with primary vendor specifications and procedures, with the unit operating under normal conditions; and

(b) Records and reports quality−assured continuous emission monitoring (CEM) and unit operating data according to the methods and procedures in 40 CFR part 75.

(51m) “Opt−in permit” means the legally binding written document that is contained within the acid rain portion of an operation permit and sets forth the requirements under 40 CFR part 74 for a combustion source or a process source that opts into the acid rain program.

(51s) “Opt−in source” means a combustion source or a process source that has elected to become an affected unit under the acid rain program and whose opt−in permit has been issued and is in effect.

(52) “Owner” means any of the following persons:

(a) Any holder of any portion of the legal or equitable title in an affected unit;

(b) Any holder of a leasehold interest in an affected unit.

(c) Any purchaser of power from an affected unit under a life−of−the−unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner does not include a passive lessor, or a person who has an equitable interest through the lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the affected unit.

(d) With respect to any allowance tracking system general account, any person identified in the submission required by 40 CFR 73.31 (c) that is subject to the binding agreement for the authorized account representative to represent that person’s ownership interest with respect to allowances.

(53) “Owner or operator” means any person who is an owner or who operates, controls or supervises an affected unit or affected source and shall include, but not be limited to, any holding company, utility system or plant manager of an affected unit or affected source.

(54) “Permit revision” means a significant permit revision, fast track revision, administrative permit revision, automatic permit revision or permit revision by the department, as provided in s. NR 409.12.

(55) “Phase I” means the acid rain program period beginning January 1, 1995 and ending December 31, 1999.

(56) “Phase II” means the acid rain program period beginning January 1, 2000 and continuing into the future.

(56m) “Plug−in combustion controls” means the replacement, in a cell burner boiler, of existing cell burners by low NOx burners or low NOx burners with overfire air.

(57) “Potential electrical output capacity” means the MWe capacity rating for the units which shall be equal to 33% of the maximum design heat input capacity of the steam generating unit,
as calculated according to Appendix D of 40 CFR part 72, incorporated by reference in s. NR 484.04 (26).

(58) “Power distribution system” means the portion of an electricity grid owned or operated by a utility that is dedicated to delivering electric energy to customers.

(59) “Power purchase commitment” means a commitment or obligation of a utility to purchase electric power from a facility pursuant to any of the following:

(a) A power sales agreement.

(b) A state regulatory authority order requiring a utility to:

1. Enter into a power sales agreement with the facility;
2. Purchase from the facility; or
3. Enter into arbitration concerning the facility for the purpose of establishing terms and conditions of the utility’s purchase of power.

(c) A letter of intent or similar instrument committing to purchase power, either actual electrical output or generator output capacity, from the source at a previously offered or lower price and a power sales agreement applicable to the source executed within the time frame established by the terms of the letter of intent but no later than November 15, 1993 or, where the letter of intent does not specify a time frame, a power sales agreement applicable to the source executed on or before November 15, 1993.

(d) A utility competitive bid solicitation that has resulted in the selection of the qualifying facility or independent power production facility as the winning bidder.

(60) “Power sales agreement” means a legally binding agreement between a qualifying facility, independent power production facility or firm associated with the facility and a regulated electric utility that establishes the terms and conditions for the sale of power from the facility to the utility.

(61) “Primary fuel or primary fuel supply” means the main fuel type, expressed in mmbtu, consumed by an affected unit for the applicable calendar year.

(61m) “Primary vendor” means the vendor of the NOx emission control system who has primary responsibility for providing the equipment, service and technical expertise necessary for detailed design, installation and operation of the controls, including process data, mechanical drawings, operating manuals or any combination thereof.

(62) “Qualifying cogeneration facility” means a facility which produces electric energy and steam or forms of useful energy, such as heat which is used for industrial, commercial, heating or cooling purposes which:

(a) The federal energy regulatory commission determines, by rule, meets the requirements of this type of facility, including requirements for minimum size, fuel use, and fuel efficiency; and

(b) Is owned by a person not primarily engaged in the generation or sale of electric power, other than electric power solely from cogeneration facilities or small power production facilities.

(63) “Qualifying facility” means a qualifying small power production facility or qualifying cogeneration facility.

(64) “Qualifying phase I technology” means a technologial system of continuous emission reduction that is demonstrated to achieve at least a 90% reduction in emissions of sulfur dioxide relative to the emissions that would have resulted from the use of fossil fuels that were not subject to treatment prior to combustion, as provided in 40 CFR 72.42.

(65) “Qualifying power purchase commitment” means a power purchase commitment in effect as of November 15, 1990 without regard to changes to that commitment so long as:

(a) The identity of the electric output purchaser, the identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation; and

(b) The terms and conditions of the power purchase commitment are not changed in such a way as to allow the costs of compliance with the acid rain program to be shifted to the purchaser.

(66) “Qualifying repowering technology” means:

(a) Replacement of an existing coal−fired boiler with one of the clean coal technologies; or

(b) Any oil−fired or gas−fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the U. S. department of energy.

(67) “Qualifying small power production facility” means a facility which is an eligible solar, wind, waste or geothermal facility, or a facility which:

(a) Produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources or any combination of these; and

(b) Has a power production capacity which, together with any other facilities located at the same site, as determined by the federal energy regulatory commission, is not greater than 80 MWe.

(67m) “Reburning” means reducing the coal and combustion air to the main burners and injecting a reburn fuel, such as gas or oil, to create a fuel-rich secondary combustion zone above the main burner zone and final combustion air to create a fuel−lean burnout zone; the formation of NOx is inhibited in the main burner zone due to the reduced combustion intensity, and NOx is destroyed in the fuel–rich secondary combustion zone by conversion to molecular nitrogen.

(68) “Receive” or “receipt of” means the date the administrator or department comes into possession of information or correspondence, whether sent in writing or by authorized electronic transmission, as indicated in an official correspondence log, or by a notation made on the information or correspondence, by the administrator or department in the regular course of business.

(69) “Recordation”, “record” or “recorded” means, with regard to allowances, the transfer of allowances by the administrator from one allowance tracking system account or subaccount to another.

(70) “Reduced utilization” means a reduction, during any calendar year in phase I, in the heat input, expressed in millions of Btu for the calendar year, at a phase I unit below the unit’s baseline, where the reduction subjects the unit to the requirement to file a reduced utilization plan under 40 CFR 72.43.

(71) “Reduced utilization plan” means a compliance plan submitted by the designated representative under 40 CFR 72.43 for the purpose of identifying an affected unit’s method of complying with the applicable sulfur dioxide and nitrogen oxides emission limitations.

(72) “Repowering extension plan” means a compliance plan submitted by the designated representative under 40 CFR 72.44 for the purpose of identifying an affected unit’s method of complying with the applicable sulfur dioxide emission limitations.

(73) “Schedule of compliance” means an enforceable sequence of actions, measures or operations designed to achieve or maintain compliance or correct non−compliance, with an applicable requirement of the acid rain program, including any applicable acid rain portion of an operation permit requirement.

(74) “Secretary of energy” means the secretary of the United States department of energy or the secretary’s duly authorized representative.

(74i) “Selective catalytic reduction” means a noncombustion control technology that destroys NOx by injecting a reducing agent, e.g., ammonia, into the flue gas that, in the presence of a catalyst, e.g., vanadium, titanium or zeolite, converts NOx into molecular nitrogen and water.

(74p) “Selective noncatalytic reduction” means a noncombustion control technology that destroys NOx by injecting a reducing agent, e.g., ammonia, urea or cyanuric acid, into the flue gases without regard to changes to that commitment so long as:

(a) The identity of the electric output purchaser, the identity of the steam purchaser and the location of the facility, remain unchanged as of the date the facility commences commercial operation; and
gas, downstream of the combustion zone that converts NO₂ to molecular nitrogen, water and, when urea or cyanuric acid are used, to carbon dioxide (CO₂).

(75) “Simple cycle combustion turbine” means a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. This term excludes combined cycle units with auxiliary firing, unless the unit did not use the auxiliary firing from 1985 to 1987 and does not use auxiliary firing at any time after November 15, 1990.

(76) “Solid waste incinerator” means a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public, including single and multiple residences, hotels and motels. The term does not include incinerators or other units required to have a permit under 42 USC 6925. The term solid waste incinerator does not include:

(a) Materials recovery facilities, including primary or secondary smelters which combust waste for the primary purpose of recovering metals.

(b) Qualifying small power production facilities or qualifying cogeneration facilities which burn homogeneous waste, such as units which burn tires or used oil, but not including refuse-derived fuel, for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy, such as heat, which are used for industrial, commercial, heating or cooling purposes.

(c) Air curtain incinerators provided that the incinerators only burn wood wastes, yard wastes and clean lumber and that air curtain incinerators comply with opacity limitations established by the department and the administrator by rule.

(76m) “Stoker boiler” means a boiler that burns solid fuel in a bed, on a stationary or moving grate, that is located at the bottom of the furnace.

(77) “Submit” or “serve” means to send or transmit a document, information or correspondence to the person specified in accordance with the applicable regulation in one of the following ways:

(a) In person.

(b) By the United States postal service.

(c) By other equivalent means of dispatch, or transmission, and delivery. Compliance with any “submission”, “service” or “mailing” deadline shall be determined by the date of dispatch, transmission or mailing and not the date of receipt.

(78) “Substitution plan” means a compliance plan submitted by the designated representative under 40 CFR 72.41 for the purpose of identifying an affected unit’s method of complying with the applicable sulfur dioxide emission limitations.

(79) “Substitution unit” means an affected unit, other than a unit under section 410 of the act (42 USC 7651), that is designated as a phase I unit in a substitution plan under 40 CFR 72.41.

(79m) “Tangentially fired boiler” means a boiler that has coal and air nozzles mounted in each corner of the furnace where the vertical furnace walls meet. Both pulverized coal and air are directed from the furnace corners along a line tangential to a circle lying in a horizontal plane of the furnace.

(80) “Total installed net output capacity” means the generator output capacity, excluding that portion of the electrical power actually used at the power production facility, as installed.

(81) “Total planned net output capacity” means the planned generator output capacity, excluding that portion of the electrical power which is designed to be used at the power production facility, as specified under one or more qualifying power purchase commitments or contemporaneous documents as of November 15, 1990.

(81m) “Turbo-fired boiler” means a pulverized coal, wall-fired boiler with burners arranged on walls so that the individual flames extend down toward the furnace bottom and then turn back up through the center of the furnace.

(82) “Unit” means a fossil fuel—fired combustion device.

(83) “Unit account” means an allowance tracking system account, established by the administrator for an affected unit pursuant to 40 CFR 73.31 (a) or (b).

(84) “Utility” means any person that sells electricity.

(85) “Utility competitive bid solicitation” means a public request from a regulated utility for offers to the utility for meeting future generating needs. A qualifying facility or independent power production facility may be regarded as having been “selected” in the solicitation if the utility has named the facility as a project with which the utility intends to negotiate a power sales agreement.

(86) “Utility regulatory authority” means an authority, board, commission or other entity, limited to the local—, state— or federal—level, whenever so specified, responsible for overseeing the business operations of utilities located within its jurisdiction, including, but not limited to, utility rates and charges to customers.

(87) “Utility unit” means a unit owned or operated by a utility that serves a generator that produces electricity for sale or that, during 1985, served a generator that produced electricity for sale, except as provided in pars. (a) and (b):

(a) A unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990 is not a utility unit for purposes of the acid rain program.

(b) A unit that cogenerates steam and electricity is not a utility unit for purposes of the acid rain program unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990 and supplies, more than one-third of its potential electrical output capacity and more than 25 MWe output to any power distribution system for sale.

(88) “Vertically fired boiler” means a dry bottom boiler with circular burners, or coal and air pipes, oriented downward and mounted on waterwalls that are horizontal or at an angle. This definition shall include dry bottom roof-fired boilers and dry bottom top-fired boilers, and shall exclude dry bottom arch-fired boilers and dry bottom turbo—fired boilers.

(89) “Wall—fired boiler” means a boiler that has pulverized coal burners arranged on the walls of the furnace. The burners have discrete, individual flames that extend perpendicularly into the furnace area.

(90) “Wet bottom” means having ash removal from the furnace in a molten state. The term “wet bottom boiler” shall include: wet bottom wall—fired boilers, including wet bottom turbo—fired boilers; and wet bottom boilers otherwise meeting the definition of vertically fired boilers, including wet bottom arch-fired boilers, wet bottom roof—fired boilers, and wet bottom top—fired boilers. The term “wet bottom boiler” shall exclude cyclone boilers and tangentially fired boilers.

History: Cr. Register, September, 1986, No. 369, eff. 10—1—86; r. and renum. from NR 407.02 (5) to (12), (14), (15), (18), (19), (21), (23) to (30), (33), (34) to be (10), (11), (15), (19), (22), (26), (28), (29), (37), (38), (47), (48), (50), (55), (56), (66), (66), (69) to (72), (78), (79) and am. (78), (79), Register, April, 1995, No. 472, eff. 5—1—95; cr. (76) (intro.), Register, December, 1993, No. 480, eff. 1—1—96; am. (2) a 2. a., r. 6, Register, December, 1996, No. 492, eff. 1—1—97; cr. (2) b., (12g), (12m), (12s), (17m), (20m), (21m), (32g), (32m), (32s), (35a), (35m), (39m), (43b), (43p), (44m), (46h), (46p), (49m), (51g), (51m), (51n), (56m), (61m), (67m), (74h), (76m), (79m), (81m), (88), (89), (90), am. (4), (12), (20), (34), (59) c., (77) b. and (c), Register, November, 1999, No. 527, eff. 12—1—99 CR 02—146; am. (34) Register October 2003 No. 574, eff. 11—1—03.

NR 409.04 New units exemption. (1) APPLICABILITY. This section applies to any new utility unit that has not previously lost an exemption under sub. (6) (d) and that, in each year starting with the first year for which the unit is to be exempt, satisfies all of the following:

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(a) Serves during the entire year, except for any period before the unit commenced commercial operation, one or more generators with total nameplate capacity of 25 MWe or less.  
(b) Burns fuel that does not include any coal or coal-derived fuel, except coal-derived gaseous fuel with a total sulfur content no greater than natural gas.  
(c) Burns gaseous fuel with an annual average sulfur content of 0.05% or less by weight, as determined under sub. (4) and non-gaseous fuel with an annual average sulfur content of 0.05% or less by weight, as determined under sub. (4).  

**2. Exemptions for non-allocated units.** (a) Any new utility unit that meets the requirements of sub. (1) and that is not allocated any allowances under 40 CFR part 73 shall be exempt from this chapter, except for the provisions of this section, 40 CFR 72.2 to 72.6, and 40 CFR 72.10 to 72.13.  
(b) The exemption under par. (a) shall be effective on January 1 of the first full calendar year for which the unit meets the requirements of sub. (1). By December 31 of the first year for which the unit is to be exempt under this section, a statement signed by the designated representative, or, if no designated representative has been authorized, a certifying official of each owner of the unit shall be submitted to the department, and a copy of the statement shall be submitted to the administrator. The statement shall be submitted in a format prescribed by the administrator, shall identify the unit, state the nameplate capacity of each generator served by the unit and the fuels currently burned or expected to be burned by the unit and their sulfur content by weight, and state that the owners and operators of the unit will comply with sub. (6).  
(c) After receipt of the statement under par. (b), the department shall revise under s. NR 409.12 (4) the operation permit covering the source at which the unit is located, if the source has an operation permit, to add the provisions and requirements of the exemption under sub. (1), par. (a), and subs. (4) and (6).  

**3. Exemptions for allocated units.** (a) Any new utility unit that meets the requirements of sub. (1) and that is allocated one or more allowances under 40 CFR part 73 shall be exempt from this chapter, except for the provisions of this section, 40 CFR 72.2 to 72.6, and 40 CFR 72.10 to 72.13, if the designated representative, or, if no designated representative has been authorized, a certifying official of each owner of the unit submits to the department and the administrator a statement, in a format prescribed by the administrator, that does all of the following:  
1. Identifies the unit and states the nameplate capacity of each generator served by the unit and the fuels currently burned or expected to be burned by the unit and their sulfur content by weight.  
2. States that the owners and operators of the unit will comply with sub. (6).  
3. Surrenders allowances equal in number to, and with the same or earlier compliance use date as, all of those allocated to the unit under 40 CFR part 73 for the first year that the unit is to be exempt under this section and for each subsequent year.  
4. Surrenders any proceeds for allowances under subd. 3, withheld from the unit under 40 CFR 73.10.  
(b) The administrator deducts from the unit’s allowance tracking system account allowances under 40 CFR 72.7(c)(1)(i)(C) and receives proceeds under 40 CFR 72.7(c)(1)(i)(D). Upon completion of any deductions and receipt of any proceeds, the administrator will close the unit’s allowance tracking system account and notify the designated representative, or certifying official, and the department.  
(c) The exemption under par. (a) shall be effective on January 1 of the first full calendar year for which the requirements of sub. (1) and par. (a) are met. After notification by the administrator under 40 CFR 72.7(c)(1)(ii) the department shall revise under s. NR 409.12 (4) the operation permit covering the source at which the unit is located, if the source has such a permit, to add the provisions and requirements of the exemption under sub. (1), par. (a), and subs. (4) and (6).  

**4. Compliance demonstration.** Compliance with the requirement that fuel burned during the year have an annual average sulfur content of 0.05% by weight or less shall be demonstrated using a method of determining sulfur content that provides information with reasonable precision, reliability, accessibility and timeliness, in accordance with one of the following:  
(a) For gaseous fuel burned during the year, if natural gas is the only gaseous fuel burned, the requirement is assumed to be met.  
(b) For gaseous fuel burned during the year where other gas in addition to or besides natural gas is burned, the requirement is met if the annual average sulfur content is equal to or less than 0.05% by weight.  

\[
\%S_{\text{annual}} = \frac{\sum_{n=1}^{\text{last sample}} \%S_{n} V_{n} d_{n}}{\sum_{n=1}^{\text{last sample}} V_{n} d_{n}}
\]

where:  
\(\%S_{\text{annual}}\) is the annual average sulfur content of the fuel burned during the year by the unit, as a percentage by weight  
\(\%S_{n}\) is the sulfur content of the nth sample of the fuel delivered during the year to the unit, as a percentage by weight  
\(V_{n}\) is the volume of the fuel in a delivery during the year to the unit of which the nth sample is taken, in cubic feet  
\(d_{n}\) is the density of the nth sample of the fuel delivered during the year to the unit, in lb per standard cubic foot  
\(n\) is each sample taken of the fuel delivered during the year to the unit, taken at least once for each delivery; or, for fuel that is delivered during the year to the unit continuously by pipeline, at least once each quarter during which the fuel is delivered  
(c) For nongaseous fuel burned during the year, the requirement is met if the annual average sulfur content is equal to or less than 0.05% by weight.  

**5. Written exemptions.** (a) A utility unit that was issued a written exemption under this section and that meets the requirements of sub. (1) shall be exempt from this chapter, except for the provisions of this section, 40 CFR 72.2 to 72.6 and 40 CFR 72.10 to 72.13, and shall be subject to the requirements of subs. (1) and (4), par. (b), and sub. (6) in lieu of the requirements in the written exemption. The department shall revise under s. NR 409.12 (4) the operation permit covering the source at which the unit is located, if the source has an operation permit, to add the provisions and requirements of the exemption under this paragraph and subs. (1) and (4), par. (b) and sub. (6).  
(b) If a utility unit under par. (a) is allocated one or more allowances under 40 CFR part 73, the designated representative, or, if no designated representative has been authorized, a certifying official of each owner of the unit shall submit to the permitting authority that issued the written exemption a statement, in a format prescribed by the administrator, meeting the requirements of sub. (3) (a) 3. and 4.
Note: The statement was to have been submitted to the permitting authority by June 30, 1998 and, if the administrator was not the permitting authority, a copy was to have been submitted to the administrator.

(6) SPECIAL PROVISIONS. (a) Duty to comply. The owners and operators and, to the extent applicable, the designated representative of a unit exempt under this section shall comply with both of the following:

1. The requirements of sub. (1) for all periods for which the unit is exempt under this section.

2. The requirements of this chapter concerning all periods for which the exemption is not in effect, even if the requirements arise, or must be complied with, after the exemption takes effect.

(b) Scope of exemption. For any period for which a unit is exempt under this section, the unit is not an affected unit under this chapter and ch. NR 407 and is not eligible under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements in ch. NR 407.

(c) Recordkeeping. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under this section shall retain at the source that includes the unit records demonstrating that the requirements of sub. (1) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the administrator or the department.

1. Records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content and the sulfur content of each sample taken.

2. The owners and operators bear the burden of proof that the requirements of sub. (1) are met.

(d) Loss of exemption. 1. On the earliest of the following dates, a unit exempt under sub. (2), (3) or (5) shall lose its exemption and become an affected unit under this chapter and ch. NR 407:

a. The date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe.

b. The date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas.

c. January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05% by weight, as determined under sub. (4), or for nongaseous fuel burned at the unit exceeds 0.05% by weight, as determined under sub. (4).

2. Notwithstanding s. NR 409.08 (1) (b) and (c), the designated representative for a unit that loses its exemption under this section shall submit a complete acid rain portion of an operation permit application no later than 60 days after the first date on which the unit is no longer exempt.

3. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under this section shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

History: Cr. Register, April, 1995, No. 472, eff. 5–1–95; r. and recr., Register, November, 1999, No. 527, eff. 12–1–99.

NR 409.05 Retired units exemption. (1) APPLICABILITY. This section applies to any affected unit, except for an opt-in source, that is permanently retired.

(2) SOURCE OBLIGATIONS. (a) Scope of exemption. Any affected unit, except for an opt-in source, that is permanently retired shall be exempt from the acid rain program, for the provisions of this section, 40 CFR 72.2 to 72.6, 72.10 to 72.13, and subpart B of 40 CFR part 73.

(b) Submissions. The exemption under par. (a) shall become effective on January 1 of the first full calendar year during which that the unit is permanently retired. By December 31 of the first year that the unit is to be exempt under this section, the designated representative, authorized in accordance with subpart B of 40 CFR part 72, or, if no designated representative has been authorized, a certifying official of each owner of the unit, shall submit a statement to the department. A copy of the statement shall also be submitted to the administrator. The statement shall state, in a format prescribed by the administrator, that the unit is permanently retired and will comply with the requirements of sub. (4).

(3) DEPARTMENT’S ACTION. (a) After receipt of the notice under sub. (2) (b), the department shall amend under s. NR 409.12 40 the operation permit covering the source at which the unit is located, if the source has an operation permit, to add the provisions and requirements of the exemption under subs. (2) (a) and (4).

(b) A unit that was issued a written exemption under this section and that is permanently retired shall be exempt from the acid rain program, except for the provisions of this section, 40 CFR 72.2 to 72.6 and 72.10 to 72.13, and subpart B of 40 CFR part 73, and shall be subject to the requirements of sub. (4) in lieu of the requirements in the written exemption. The department shall amend under s. NR 409.12 (4) the operation permit covering the source at which the unit is located, if the source has such a permit, to add the provisions and requirements of the exemption under this subsection and sub. (4).

(4) SPECIAL PROVISIONS. (a) Allowance allocations. A unit exempt under this section may not emit any sulfur dioxide or nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with subpart B of 40 CFR part 73.

(b) Resumption of operations. A unit exempt under this section may not resume operation unless the designated representative of the source that includes the unit submits a complete acid rain portion of an operation permit application under s. NR 409.08 (2) for the unit not less than 24 months prior to the later of January 1, 2000 or the date on which the unit is first to resume operation.

(c) Duty to comply. The owners and operators and, to the extent applicable, the designated representative of a unit exempt under this section shall comply with the requirements of the acid rain program concerning all periods for which the exemption is not in effect, even if the requirements arise, or must be complied with, after the exemption takes effect.

(d) Scope of exemption. For any period for which a unit is exempt under this section, the unit is not an affected unit under this chapter and ch. NR 407 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 72.

(e) Recordkeeping. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under this section shall retain at the source that includes the unit records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the administrator or the department. The owners and operators bear the burden of proof that the unit is permanently retired.

(f) Loss of exemption. 1. On the earlier of the following dates, a unit exempt under sub. (2) or (3) shall lose its exemption and become an affected unit under this chapter and ch. NR 407:

a. The date on which the designated representative submits an acid rain portion of an operation permit application under par. (b).

b. The date on which the designated representative is required under par. (b) to submit an acid rain portion of an operation permit application.
2. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under this section shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

History: Cr. Register, April, 1995, No. 472, eff. 5-1-95; r. and recr., Register, November, 1999, No. 327, eff. 12-1-99.

NR 409.055 Non–cogeneration industrial utility units exemption. (1) APPLICABILITY. This section applies to any non–cogeneration, industrial utility unit that has not previously lost an exemption under sub. (4) (d) and that meets all of the following criteria:

(a) Starting on the date of the signing of the interconnection agreement under par. (b) and thereafter there has been no owner or operator of the unit, division or subsidiary or affiliate or parent company of an owner or operator of the unit, or combination thereof, whose principal business is the sale, transmission or distribution of electricity or that is a public utility under the jurisdiction of a state or local utility regulatory authority.

(b) On or before March 23, 1993, the owners or operators of the unit entered into an interconnection agreement and any related power purchase agreement with a person whose principal business is the sale, transmission or distribution of electricity or that is a public utility under the jurisdiction of a state or local utility regulatory authority, requiring the generator or generators served by the unit to produce electricity for sale only for incidental electricity sales to the person.

(c) The unit served or serves one or more generators that, in 1985 or any year thereafter, actually produced electricity for sale only for incidental electricity sales required under the interconnection agreement and any related power purchase agreement under par. (b) or a successor agreement under sub. (4) (d) 2.

(2) PETITION FOR EXEMPTION. The designated representative, authorized in accordance with subpart B of 40 CFR part 72, of a unit under sub. (1) may submit to the department a complete petition for an exemption for the unit from the requirements of the acid rain program, except for the provisions of this section, 40 CFR 72.2 to 72.6, and 40 CFR 72.10 to 72.13.

2. If a petition for exemption is submitted for a unit but the designated representative fails to demonstrate that the requirements of sub. (1) are met, the department shall deny an exemption under this section.

(b) In issuing or denying an exemption under par. (a), the department shall treat the petition for exemption as a permit application and apply the procedures used for issuing or denying the draft, proposed and final acid rain portion of operation permits.

(c) An exemption issued under par. (a) 1. shall become effective on January 1 of the first full year the unit meets the requirements of sub. (1).

(d) An exemption issued under par. (a) 1. shall be effective until the date on which the unit loses the exemption under sub. (4) (d).

(e) After issuance of the exemption under pars. (a) and (b), the department shall amend under s. NR 409.12 (4) the operation permit covering the source at which the unit is located, if the source has an operation permit, to add the provisions and requirements of the exemption under par. (a) 1. and sub. (4).

(4) SPECIAL PROVISIONS. (a) Duty to comply. The owners and operators and, to the extent applicable, the designated representative of a unit exempt under this section shall comply with the requirements of the acid rain program concerning all periods for which the exemption is not in effect, even if the requirements arise, or must be complied with, after the exemption takes effect.

(b) Scope of exemption. For any period for which a unit is exempt under this section, the unit is not an affected unit under this chapter and ch. NR 407 and is not eligible to be an opt–in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under ch. NR 407.

(5) RECORDKEEPING. For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under this section shall retain at the source that includes the unit records demonstrating that the requirements of sub. (1) are met. The owners and operators bear the burden of proof that the requirements of this section are met. The 5–year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the administrator or the department. Records shall include all of the following information:

1. A copy of the interconnection agreement and any related power purchase agreement under sub. (1) (b) and any successor agreement under par. (d) 2.

2. The nameplate capacity of each generator served by the unit.

3. For each year starting in 1985, the actual annual electrical output of each generator served by the unit, the total amount of electricity produced for sales to any customer by each generator, and the total amount of electricity produced and sold as required by the interconnection agreement and any related power purchase agreement under sub. (1) (b) or any successor agreement under sub. (4) (d) 2.

(h) A statement that each generator served by the unit actually produced electricity for sale only for incidental electricity sales, in accordance with sub. (1) (c), required under the interconnection agreement and any related power purchase agreement under sub. (1) (b) or any successor agreement under sub. (4) (d) 2.
(d) Loss of exemption. 1. A “successor agreement” is an agreement that satisfies all of the following:
   a. Modifies, replaces or supersedes the interconnection agreement or related power purchase agreement under sub. (1) (b).
   b. Is between the owners and operators of the unit and a person that is contractually obligated to sell electricity to the owners and operators of the unit and either whose principal business is the sale, transmission or distribution of electricity or that is a public utility under the jurisdiction of a state or local utility regulatory authority.
   c. Requires the generator served by the unit to produce electricity for sale to the person specified in the interconnection agreement or related power purchase agreement, to the extent they are still in effect, and the successor agreement may not exceed the total amount of electricity that the generator was required to produce for sale under the interconnection agreement or related power purchase agreement under sub. (1) (b).
   2. On the earliest of the following dates, a unit exempt under this section shall lose its exemption and become an affected unit under this chapter and ch. NR 407:
      a. The first date on which there is an owner or operator of the unit, division or subsidiary or affiliate or parent company of an owner or operator of the unit, or combination thereof, whose principal business is the sale, transmission or distribution of electricity or that is a public utility under the jurisdiction of a state or local utility regulatory authority.
      b. If any generator served by the unit actually produces any electricity for sale other than for sale to the person specified as the purchaser in the interconnection agreement or any related power purchase agreement under sub. (1) (b) or a successor agreement under this subdivision, then the day after the date on which the electricity is sold.
      c. If any generator served by the unit actually produces any electricity for sale to the person specified as the purchaser in the interconnection agreement or any related power purchase agreement under sub. (1) (b) or a successor agreement under this subdivision, where the sale results in total sales for a calendar year exceeding 10% of the nameplate capacity of that generator times 8,769 hours per year, then the day after the date on which the sale is made.
      d. If any generator served by the unit actually produces any electricity for sale to the person specified as the purchaser in the interconnection agreement or any related power purchase agreement under sub. (1) (b) or a successor agreement under this subdivision, where the sale results in total sales for a calendar year exceeding 10% of the actual electric output of the generator for that year, then January 1 of the year after that year.
      e. If the interconnection agreement or related power purchase agreement under sub. (1) (b) expires or is terminated, no successor agreement under this subdivision, is in effect, and any generator served by the unit actually produces any electricity for sale, then the day after the date on which the electricity is sold.
      3. Notwithstanding s. NR 409.08 (1) (b) and (c), the designated representative for a unit that loses its exemption under this section shall submit a complete acid rain portion of an operation permit application no later than 60 days after the first date on which the unit is no longer exempt.
      4. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under this section shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

History: Cr., Register, November, 1999, No. 527, eff. 12–1–99.

NR 409.06 Standard requirements. (1) PERMIT REQUIREMENTS. (a) The designated representative of each affected source and each affected unit at the source shall:
   1. Except for a phase I acid rain permit to be issued by EPA, submit a complete acid rain portion of an operation permit application under this chapter in accordance with the deadlines specified in s. NR 409.08 (1).
   2. Submit in a timely manner any supplemental information that the department determines is necessary in order to review an application for the acid rain portion of an operation permit and issue or deny an acid rain portion of an operation permit.
   (b) The owners and operators of each affected source and each affected unit at the source shall:
      1. Operate the unit in compliance with a complete acid rain portion of an operation permit application or a superseding acid rain portion of an operation permit issued by the department; and
      2. Have an acid rain portion of an operation permit.

(2) MONITORING REQUIREMENTS. (a) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
   (b) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the acid rain program.
   (c) The requirements of 40 CFR part 75 do not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the act and other provisions of the operation permit for the source.

(3) SULFUR DIOXIDE REQUIREMENTS. (a) The owners and operators of each affected source and each affected unit at the source shall:
   1. Hold allowances, as of the allowance transfer deadline, in the unit’s compliance subaccount, after deductions under 40 CFR 73.34 (c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
   2. Comply with the applicable acid rain emissions limitation for sulfur dioxide.
   (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation.
   (c) An affected unit is subject to the requirements under par. (a) as follows:
      1. Starting January 1, 2000, an affected unit under s. NR 409.01 (1) (a) 2.; or
      2. Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under s. NR 409.01 (1) (a) 3.
   (d) Allowances shall be held in, deducted from or transferred among allowance tracking system accounts in accordance with the acid rain program.
   (e) An allowance may not be deducted, in order to comply with the requirements under par. (a) 1., prior to the calendar year for which the allowance was allocated.
   (f) An allowance allocated by the administrator under the acid rain program is a limited authorization to emit sulfur dioxide in accordance with the acid rain program. No provision of the acid rain program, the acid rain portion of an operation permit application, the acid rain portion of an operation permit or an exemption under s. NR 409.04, 409.05 or 409.055 and no provision of law may be construed to limit the authority of the United States to terminate or limit the authorization.
(g) An allowance allocated by the administrator under the acid rain program does not constitute a property right.

(4) **Nitrogen Oxides Requirements.** The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitation for nitrogen oxides.

(5) **Excess Emissions Requirements.** (a) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to the administrator, as required under 40 CFR part 77, and submit a copy to the department.

(b) If one or more affected units governed by an approved NOx averaging plan under s. NR 409.065 (7) fail, after applying s. NR 409.065 (7) (d) 2. a., to meet their respective alternative contemporaneous emission limitations or annual heat input limits, then excess emissions of nitrogen oxides occur during the year at each unit. The sum of the excess emissions of nitrogen oxides of these units shall equal the amount determined under s. NR 409.065 (8) (b). The owners and operators of these units shall pay an excess emissions penalty based on the sum of the excess emissions of nitrogen oxides of the units.

(c) The owners and operators of an affected unit that has excess emissions in any calendar year shall:

1. Pay to the administrator without demand the penalty required, and pay to the administrator upon demand the interest on that penalty, as required by 40 CFR part 77; and

2. Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

(6) **Recordkeeping and Reporting Requirements.** (a) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the administrator or department.

1. The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond the 5-year period until the documents are superseded because of the submission of a new certificate of representation changing the designated representative.

2. All emissions monitoring information, in accordance with 40 CFR part 75; provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

3. Copies of all reports, compliance certifications, and other submissions and all records made or required under the acid rain program.

4. Copies of all documents used to complete an acid rain portion of an operation permit application and any other submission under the acid rain program or to demonstrate compliance with the requirements of this chapter and the acid rain program.

5. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the acid rain program, including those under s. NR 409.13 and 40 CFR part 75.

(7) **Liability.** (a) Any person who knowingly violates any requirement or prohibition of the acid rain program, a complete acid rain portion of an operation permit application, an acid rain portion of an operation permit or an exemption under s. NR 409.04, 409.05 or 409.055, shall be subject to enforcement by the department pursuant to ch. NR 494 and ss. 285.83 and 285.87, Stats.

(b) Any person who knowingly makes a false, material statement in any record, submission or report under the acid rain program shall be subject to criminal enforcement by the department pursuant to ch. NR 494 and ss. 285.83 and 285.87, Stats.

(c) No permit revision may excuse any violation of the requirements of this chapter and the acid rain program that occurs prior to the date that the revision takes effect.

(d) Each affected source and each affected unit shall meet the requirements of this chapter and the acid rain program.

(e) Any provision of the acid rain program that applies to an affected source, including a provision applicable to the designated representative of an affected source, shall also apply to the owners and operators of the source and of the affected units at the source.

(f) Any provision of the acid rain program that applies to an affected unit, including a provision applicable to the designated representative of an affected unit, shall also apply to the owners and operators of the unit. Except as provided under s. NR 409.09 (2), 40 CFR 72.41, 72.42, 72.43, 74.47 and 76.11, and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75, including 40 CFR 75.16, 75.17 and 75.18, the owners and operators and the designated representative of one affected unit are not liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(g) Each violation of a provision of this chapter and 40 CFR parts 72, 73, 75, 77 and 78 and regulations implementing sections 407 and 410 of the act (42 USC 7651f and 7651i) by an affected source or affected unit, or by an owner or operator or designated representative of the source or unit, shall be a separate violation.

(8) **Effect on other authorities.** No provision of the acid rain program, an acid rain portion of an operation permit application, an acid rain portion of an operation permit or an exemption under s. NR 409.04, 409.05 or 409.055 may be construed as doing any of the following:

(a) Except as expressly provided in title IV of the act (42 USC 7651 to 7651o), exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the act, including the provisions of title I of the act relating to applicable national ambient air quality standards or state implementation plans.

(b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit may not affect the source’s obligation to comply with any other provisions of the act.

(c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding the state regulation, or limiting the state regulation, including any prudence review requirements under state law.

(d) Modifying the federal power act (16 USC 791 to 828c) or affecting the authority of the federal energy regulatory commission under the federal power act.

(e) Interfering with or impairing any program for competitive bidding for power supply in a state in which the program is established.

History:

Cr. Register, April, 1995, No. 472, eff. 5–1–95; am. (8) (d), Register, December, 1995, No. 480, eff. 1–1–96; am. (8) (intro.), (d), Register, December, 1995, No. 492, eff. 1–1–97; renum. (5) (b) to be (5) (c), am. (2) (a), (b), (c) (1) (f), (6) (a) 2., (7) (a), (b), (f) and (8) (intro.) and cr. (4) and (5) (b), Register, November, 1999, No. 527, eff. 12–1–99.

**NR 409.065 Nitrogen Oxides Requirements.**

(1) **Applicability.** (a) Except as provided in pars. (b) to (c), this section applies to each coal–fired utility unit that is subject to an acid rain emissions limitation or reduction requirement for SO2 under Phase I or Phase II pursuant to section 404, 405 or 409 of the act (42 USC 7651c, 7651d or 7651h).

(b) The emission limitations for NOx under this section apply to each affected coal–fired utility unit subject to section 404(d) or
409(b) of the act on the date the unit is required to meet the acid rain emissions reduction requirement for SO$_2$.

(c) The provisions of this section apply to each coal–fired substitution unit or compensating unit, designated and approved by U.S. EPA as a Phase I unit pursuant to 40 CFR 72.41 or 72.43 as follows:

1. A coal–fired substitution unit that is designated in a substitution plan that is approved by U.S. EPA and active as of January 1, 1995 shall be treated as a Phase I coal–fired utility unit for purposes of this section. In the event the designation of the unit as a substitution unit is terminated after December 31, 1995, pursuant to 40 CFR 72.41 and the unit is no longer required to meet Phase I SO$_2$ emissions limitations, the provisions of this section will continue to apply.

2. A coal–fired substitution unit that is designated in a substitution plan that is not approved by U.S. EPA or not active as of January 1, 1995, or a coal–fired compensating unit, shall be treated as a Phase II coal–fired utility unit for purposes of this section.

2. **NITROGEN OXIDES EMISSION LIMITATIONS FOR GROUP 1, PHASE I BOILERS.** (a) Beginning January 1, 1996, or for a unit subject to section 404(d) of the act, the date on which the unit is required to meet acid rain emissions reduction requirements for SO$_2$, the owner or operator of a Phase I coal–fired utility unit with a tangentially fired boiler or a dry bottom wall–fired boiler, other than units applying cell burner technology, may not discharge, or allow to be discharged, emissions of NO$_x$ in excess of the following limits, except as provided in par. (c) or (e) or in sub. (6) or (7):

1. 0.45 pound per million Btu of heat input on an annual average basis for tangentially fired boilers.

2. 0.50 pound per million Btu of heat input on an annual average basis for dry bottom wall–fired boilers other than units applying cell burner technology.

(b) The owner or operator shall determine the annual average NO$_x$ emission rate, in pounds per million Btu, using the methods and procedures specified in 40 CFR part 75.

(c) Unless the unit meets the early election requirement of sub. (5), the owner or operator of a coal–fired substitution unit with a tangentially fired boiler or a dry bottom wall–fired boiler, other than units applying cell burner technology, that satisfies the requirements of sub. (1) (c) 2., shall comply with the NO$_x$ emission limitations that apply to Group 1, Phase II boilers.

(d) The owner or operator of a Phase I unit with a cell burner boiler that converts to a conventional wall–fired boiler on or before January 1, 1995 or, for a unit subject to section 404(d) of the act, the date the unit is required to meet acid rain emissions reduction requirements for SO$_2$ shall comply, by the respective date or January 1, 1996, whichever is later, with the NO$_x$ emissions limitation applicable to dry bottom wall–fired boilers under par. (a), except as provided in par. (c) or (e) or in sub. (6) or (7).

(e) The owner or operator of a Phase I unit with a Group 1 boiler that converts to a fluidized bed or other type of utility boiler not included in Group 1 boilers on or before January 1, 1995 or, for a unit subject to section 404(d) of the act, the date the unit is required to meet acid rain emissions reduction requirements for SO$_2$, is exempt from the NO$_x$ emissions limitations specified in par. (a), but shall comply with the NO$_x$ emission limitations for Group 2 boilers under sub. (3).

(f) Except as provided in sub. (5) and in par. (c), each unit subject to the requirements of this section is not subject to the requirements of sub. (4).

3. **NITROGEN OXIDES EMISSION LIMITATIONS FOR GROUP 2 BOILERS.** (a) Beginning January 1, 2000 or, for a unit subject to section 409(b) of the act, the date on which the unit is required to meet acid rain emissions reduction requirements for SO$_2$, the owner or operator of a Group 2 coal–fired boiler with a cell burner boiler, cyclone boiler, a wet bottom boiler or a vertically fired boiler may not discharge, or allow to be discharged, emissions of NO$_x$ to the atmosphere in excess of the following limits, except as provided in sub. (6) or (7):

1. 0.68 pound per million Btu of heat input on an annual average basis for cell burner boilers. The NO$_x$ emission control technology on which the emission limitation is based is plug–in combustion controls or non–plug–in combustion controls. Except as provided in sub. (2) (d), the owner or operator of a unit with a cell burner boiler that installs non–plug–in combustion controls after November 15, 1999 shall comply with the emission limitation applicable to cell burner boilers. The owner or operator of a unit with a cell burner that installs non–plug–in combustion controls on or before November 15, 1999 shall comply with the applicable emission limitation for dry bottom wall–fired boilers.

2. 0.86 pound per million Btu of heat input on an annual average basis for cyclone boilers with a maximum continuous steam flow at 100% of load of greater than 1060, in thousands of pounds per hour. The NO$_x$ emission control technology on which the emission limitation is based is natural gas reburning or selective catalytic reduction.

3. 0.84 pound per million Btu of heat input on an annual average basis for wet bottom boilers, with a maximum continuous steam flow at 100% of load of greater than 450, in thousands of pounds per hour. The NO$_x$ emission control technology on which the emission limitation is based is natural gas reburning or selective catalytic reduction.

4. 0.80 pound per million Btu of heat input on an annual average basis for vertically–fired boilers. The NO$_x$ emission control technology on which the emission limitation is based is combustion controls.

(b) The owner or operator shall determine the annual average NO$_x$ emission rate, in pounds per million Btu, using the methods and procedures specified in 40 CFR part 75.

4. **NITROGEN OXIDES EMISSION LIMITATIONS FOR GROUP 1, PHASE II BOILERS.** (a) Beginning January 1, 2000, the owner or operator of a Group 1, Phase II coal–fired utility unit with a tangentially–fired boiler or a dry bottom wall–fired boiler may not discharge, or allow to be discharged, emissions of NO$_x$ to the atmosphere in excess of the following limits, except as provided in sub. (5), (6) or (7):

1. 0.40 pound per million Btu of heat input on an annual average basis for tangentially–fired boilers.

2. 0.46 pound per million Btu of heat input on an annual average basis for dry bottom wall–fired boilers other than units applying cell burner technology.

(b) The owner or operator shall determine the annual average NO$_x$ emission rate, in pounds per million Btu, using the methods and procedures specified in 40 CFR part 75.

5. **EARLY ELECTION FOR GROUP 1, PHASE II BOILERS.** (a) General provisions. 1. The owner or operator of a Phase II coal–fired utility unit with a Group 1 boiler may elect to have the unit become subject to the applicable emissions limitation for NO$_x$ under sub. (2), starting no later than January 1, 1997.

2. The owner or operator of a Phase II coal–fired utility unit with a Group 1 boiler that elects to become subject to the applicable emission limitation under sub. (2) may not be subject to sub. (4) until January 1, 2008, provided the designated representative demonstrates that the unit is in compliance with the limitation under sub. (2), using the methods and procedures specified in 40 CFR part 75, for the period beginning January 1 of the year in which the early election takes effect, but not later than January 1, 1997, and ending December 31, 2007.

3. The owner or operator of any Phase II unit with a cell burner boiler that converts to conventional burner technology may elect to become subject to the applicable emissions limitation under sub. (2) for dry bottom wall–fired boilers, provided the owner or operator complies with the provisions in subd. 2.

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The owner or operator of a Phase II unit approved for early election may not submit an application for an alternative emissions limitation demonstration period under sub. (6) until the earlier of the following:

(1) January 1, 2008.

(2) Early election is terminated pursuant to par. (d) 3.

(3) The owner or operator of a Phase II unit approved for early election may not incorporate the unit into an averaging plan prior to January 1, 2000. On or after January 1, 2000, for purposes of the averaging plan, the early election unit will be treated as subject to the applicable emissions limitation for NO\(_x\) for Phase II units with Group I boilers under sub. (4).

(b) Submission of plan. In order to obtain early election status, the designated representative of a Phase II unit with a Group 1 boiler shall have submitted an early election plan to U.S. EPA by January 1, 1997, and U.S. EPA shall have approved the plan.

(c) Department's action. Beginning January 1, 2000, the department shall approve any early election plan previously approved by U.S. EPA during Phase I, unless the plan is terminated pursuant to par. (d) 3.

(d) Special provisions. 1. Nitrogen oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO\(_x\) as provided under par. (a) 2. except as provided under subd. 3. c.

2. Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or this section at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR part 77.

3. Termination. a. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect.

b. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under sub. (2) for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the department shall terminate the plan. The termination shall take effect beginning January 1 of the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan.

c. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative shall submit a notice under s. NR 409.09 (1) (d) by January 1 of the year for which the termination is to take effect.

d. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO\(_x\) for Phase II units with Group I boilers under sub. (4).

e. If an early election plan is terminated in or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO\(_x\) for Phase II units with Group I boilers under sub. (4).

(6) ALTERNATIVE EMISSION LIMITATIONS. (a) General provisions. The designated representative of an affected unit that is not an early election unit pursuant to sub. (5) and cannot meet the applicable emission limitation in sub. (2), (3) or (4) using, for Group I boilers, either low NO\(_x\) burner technology or an alternative technology in accordance with par. (c) 11., or, for tangentially-fired boilers, separated overfire air, or, for Group 2 boilers, the technology on which the applicable emission limitation is based may petition the department for an alternative emission limitation less stringent than the applicable emission limitation. In order for the unit to qualify for an alternative emission limitation, the designated representative shall demonstrate that the affected unit cannot meet the applicable emission limitation in sub. (2), (3) or (4) based on a showing, to the satisfaction of U.S. EPA, that all of the following apply:

1. One of the following:

   a. For a tangentially-fired boiler, the owner or operator has either properly installed low NO\(_x\) burner technology or properly installed separated overfire air.

   b. For a dry bottom wall-fired boiler, other than a unit applying cell burner technology, the owner or operator has properly installed low NO\(_x\) burner technology.

   c. For a Group 1 boiler, the owner or operator has properly installed an alternative technology, including but not limited to reburning, selective noncatalytic reduction or selective catalytic reduction, that achieves NO\(_x\) emission reductions demonstrated in accordance with par. (c) 11.

   d. For a Group 2 boiler, the owner or operator has properly installed the appropriate NO\(_x\) emission control technology on which the applicable emission limitation in sub. (3) is based.

2. The installed NO\(_x\) emission control system has been designed to meet the applicable emission limitation in sub. (2), (3) or (4).

3. For a demonstration period of at least 15 months or other period of time, as provided in par. (f) 1., all of the following:

   a. The NO\(_x\) emission control system has been properly installed and properly operated according to specifications and procedures designed to minimize the emissions of NO\(_x\) to the atmosphere.

   b. Unit operating data as specified in this section show that the unit and NO\(_x\) emission control system were operated in accordance with the bid and design specifications on which the design of the NO\(_x\) emission control system was based.

   c. Unit operating data as specified in this section, continuous emission monitoring data obtained pursuant to 40 CFR part 75, and the test data specific to the NO\(_x\) emission control system show that the unit could not meet the applicable emission limitation in sub. (2), (3) or (4).

(b) Petitioning process. The petitioning process for an alternative emission limitation shall consist of the following steps:

1. The owner or operator establishes, through unit operation during a period of at least 3 months following the installation of the NO\(_x\) emission control system, that the specific unit and its NO\(_x\) emission control system were unable to meet the applicable emissions limitation under sub. (2), (3) or (4) while operated in accordance with the design operating conditions and with vendor specifications and procedures.

2. The owner or operator submits a petition for an alternative emission limitation demonstration period as specified in par. (d).

3. The owner or operator demonstrates, during a demonstration period of at least 15 months or other period of time as provided in par. (f) 1., that the specific unit is able to meet neither the applicable emissions limitation under sub. (2), (3) or (4) nor the minimum NO\(_x\) emissions rate that the specific unit can achieve during long-term load dispatch operation.

4. The owner or operator submits a petition for a final alternative emission limitation as specified in par. (e).

(c) Deadlines. 1. Petition for an alternative emission limitation demonstration period. The designated representative of the unit shall submit a petition for an alternative emission limitation demonstration period to the department after the unit has been operated for at least 3 months after installation of the NO\(_x\) emission control system required under par. (a) and not later than either of the following:

   a. 120 days after January 1 of the calendar year in which the alternative emission limitation demonstration period is to begin.

   b. 120 days after startup of the NO\(_x\) emission control system if the unit is not operating at the beginning of that calendar year.
2. Petition for a final alternative emission limitation. Not later than 90 days after the end of an approved alternative emission limitation demonstration period for the unit, the designated representative of the unit may submit a petition for an alternative emission limitation to the department.

3. Renewal of an alternative emission limitation. In order to request continuation of an alternative emission limitation, the designated representative shall submit a petition to renew the alternative emission limitation on the date that the application for renewal of the source’s acid rain portion of an operation permit containing the alternative emission limitation is due.

(d) Contents of petition for an alternative emission limitation demonstration period. The designated representative of an affected unit that has met the minimum criteria under par. (a) and that has been operated for a period of at least 3 months following the installation of the required NOx emission control system may submit to the department a petition for an alternative emission limitation demonstration period. In the petition, the designated representative shall provide all of the following information:

1. Identification of the unit.
2. The type of NOx control technology installed.

Note: NOx control technologies include, but are not limited to, the following: low NOx burner technology, selective noncatalytic reduction, selective catalytic reduction and reburning.
3. If an alternative technology is installed, the time period, not less than 6 consecutive months, prior to installation of the technology to be used for the demonstration required in par. (e) 11.
4. Documentation as set forth in sub. (9) (b) showing that the installed NOx emission control system has been designed to meet the applicable emission limitation in sub. (2), (3) or (4) and that the system has been properly installed according to procedures and specifications designed to minimize the emissions of NOx to the atmosphere.
5. The date the unit commenced operation following the installation of the NOx emission control system or the date the specific unit became subject to the emission limitations of sub. (2), (3) or (4), whichever is later.
6. The dates of the operating period, which shall be at least 3 months long.
7. Certification by the designated representative that the owner or owners or operator operated the unit and the NOx emission control system during the operating period in accordance with all of the following:
   a. Specifications and procedures designed to achieve the maximum NOx reduction possible with the installed NOx emission control system or the applicable emission limitation in sub. (2), (3) or (4).
   b. The operating conditions upon which the design of the NOx emission control system was based.
   c. Vendor specifications and procedures.
   8. A brief statement describing the reason or reasons why the unit cannot achieve the applicable emission limitation in sub. (2), (3) or (4).
9. A demonstration period plan, as set forth in sub. (9) (c).
10. Unit operating data and quality-assured continuous emission monitoring data, including the specific data items listed in sub. (9) (d), collected in accordance with 40 CFR part 75 during the operating period and demonstrating the inability of the specific unit to meet the applicable emission limitation in sub. (2), (3) or (4) on an annual average basis while operating as certified under subd. 7.
11. An interim alternative emission limitation, in pounds per million Btu, that the unit can achieve during a demonstration period of at least 15 months. The interim alternative emission limitation shall be derived from the data specified in subd. 10. using methods and procedures satisfactory to U.S. EPA.
12. The proposed dates of the demonstration period, which shall be at least 15 months long.
13. A report which outlines the testing and procedures to be taken during the demonstration period in order to determine the maximum NOx emission reduction obtainable with the installed system. The report shall include the reasons for the NOx emission control system’s failure to meet the applicable emission limitation, and the tests and procedures that will be followed to optimize the NOx emission control system’s performance. Tests and procedures may include those identified in s. NR 439.098 as appropriate.
14. The special provisions at par. (g) 1.

(e) Contents of petition for a final alternative emission limitation. After the approved demonstration period, the designated representative of the unit may petition the department for an alternative emission limitation. The petition shall include all of the following elements:

1. Identification of the unit.
2. Certification that the owner or owners or operator operated the affected unit and the NOx emission control system during the demonstration period in accordance with all of the following:
   a. Specifications and procedures designed to achieve the maximum NOx reduction possible with the installed NOx emission control system or the applicable emissions limitation in sub. (2), (3) or (4).
   b. The operating conditions including load dispatch conditions upon which the design of the NOx emission control system was based.
   c. Vendor specifications and procedures.
3. Certification that the owner or owners or operator have installed in the affected unit all NOx emission control systems, made any operational modifications, and completed any planned upgrades and maintenance to equipment specified in the approved demonstration period plan for optimizing NOx emission reduction performance, consistent with the demonstration period plan and the proper operation of the installed NOx emission control system. The certification shall explain any differences between the installed NOx emission control system and the equipment configuration described in the approved demonstration period plan.
4. A clear description of each step or modification taken during the demonstration period to improve or optimize the performance of the installed NOx emission control system.
5. Engineering design calculations and drawings that show the technical specifications for installation of any additional operational or emission control modifications installed during the demonstration period.
6. Unit operating and quality-assured continuous emission monitoring data, including the specific data listed in sub. (9) (e), collected in accordance with 40 CFR part 75 during the demonstration period and demonstrating the inability of the specific unit to meet the applicable emission limitation in sub. (2), (3) or (4) on an annual average basis while operating in accordance with the certification under subd. 2.
7. A report, based on the parametric test requirements in the approved demonstration period plan as identified in par. (d) 13., that demonstrates the unit was operated in accordance with the operating conditions upon which the design of the NOx emission control system was based and describes the reason or reasons for the failure of the installed NOx emission control system to meet the applicable emission limitation in sub. (2), (3) or (4) on an annual-average basis.
8. The minimum NOx emission rate, in pounds per million Btu, that the affected unit can achieve on an annual average basis with the installed NOx emission control system. This value, which shall be the requested alternative emission limitation, shall be derived from the data specified in this section using methods and procedures satisfactory to U.S. EPA and shall be the lowest
annual emission rate the unit can achieve with the installed NO\textsubscript{x} emission control system.

9. All supporting data and calculations documenting the determination of the requested alternative emission limitation and its conformance with the methods and procedures satisfactory to U.S. EPA.

10. The special provisions in par. (g) 2.

11. In addition to the other requirements of this section, the owner or operator of an affected unit with a Group 1 boiler that has installed an alternative technology, in addition to or in lieu of low NO\textsubscript{x} burner technology, and cannot meet the applicable emission limitation in sub. (2) shall demonstrate, to the satisfaction of U.S. EPA, that the actual percentage reduction in NO\textsubscript{x} emissions (pounds per million Btu), on an annual average basis is greater than 65\% of the average annual NO\textsubscript{x} emissions prior to the installation of the NO\textsubscript{x} emission control system. The percentage reduction in NO\textsubscript{x} emissions shall be determined using continuous emissions monitoring data for NO\textsubscript{x} taken during the time period, under par. (d) 3., prior to the installation of the NO\textsubscript{x} emission control system and during long−term load dispatch operation of the specific boiler.

(f) Department’s action. 1. Alternative emission limitation demonstration period. a. The department may approve an alternative emission limitation demonstration period and demonstration period plan, provided that the requirements of this section are met to the satisfaction of the department. The department shall disapprove a demonstration period if the requirements of par. (a) were not met during the operating period.

b. If the demonstration period is approved, the department shall include, as part of the demonstration period, the 4−month period prior to submission of the application in the demonstration period.

c. During the alternative emission limitation demonstration period, a unit may emit at a rate not greater than the interim alternative emission limitation on or after the applicable date established in sub. (3) or (4) and until the date that U.S. EPA approves or denies a final alternative emission limitation.

d. After an alternative emission limitation demonstration period is approved, if the designated representative requests an extension of the demonstration period in accordance with par. (g) 1. b., the department may extend the demonstration period by administrative revision under s. NR 409.12 (4) to the acid rain portion of an operation permit.

e. The department shall deny the demonstration period if the designated representative cannot demonstrate that the unit met the requirements of par. (a) during the operating period. In those cases, the department shall require that the owner or operator operate the unit in compliance with the applicable emission limitation in sub. (2), (3) or (4) for the period preceding the submission of the application for an alternative emission limitation demonstration period, including the operating period, if the periods are after the date on which the unit is subject to the standard limit under sub. (2), (3) or (4).

2. Alternative emission limitation. a. If the department determines that the requirements in this subsection are met, the department shall approve an alternative emission limitation and issue or revise an acid rain portion of an operation permit to disapprove an alternative emission limitation.

3. Alternative emission limitation renewal. a. If, upon review of a petition to renew an approved alternative emission limitation, the department determines that no changes have been made to the control technology, its operation, the operating conditions on which the alternative emission limitation was based or the actual NO\textsubscript{x} emission rate, the alternative emission limitation shall be renewed.

b. If the department determines that changes have been made to either the control technology, its operation, the fuel quality or the operating conditions on which the alternative emission limitation was based, the designated representative shall submit, in order to renew the alternative emission limitation or to obtain a new alternative emission limitation, a petition for an alternative emission limitation demonstration period that meets the requirements of par. (d) using a new demonstration period.

(g) Special provisions. 1. Alternative emission limitation demonstration period. a. Each unit with an approved alternative emission limitation demonstration period shall comply with the interim emission limitation specified in the unit’s permit beginning on the effective date of the demonstration period specified in the permit and, if a timely petition for a final alternative emission limitation is submitted, extending until the date on which the department issues or revises an acid rain portion of an operation permit to approve or disapprove an alternative emission limitation. If a timely petition is not submitted, then the unit shall comply with the standard emission limit under sub. (2), (3) or (4) beginning on the date the petition was required to be submitted under par. (c) 2.

b. When the owner or operator identifies, during the demonstration period, boiler or NO\textsubscript{x} emission control system operating modifications or upgrades that would produce further NO\textsubscript{x} emission reductions, enabling the affected unit to comply with or bring its emission rate closer to the applicable emissions limitation under sub. (2), (3) or (4), the designated representative may submit a request and the department may grant, by administrative revision under s. NR 409.12 (4), an extension of the demonstration period for a period of time not to exceed 12 months as may be necessary to implement the modifications or upgrades.

c. If the approved interim alternative emission limitation applies to a unit for part, but not all, of a calendar year, the unit shall determine compliance for the calendar year in accordance with the procedures in sub. (8) (a).

d. A unit with an approved alternative emission limitation demonstration period shall be operated under load dispatch conditions consistent with the operating conditions upon which the design of the NO\textsubscript{x} emission control system and performance guarantee were based, and in accordance with the demonstration period plan.

e. A unit with an approved alternative emission limitation demonstration period shall install all NO\textsubscript{x} emission control systems, make any operational modifications, and complete any upgrades and maintenance to equipment specified in the approved demonstration period plan for optimizing NO\textsubscript{x} emission reduction performance.

f. When the owner or operator identifies boiler or NO\textsubscript{x} emission control system operating modifications or upgrades that would produce further NO\textsubscript{x} emission reductions, enabling the affected unit to comply with or bring its emission rate closer to the applicable emissions limitation under sub. (2), (3) or (4), the designated representative may submit a request and the department may grant, by administrative revision under s. NR 409.12 (4), a revision to the unit’s acid rain portion of an operation permit and demonstration period plan to include the modifications or upgrades.
g. A unit with an approved alternative emission limitation demonstration period shall monitor in accordance with 40 CFR part 75 and shall conduct all tests required under the approved demonstration period plan.

2. Final alternative emission limitation. a. Each unit with an approved alternative emission limitation shall comply with the alternative emission limitation specified in the unit’s permit beginning on the date specified in the permit as issued or revised by the department to apply the final alternative emission limitation.

b. If the approved interim or final alternative emission limitation applies to a unit for part, but not all, of a calendar year, the unit shall determine compliance for the calendar year in accordance with the procedures in sub. (8) (a).

(7) EMISSIONS AVERAGING. (a) General provisions. 1. In lieu of complying with the applicable emission limitation in sub. (2), (3) or (4), any affected units subject to such emission limitation, under control of the same owner or operator, and having the same designated representative may average their NOx emissions under an approved averaging plan approved under this subsection.

2. Each affected unit included in an averaging plan for Phase II shall be a boiler subject to an emission limitation in sub. (2), (3) or (4) for all years for which the unit is included in the plan.

3. Each unit included in an averaging plan shall have an alternative contemporaneous annual emission limitation (pounds per million Btu) and can only be included in one averaging plan.

4. Each unit included in an averaging plan shall have a minimum allowable annual heat input value (million Btu), if it has an alternative contemporaneous annual emission limitation more stringent than that unit’s applicable emission limitation under sub. (2), (3) or (4), and a maximum allowable annual heat input value, if it has an alternative contemporaneous annual emission limitation less stringent than that unit’s applicable emission limitation under sub. (2), (3) or (4).

5. The Btu–weighted annual average emission rate for the units in an averaging plan shall be less than or equal to the Btu–weighted annual average emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in sub. (2), (3) or (4).

6. In order to demonstrate that the proposed plan is consistent with par. (a) 4., the alternative contemporaneous annual emission limitations and annual heat input values assigned to the units in the proposed averaging plan shall meet the following requirement:

\[
\frac{\sum_{i=1}^{n} (R_{i1} \times HI_i)}{\sum_{i=1}^{n} HI_i} \leq \frac{\sum_{i=1}^{n} (R_{i2} \times HI_i)}{\sum_{i=1}^{n} HI_i}
\] (Equation 1)

where:

- \(R_{i1}\) is the alternative contemporaneous annual emission limitation for unit \(i\), in pounds per million Btu, as specified in the averaging plan.
- \(R_{i2}\) is the applicable emission limitation for unit \(i\), in pounds per million Btu, as specified in sub. (2), (3) or (4) except that for early election units, which may be included in an averaging plan only on or after January 1, 2000, \(R_{i2}\) shall equal the most stringent applicable emission limitation under sub. (2) or (4); for units with an alternative emission limitation under sub. (2) or (4), \(R_{i2}\) shall equal the applicable emissions limitation under sub. (2), (3) or (4), not the alternative emissions limitation.
- \(HI_i\) is the annual heat input for unit \(i\), in million Btu, as specified in the averaging plan.

7. No unit may be included in more than one averaging plan.

(b) Submission requirements. 1. The designated representative of a unit meeting the requirements of par. (a) 1. and 7. may submit an averaging plan or a revision to an approved averaging plan to the department and any other applicable permitting authorities at any time up to and including January 1 (or July 1, if the plan is restricted to only units located within the department’s jurisdiction) of the calendar year for which the averaging plan is to become effective.

2. The designated representative shall submit a copy of the same averaging plan, or the same revision to an approved averaging plan, to any other permitting authority with jurisdiction over a unit in the plan, and to U.S. EPA.

3. When an averaging plan or a revision to an approved averaging plan is not approved, the owner or operator of each unit in the plan shall operate the unit in compliance with the emission limitation that would apply in the absence of the averaging plan or revision to a plan.

(c) Contents of NOx averaging plan. A complete NOx averaging plan shall include all of the following elements:

1. Identification of each unit in the plan.
2. Each unit’s applicable emission limitation in sub. (2), (3) or (4).
3. The alternative contemporaneous annual emission limitation for each unit (in pounds per million Btu). If any of the units identified in the NOx averaging plan utilize a common stack pursuant to 40 CFR 75.17(a)(2)(i)(B), the same alternative contemporaneous emission limitation shall be assigned to each unit and different heat input limits may be assigned.
4. The annual heat input limit for each unit (in million Btu).
5. The calculation for Equation 1 in par. (a) 5.
6. The calendar years for which the plan will be in effect.
7. The special provisions in par. (d).

(d) Special provisions. 1. Emission limitations. Except as provided as in subd. 2., each affected unit in an approved averaging plan is in compliance with the acid rain emission limitation for NOx under the plan if all of the following requirements are met:

a. For each unit, the unit’s actual annual average emission rate for the calendar year, in pounds per million Btu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan.

b. For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in sub. (2), (3) or (4), the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan.

c. For each unit with an alternative contemporaneous annual emission limitation more stringent than the applicable emission limitation in sub. (2), (3) or (4), the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan.

2. Group showing of compliance. If one or more of the units does not meet the requirements under subd. 1., the designated representative shall demonstrate, in accordance with subd. 2. a. (i.e., Equation 2) that the actual Btu–weighted annual average emission rate for the units in the plan is less than or equal to the Btu–weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in sub. (2), (3) or (4).
a. A group showing of compliance shall be made based on the following equation:
\[
\sum_{i=1}^{n} (R_{ai} \times H_{li}) \leq \sum_{i=1}^{n} R_{ai} \times H_{li} \quad \text{(Equation 2)}
\]

where:
- \( R_{ai} \) is the actual annual average emission rate for unit \( i \), in pounds per million Btu, as determined using the procedures in 40 CFR part 75. For units in an averaging plan utilizing a common stack pursuant to 40 CFR 75.17(a)(2)(i)(B), use the same NO\(_x\) emission rate value for each unit utilizing the common stack, and calculate this value in accordance with appendix F of 40 CFR part 75.
- \( R_{ai} \) is the applicable annual emission limitation for unit \( i \), in pounds per million Btu, as determined using the procedures in 40 CFR part 75.
- \( H_{li} \) is the actual annual heat input for unit \( i \), in million Btu, as determined using the procedures in 40 CFR part 75.
- \( H_{li} \) is the applicable annual heat input for unit \( i \), in million Btu, as determined using the procedures in 40 CFR part 75.

b. If there is a successful group showing of compliance under subd. 2. a. for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under subd. 1.

3. Liability. The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including

(8) ComplianCe and excess emissions. Excess emissions of nitrogen oxides under 40 CFR 77.6 shall be calculated as follows:

(a) For a unit that is not in an approved averaging plan:

1. Calculate EE\(_i\) for each portion of the calendar year that the unit is subject to a different NO\(_x\) emission limitation:
\[
EE_{i} = \frac{(R_{ai} - R_{ji}) \times H_{li}}{2000} EE_{i} = \text{(Equation 3)}
\]

where:
- \( EE_{i} \) is the excess emissions for NO\(_x\) for the portion of the calendar year (in tons)
- \( R_{ai} \) is the actual average emission rate for the unit (in pounds per million Btu), determined according to 40 CFR part 75 for the portion of the calendar year for which the applicable emission limitation \( R_{ai} \) is in effect
- \( R_{ji} \) is the applicable emission limitation for the unit (in pounds per million Btu), as specified in sub. (2), (3) or (4) or as determined under sub. (6)
- \( H_{li} \) is the actual heat input for the unit, (in million Btu), determined according to 40 CFR part 75 for the portion of the calendar year for which the applicable emission limitation, \( R_{ai} \), is in effect

2. If \( EE_{i} \) is a negative number for any portion of the calendar year, the EE value for that portion of the calendar year shall be equal to zero (e.g., if \( EE_{i} = -100 \), then \( EE_{i} = 0 \)).

3. Sum all EE\(_i\) values for the calendar year:
\[
EE = \sum_{i=1}^{n} EE_{i} \quad \text{(Equation 4)}
\]

where:
- \( EE \) is the excess emissions for NO\(_x\) for the year (in tons)
- \( n \) is the number of time periods during which a unit is subject to different emission limitations

(b) For units participating in an approved averaging plan, when all the requirements under sub. (7) (d) 1. and 2. are not met:
\[
EE = \frac{\sum_{i=1}^{n} (R_{ai} \times H_{li}) - \sum_{i=1}^{n} (R_{ai} \times H_{li})}{2000} \quad \text{(Equation 5)}
\]

where:
- \( EE \) is the excess emissions for NO\(_x\) for the year (in tons)
- \( R_{ai} \) is the actual annual average emission rate for NO\(_x\) for unit \( i \) (in pounds per million Btu), determined according to 40 CFR part 75
- \( R_{ai} \) is the applicable emission limitation for unit \( i \) (in pounds per million Btu), as specified in sub. (2), (3) or (4)
- \( H_{li} \) is the actual annual heat input for unit \( i \) (in million Btu), determined according to 40 CFR part 75
- \( n \) is the number of units in the averaging plan

(9) Monitoring, recordkeeping and reporting requirements. (a) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site certain relevant documents described below for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the administrator or department. The following documents shall be kept at the source:

1. The certificate of representation for the designated representative for the source and each affected unit at the source and all records made or required under the acid rain program.
2. All emissions monitoring information, in accordance with 40 CFR part 75.
3. Copies of all reports, compliance certifications and other submissions and all records made or required under the acid rain program.
4. Copies of all documents used to complete an acid rain portion of an operation permit application and any other submission under the acid rain program or to demonstrate compliance with the requirements of this chapter and the acid rain program.

(b) In accordance with sub. (6) (d) 4., a petition for an alternative emission limitation demonstration period shall include the following information:

1. Documentation that the owner or operator solicited bids for a NO\(_x\) emission control system designed for application to the specific boiler and designed to achieve the applicable emission limitation in sub. (2), (3) or (4) on an annual average basis. This documentation shall include a copy of all bid specifications.
2. A copy of the performance guarantee submitted by the vendor of the installed NO\(_x\) emission control system to the owner or operator showing that the system was designed to meet the applicable emission limitation in sub. (2), (3) or (4) on an annual average basis.
3. Documentation describing the operational and combustion conditions that are the basis of the performance guarantee.
4. Certification by the primary vendor of the NOx emission control system that the equipment and associated auxiliary equipment was properly installed according to the modifications and procedures specified by the vendor.
5. Certification by the designated representative that the owner or owners or operator installed technology that meets the requirements of sub. (6) (a).

(c) In accordance with sub. (6) (d) 9., a petition for an alternative emission limitation demonstration period shall include the following information:
1. The operating conditions of the NOx emission control system including load range, O2 range, coal volatile matter range, and, for tangentially fired boilers, distribution of combustion air within the NOx emission control system.
2. Certification by the designated representative that the owner or owners or operator have achieved and are following the operating conditions, boiler modifications and upgrades that formed the basis for the system design and performance guarantee.
3. Any planned equipment modifications and upgrades for the purpose of achieving the maximum NOx reduction performance of the NOx emission control system that were not included in the design specifications and performance guarantee, but that were achieved prior to submission of this application and are being followed.
4. A list of any modifications or replacements of equipment that are to be done prior to the completion of the demonstration period for the purpose of reducing emissions of NOx.
5. The parametric testing that will be conducted to determine the reason or reasons for the failure of the unit to achieve the applicable emission limitation and to verify the proper operation of the installed NOx emission control system during the demonstration period. The tests shall include tests in s. NR 439.098, which may be modified according to the following criteria:
   a. The owner or operator of the unit may add tests to those listed in s. NR 439.098, if the additions provide data relevant to the failure of the installed NOx emission control system to meet the applicable emissions limitation in sub. (2), (3) or (4); or
   b. The owner or operator of the unit may remove tests listed in s. NR 439.098 that are shown, to the satisfaction of the department, not to be relevant to NOx emissions from the affected unit; and
   c. In the event the performance guarantee or the NOx emission control system specifications require additional tests not listed in s. NR 439.098, or specify operating conditions not verified by tests listed in s. NR 439.098, the owner or operator of the unit shall include additional tests.
(d) In accordance with sub. (6) (d) 10., a petition for an alternative emission limitation demonstration period shall include all of the following information for the operating period:
1. The average NOx emission rate (in pounds per million Btu) of the specific unit.
2. The highest hourly NOx emission rate (in pounds per million Btu) of the specific unit.
3. Hourly NOx emission rate (in pounds per million Btu), calculated in accordance with 40 CFR part 75.
4. Total heat input (in million Btu) for the unit for each hour of operation, calculated in accordance with the requirements of 40 CFR part 75.
5. Total integrated hourly gross unit load (in megawatts, gross, electrical).
(e) A petition for an alternative emission limitation shall include all of the following information in accordance with sub. (6) (e) 6.:
NR 409.08 Application for the acid rain portion of an operation permit. (1) REQUIREMENT TO APPLY. (a) Duty to apply. 1. The designated representative of any source with an affected unit shall submit a complete acid rain portion of an operation permit application by the applicable deadline in pars. (b) and (c), and the owners and operators of the source and any affected unit at the source may not operate the source or unit without a permit or permit application meeting the requirements of sub. (3) that states its acid rain program requirements.

2. The designated representative of any source with an affected unit subject to s. NR 409.065 shall submit, by the applicable deadline under par. (c) 2., a complete acid rain portion of an operation permit application or, if the unit is covered by an acid rain portion of an operation permit, a complete permit revision that includes a complete compliance plan for NOx emissions covering the unit.

Note: Application forms may be obtained from the regional and area offices of the department or from the Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison WI 53707–7921, Attention: Operation permits.

(b) Deadlines. 1. For any source with an existing unit described under s. NR 409.01 (1) (a) 2., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department at least 24 months before the later of January 1, 2000 or the date on which the unit commences operation.

2. For any source with a new unit described under s. NR 409.01 (1) (a) 3. a., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department at least 24 months before the later of January 1, 2000 or the date on which the unit commences operation.

3. For any source with a unit described under s. NR 409.01 (1) (a) 3. b., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department at least 24 months before the later of January 1, 2000 or the date on which the unit commences operation.

4. For any source with a unit described under s. NR 409.01 (1) (a) 3. c., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department at least 24 months before the later of January 1, 2000 or the date on which the auxiliary firing commences operation.

5. For any source with a unit described under s. NR 409.01 (1) (a) 3. d., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department before the later of January 1, 1998 or March 1 of the year following the 3 calendar year periods in which the unit sold to a utility power distribution system an annual average of more than one−third of its potential electrical output capacity and more than 219,000 MWe−hrs actual electric output, on a gross basis.

6. For any source with a unit described under s. NR 409.01 (1) (a) 3. e., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department before the later of January 1, 1998 or March 1 of the year following the calendar year in which the facility fails to meet the definition of qualifying facility.

7. For any source with a unit described under s. NR 409.01 (1) (a) 3. f., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department before the later of January 1, 1998 or March 1 of the year following the calendar year in which the facility fails to meet the definition of an independent power production facility.

8. For any source with a unit described under s. NR 409.01 (1) (a) 3. g., the designated representative shall submit a complete acid rain portion of an operation permit application governing the unit to the department before the later of January 1, 1998 or March 1 of the year following the 3 calendar year periods in which the incinerator consumed 20% or more fossil fuel, on a Btu basis.

Note: Early election units were required to submit an application to U.S. EPA not later than January 1, 1997. For a Phase I or Phase II unit with a Group 1 or Group 2 boiler, the designated representative was required to submit a complete permit application and compliance plan for NOx emissions covering the unit in Phase II to the department and U.S. EPA not later than January 1, 1998.

(c) Duty to reapply. 1. The designated representative shall submit a complete acid rain portion of an operation permit application for each source with an affected unit at least 6 months before the permit expires.

2. The designated representative of any source with an affected unit subject to s. NR 409.065 shall submit a complete acid rain portion of an operation permit application, including a complete compliance plan for NOx emissions covering the unit, in accordance with par. (d) and with the deadlines in subd. 1.

(d) Number of copies. 1. The original and 3 copies of all permit applications shall be submitted to the department.

2. The original and 3 copies of the compliance plan for NOx emissions for Phase II shall be submitted to the department, and one copy of the compliance plan for NOx emissions submitted to U.S. EPA headquarters, acid rain division.

(e) Multiple applications. Where 2 or more affected units are located at a source, the department may allow the designated representative of the source to submit, under par. (a) or (c), 2 or more acid rain portions of operation permit applications covering the units at the source, provided that each affected unit is covered by one and only one application.

Note: Application forms may be obtained from the regional offices of the department or from the Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison WI 53707–7921, Attention: Operation permits.

(2) INFORMATION REQUIREMENTS FOR THE ACID RAIN PORTION OF OPERATION PERMIT APPLICATIONS. A complete acid rain portion of an operation permit application shall be submitted on a form approved by the department and shall include the following elements:

(a) Identification of the affected source for which the acid rain portion of the permit application is submitted.

(b) Identification of each affected unit, except for an opt−in unit, at the source for which the acid rain portion of the permit application is submitted.

(c) A complete compliance plan for each unit, in accordance with s. NR 409.09.

(d) The standard requirements under s. NR 409.06.

(e) If the unit is a new unit, the date that the unit has commenced or shall commence operation and the deadline for monitor certification under 40 CFR part 75.

(f) If the unit is subject to s. NR 409.065, the following information:

1. Identification of each affected unit that is at the source and is subject to s. NR 409.065.

2. Identification of the boiler type of each unit.

3. Identification of the compliance option proposed for each unit, including meeting the applicable emissions limitation under s. NR 409.065 (2), (3) or (4), (5) (early election), (6) (alternative emission limitation), or (7) (NOx emissions averaging), and any additional information required for the appropriate option in accordance with s. NR 409.065.

4. The compliance certification statements required of the designated representative in accordance with s. NR 409.07 (1) (b) and (c).

(3) PERMIT APPLICATION SHIELD AND BINDING EFFECT OF PERMIT APPLICATION. (a) 1. Once a designated representative submits a timely and complete acid rain portion of an operation permit application, the owners and operators of the affected source and the affected units covered by the permit application shall be
deemed in compliance with the requirement to have an acid rain portion of an operation permit under ss. NR 409.06 (1) (b) and 409.08 (1) (a).

2. After an application for an operation permit has been initially deemed complete, the department may require additional information, including other information than that requested on the application forms, as needed to process the application. The department shall specify, in writing, a reasonable time period, of not less than 30 days, for the applicant to submit the requested information. The applicant may request and the department may grant a reasonable extension of the time period to submit the requested information. If the applicant does not supply the information requested by the date specified, the authorization for an existing source to operate under s. 285.62 (8), Stats., no longer applies to the source.

(b) Prior to the date on which an acid rain portion of a permit is issued or denied, an affected unit governed by and operated in accordance with the terms and requirements of a timely and complete acid rain portion of an operation permit application shall be deemed to be operating in compliance with the acid rain program.

(c) A complete acid rain portion of an operation permit application shall be binding on the owners and operators and the designated representative of the affected source and the affected units covered by the permit application and shall be enforceable as an acid rain portion of an operation permit from the date of submission of the permit application until the issuance or denial of the acid rain portion of an operation permit covering the units.

(4) RELATIONSHIP TO CH. NR 407 OPERATION PERMIT PROGRAM. (a) The department shall act in accordance with this chapter and chs. NR 406 and 407 for the purpose of incorporating acid rain program requirements into each affected source’s operation permit or for issuing written exemptions under ss. NR 409.04, 409.05 and 409.055. To the extent that any requirements of this chapter are inconsistent with the requirements of ch. NR 406 or 407, this chapter shall take precedence and shall govern the issuance, denial, revision, reopening, renewal and appeal of the acid rain portion of an operation permit. For purposes of applying this subsection, the provisions of this chapter and of chs. NR 406 and 407 applicable to acid rain portions of operation permit applications and acid rain portions of operation permits shall also apply to petitions for exemption for new units, retired units or non–co-generation industrial utility units to the extent consistent with ss. NR 409.04, 409.05 and 409.055.

History: Cr. Register, April, 1995, No. 472, eff. 5–1–95; renum. (1) (a) to be (1) (a) 1. (b) and (c) to be (1) (c) (1) (a) 1. and (d) to be (1) (d) 1. , (1) (c) (1) (a) 2., (1) (d) 2., (c) and (f) and am. (2) (b), (3) (b), (c) and (4) (a), Register, November, 1999, No. 527, eff. 12–1–99; CR 09–020: am. (1) (e) 1. Register January 2010 No. 649, eff. 2–1–10.

NR 409.09 Acid rain compliance plan and compliance options. (1) GENERAL. (a) Acid rain portion of an operation permit application. 1. For each affected unit included in the acid rain portion of an operation permit application, a complete compliance plan shall include, for sulfur dioxide emissions, a certification that, as of the allowance transfer deadline, the designated representative shall hold allowances in the unit’s compliance subaccount, after deductions under 40 CFR 73.34 (c), not less than the total annual emissions of sulfur dioxide from the unit.

The compliance plan may also specify, in accordance with this section, one or more of the acid rain compliance options.

2. A complete compliance plan for NOx shall, for each affected unit included in the permit application and subject to s. NR 409.065, either certify that the unit will comply with the applicable emissions limitation under s. NR 409.065 (2), (3) or (4) or specify one or more other acid rain compliance options for NOx in accordance with the requirements of s. NR 409.065.

(b) Multi–unit compliance plan option. The compliance plan may include a multi–unit compliance option under sub. (2) or, for

nitrogen oxides, under section 407 of the act (42 USC 7651f) or s. NR 409.065 (7).

1. A plan for a compliance option that includes units at more than one affected source shall be complete only if:

a. The plan is signed and certified by the designated representative for each source with an affected unit governed by the plan; and

b. A complete permit application is submitted covering each unit governed by the plan.

2. The department’s approval of a plan under subd. 1. that includes units in more than one state shall be final only after every permitting authority with jurisdiction over any unit has approved the plan with the same modifications or conditions, if any.

(c) Conditional approval. In the compliance plan, the designated representative of an affected unit may propose, in accordance with this section, any acid rain compliance option for conditional approval; provided that an acid rain compliance option under section 407 of the act (42 USC 7651f) may be conditionally proposed only to the extent provided in s. NR 409.065.

1. To activate a conditionally–approved acid rain compliance option, the designated representative shall notify the department in writing that the conditionally–approved compliance option shall actually be pursued beginning January 1 of a specified year. Notification shall be subject to the limitations on activation under sub. (2) and s. NR 409.065. If the conditionally–approved compliance option includes a plan described in par. (b) 1., the designated representative of each source governed by the plan shall sign and certify the notification.

2. The notification under subd. 1. shall specify the first calendar year and the last calendar year for which the conditionally–approved acid rain compliance option is to be activated.

3. Upon submission of a notification meeting the requirements of subds. 1. and 2. , the conditionally–approved acid rain compliance option becomes binding on the owners and operators and the designated representative of any unit governed by the conditionally–approved compliance option.

4. A notification meeting the requirements of subds. 1. and 2. shall be treated as an administrative permit revision under s. NR 409.12 (4) (a) 1.

(d) Termination of compliance option. 1. The designated representative for a unit may terminate an acid rain compliance option by notifying the department in writing that an approved compliance option shall be terminated beginning January 1 of a specified year. Notification shall be subject to the limitations on termination under sub. (2) and s. NR 409.065. If the compliance option includes a plan described in par. (b) 1., the designated representative for each source governed by the plan shall sign and certify the notification.

2. The notification under subd. 1. shall specify the calendar year for which the termination shall take effect.

3. Upon submission of a notification meeting the requirements of subds. 1. and 2. , the termination becomes binding on the owners and operators and the designated representative of any unit governed by the acid rain compliance option to be terminated.

4. A notification meeting the requirements of subds. 1. and 2. shall be treated as an administrative permit revision under s. NR 409.12 (4) (a) 6.
a. Any existing affected unit that is a coal-fired unit and has a 1985 actual SO₂ emissions rate equal to or greater than 1.2 lbs/ mmBtu.

b. Any new unit that is a replacement unit, as provided in par. (b) 2., for a unit meeting the requirements of subd. 1. a.

c. Any oil or gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991 by the secretary of energy.

2. A repowering extension does not exempt the owner or operator for any unit governed by the repowering plan from the requirement to comply with the unit's acid rain emissions limitations for sulfur dioxide.

(b) Repowering extension plan. The designated representative of any unit meeting the requirements of par. (a) 1. a. may include in the unit’s acid rain portion of an operation permit application a repowering extension plan that includes a demonstration that:

1. The unit shall be repowered with a qualifying repowering technology in order to comply with the emissions limitations for sulfur dioxide; or

2. The unit shall be replaced by a new utility unit that has the same designated representative and that is located at a different site using a qualified repowering technology and the existing unit shall be permanently retired from service on or before the date on which the new utility unit commences commercial operation.

(c) Submittal dates. In order to apply for a repowering extension, the designated representative of a unit under par. (a) shall:

1. Submit to the department, by January 1, 1996, a complete repowering extension plan;

2. Submit to the administrator before June 1, 1997, a complete petition for approval of repowering technology in accordance with 40 CFR 72.44 (d) and submit a copy to the department; and

3. If the repowering extension plan is submitted for conditional approval, submit to the department by December 31, 1997, a notification to activate the plan in accordance with sub. (1) (c).

(d) Contents of repowering extension plan. A complete repowering extension plan shall be sent to the department and include the following elements:

1. Identification of the existing unit governed by the plan.

2. The unit’s federally-approved state implementation plan sulfur dioxide emissions limitation.

3. The unit’s 1995 actual SO₂ emissions rate or best estimate of the actual emissions rate; provided that the actual emissions rate is submitted to the department by January 30, 1996.

4. A schedule for construction, installation and commencement of operation of the repowering technology approved or submitted for approval to the administrator under 40 CFR 72.44 (d) with dates for the following milestones:

   a. Completion of design engineering.

   b. For a plan under par. (b) 1., removal of the existing unit from operation to install the qualified repowering technology.

   c. Commencement of construction.

   d. Completion of construction.

   e. Startup testing.

   f. For a plan under par. (b) 2., shutdown of the existing unit.

   g. Commencement of commercial operation of the repowering technology.

5. For a plan under par. (b) 2.:

   a. Identification of the new unit. A new unit may not be included in more than one repowering extension plan.

   b. Certification that the new unit shall replace the existing unit.

   c. Certification that the new unit has the same designated representative as the existing unit.

d. Certification that the existing unit shall be permanently retired from service on or before the date the new unit commences commercial operation.

6. The special provisions of par. (g).

(e) Department’s action on repowering extension plan. 1. The department may not approve a repowering extension plan until the administrator makes a conditional determination that the technology is a qualified repowering technology, unless the department approves the plan subject to the conditional determination of the administrator.

2. a. Upon a conditional determination by the administrator that the technology to be used in the repowering extension plan is a qualified repowering technology and a determination by the department that the plan meets the requirements, the department shall issue the acid rain portion of the operation permit, including the approved repowering extension plan and a schedule of compliance with enforceable milestones for construction, installation and commencement of operation of the repowering technology and other requirements necessary to ensure that emission reduction requirements under this section are met.

b. Except as otherwise provided in par. (f), the repowering extension shall be in effect starting January 1, 2000 and ending on the day before the date specified in the acid rain portion of an operation permit, on which the existing unit shall be removed from operation, to install the qualifying repowering technology, or shall be permanently removed from service for replacement by a new unit with the technology; provided that the repowering extension shall end no later than December 31, 2003.

c. The portion of the operation permit specifying the repowering extension and other requirements under subd. 2. a. shall be subject to the administrator’s final determination, under 40 CFR 72.44 (d) (4), that the technology to be used in the repowering extension plan is a qualifying repowering technology.

3. Allowances shall be allocated in accordance with 40 CFR 72.44 (f) (3) and (g).

(f) Failed repowering projects. 1. If, at any time before the end of the repowering extension under par. (e) 2. b., the designated representative of a unit governed by an approved repowering extension plan submits the notification under s. NR 409.13 (d) that the owners and operators have decided to terminate efforts to properly design, construct and test the repowering technology specified in the plan before completion of construction or startup testing, the designated representative may submit to the department a requested significant permit revision demonstrating that the efforts were in good faith. A copy of the requested significant permit revision shall be submitted to the administrator. If the demonstration is to the satisfaction of the administrator, the unit may not be deemed in violation of the act because of a termination and the department shall revise the operation permit in accordance with subd. 2.

2. Regardless of whether notification under subd. 1. is given, the repowering extension shall end beginning on the earlier of the date of the notification or the date by which the designated representative was required to give the notification under s. NR 409.13 (2) (d).

3. The designated representative of a unit governed by an approved repowering extension plan may submit to the department a proposed significant permit revision demonstrating that the repowering technology specified in the plan was properly constructed and tested on the unit but was unable to achieve the emissions reduction requirements specified in the plan and that it is economically or technologically infeasible to modify the technology to achieve the emission limits. A copy of the requested significant permit revision shall be submitted to the administrator. In order to be properly constructed and tested, the repowering technology shall be constructed at least to the extent necessary for direct testing of multiple combustion emissions, including sulfur...
dioxide and nitrogen oxides, from the unit while operating the technology at nameplate capacity. If the demonstration is to the satisfaction of the administrator:

a. The unit may not be deemed in violation of the act because of the failure to achieve the emissions reduction limitations;

b. The department shall revise the acid rain portion of the operation permit in accordance with subd. 3. c. and d.;

c. The existing unit may be retrofitted or repowered with another clean coal or other available control technology; and

d. The repowering extension shall continue in effect until the earlier of the date the existing unit commences commercial operation with the control technology or December 31, 2003.

(g) Special provisions. 1. a. Sulfur dioxide allowances allocated during the repowering extension under pars. (e) 3. and (f) to a unit governed by an approved repowering extension plan may not be transferred to any allowance tracking system account other than the unit accounts of other units at the same source as that unit.

b. Any existing unit governed by an approved repowering extension plan shall be subject to the acid rain emissions limitations for nitrogen oxides in accordance with section 407 of the act (42 USC 7651f) and s. NR 409.065 beginning on the date that the unit is removed from operation to install the repowering technology or is permanently removed from service.

c. No existing unit governed by an approved repowering extension plan shall be eligible for a waiver under section 111 (j) of the act (42 USC 7411 (j)).

d. No new unit governed by an approved repowering extension plan shall receive an exemption from the requirements imposed under section 111 of the act (42 USC 7411).

2. Each unit governed by an approved repowering extension plan shall comply with the special reporting requirements of s. NR 409.13 (2).

3. a. The owners and operators of a unit governed by an approved repowering plan shall be liable for any violation of the plan or this section at that or any other unit governed by the plan.

b. The units governed by the plan under par. (b) 2. shall continue to have a common designated representative until the existing unit is permanently retired under the plan.

4. Except as provided in par. (f), a repowering extension plan may not be terminated after December 31, 1999.

History: Cr. Register, April, 1995, No. 472, eff. 5–1–95; renum. (1) (a) to be (1) (a) 1., cr. (1) (a) 2. and am. (1) (b) intr., (c) intr., 1., (d) 1., (2) (f) 1., 3. intr., intr.) and (g) 1. b., Register, November, 1999, No. 527, eff. 12–1–99.

NR 409.10 Acid rain portion of an operation permit. (1) CONTENTS. (a) Each acid rain portion of an operation permit, including any draft or proposed acid rain portion of an operation permit, shall contain the following elements:

1. All elements required for a complete acid rain portion of an operation permit application under s. NR 409.08 (2), as approved or adjusted by the department.

2. The applicable acid rain emissions limitation for sulfur dioxide.

3. The applicable acid rain emissions limitation for nitrogen oxides.

(b) Each acid rain portion of an operation permit is deemed to incorporate the definitions of terms under s. NR 409.02, chs. NR 400, 406 and 407, and the definitions in title IV of the act (42 USC 7651 to 7651o).

(2) PERMIT SHIELD. Each affected unit operated in accordance with the acid rain portion of an operation permit that governs the unit and that was issued in compliance with title IV of the act (42 USC 7651 to 7651o), as provided in this chapter, 40 CFR parts 72, 73, 74, 75, 76, 77 and 78 and the regulations implementing section 407 of the act (42 USC 7651), shall be deemed to be operating in compliance with the acid rain program, except as provided in s. NR 409.06 (7) (f).

History: Cr. Register, April, 1995, No. 472, eff. 5–1–95; am. (2), Register, November, 1999, No. 527, eff. 12–1–99.

NR 409.11 Acid rain portion of an operation permit issuance procedures. (1) GENERAL. The department shall issue or deny all acid rain portions of title V permits in accordance with s. 285.62, Stats. and s. NR 409.10.

Note: These rules are intended to follow the requirements in 40 CFR 72.72 regarding state permit program approval criteria.

(a) Permit issuance deadline and effective date. 1. On or before December 31, 1997, the department shall issue an operation permit with a phase II acid rain portion to each affected source whose designated representative submitted a timely and complete application for the acid rain portion of its operation permit by January 1, 1996 in accordance with s. NR 409.07 (1) and which meets the requirements of this chapter and ch. NR 407.

2. Not later than January 1, 1999, for each unit subject to an acid rain NO\textsubscript{2} emissions limitation, the department shall begin the process of amending the acid rain portion of an operation permit under s. NR 409.12 (4) to add any NO\textsubscript{2} early election plan that was approved by the administrator under 40 CFR 76.8 and has not been terminated and begin the process of amending the acid rain portion of the permit to add the acid rain program nitrogen oxides requirements; provided that the designated representative of the affected source submitted a timely and complete acid rain portion of an operation permit application for nitrogen oxides in accordance with s. NR 409.07 (1). The amending may not affect the term of the acid rain portion of an operation permit.

3. Each acid rain portion of an operation permit issued in accordance with this chapter shall have a term of 5 years commencing on its effective date, provided that, at the discretion of the department, the first acid rain portion of an operation permit for Phase II may have a term of less than 5 years where necessary to coordinate the term of the permit with the term of an operation permit issued by the department to the source. Each acid rain portion of an operation permit issued in accordance with subd. 1. shall take effect by the later of January 1, 2000 or, where the permit governs a unit under s. NR 409.01 (1) (a) 3., the deadline for monitor certification under 40 CFR part 75.

4. The acid rain portion of an operation permit shall be binding on any new owner or operator or designated representative of any source or unit governed by the permit.

(b) Acid rain portion of an operation permit requirements. Each acid rain portion of an operation permit shall contain all applicable acid rain requirements, shall be a portion of the operation permit that is complete and segregable from all other air quality requirements and may not incorporate information contained in any other documents, other than documents that are readily available.

(2) ACID RAIN APPEAL PROCEDURES. (a) Appeals of the acid rain portion of an operation permit issued by the department that do not challenge or involve decisions or actions of the administrator under 40 CFR parts 72, 73, 74, 75, 76, 77 and 78 shall be conducted according to the procedures in ch. NR 407 and ss. 285.13 (1), 285.81 and 227.40 to 227.60, Stats. The permit shield under s. NR 409.10 (2) shall continue to be in effect during the appeal process. Appeals of the acid rain portion of a permit that challenge or involve decisions or actions of the administrator shall follow the procedures under 40 CFR part 78 and section 307 of the act (42 USC 7607). Decisions or actions include, but are not limited to, allowance allocations, determinations concerning alternative monitoring systems and determinations of whether a technology is a qualifying repowering technology.

(b) No state administrative or judicial appeal of the acid rain portion of an operation permit may be allowed to commence more
than 30 days following issuance of the acid rain portion of an operation permit, as provided by ss. 285.81 and 227.53, Stats.

(c) The administrator may intervene as a matter of right in any state administrative appeal of an acid rain portion of an operation permit or denial of an acid rain portion of an operation permit.

(e) The department shall serve written notice on the administrator of any state administrative or judicial appeal concerning an acid rain provision of any operation permit or denial of an acid rain portion of any operation permit within 30 days of the filing of the appeal.

(f) The department shall serve written notice on the administrator of any determination or order in a state administrative or judicial proceeding that interprets, modifies, voids or otherwise relates to any portion of an acid rain portion of an operation permit.

History: Cr. Register, April, 1995, No. 472, eff. 5−1−95; am. (2) (a), may be processed using the administrative permit

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ter or by the state, including a state court, modifying or voiding any provision of the acid rain portion of an operation permit shall be subject to review by the administrator in accordance with 40 CFR 70.8 (c) as applied to permit modifications, unless the determination or interpretation is an administrative revision approved in accordance with 40 CFR 72.83 and sub. (4).

(b) A request for a permit revision may be submitted to the department at any time. No permit revision may affect the duration of the permit to be revised. No permit revision may excuse any violation of an applicable requirement of the acid rain program that occurred prior to the effective date of the revision.

(c) The terms of the acid rain portion of the operation permit shall apply while the request for a permit revision is pending, except as provided in sub. (4) for administrative permit revisions.

(d) The standard requirements of 40 CFR 72.9 may not be modified or voided by a permit revision.

(e) Any request for a permit revision to incorporate a compliance option that was not submitted for approval and comment during the permit issuance process, or involving a change in a compliance option that was previously submitted, shall meet the requirements for applying for that compliance option under subpart D of 40 CFR part 72 and 40 CFR parts 74 and 76.

(f) For permit revisions not described in sub. (2) or (3), the department may, at its discretion, determine whether the revision request will be processed under sub. (2) or (3).

(g) Any designated representative who fails to submit any relevant information or who has submitted incorrect information in a permit revision shall, upon becoming aware of the failure or incorrect submittal, promptly submit the supplementary information or corrected information to the department.

(2) Significant Permit Revisions. (a) Applications for the following revisions shall be processed as significant permit revisions except as provided in sub. (4) (a) 11.:  

1. Relaxation of an excess emission offset requirement after approval of the offset plan by the administrator.

2. Incorporation of a final nitrogen oxides alternative emission limitation pursuant to section 407 (d) of the act (42 USC 7651l(d)).

3. Determinations concerning failed repowering projects under 40 CFR 72.44 (g) (1) (i) and (2).

(b) Requests for the following permit revisions shall be processed, at the option of the designated representative submitting the request for the permit revision, under either the significant permit revision procedures in par. (c) or under the fast−track revision procedures in sub. (3):

1. Use of a compliance option that the designated representative did not submit for approval and comment during the permit issuance process, except that incorporation of a reduced utilization plan that does not designate a compensating unit, and that meets the requirements for phase I reduced utilization plans in 40 CFR 72.43, may be processed using the administrative permit revision procedures in sub. (4).

2. Changes in a substitution plan or reduced utilization plan that result in the addition of a new substitution unit or a new compensating unit under the plan.

3. Addition of a nitrogen oxides averaging plan to a permit.

4. Changes in a phase I extension plan, phase II repowering extension plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension.

(c) Requests for significant permit revisions shall be processed in accordance with s. 285.62, Stats., except that the department shall act on the majority of the requests for significant permit revisions within 9 months after receipt of a complete application.

(d) An affected source requesting a significant permit revision under this subsection shall comply with all applicable requirements proposed in the request for revision, if the request is complete, while the request is pending. Where a conflict exists between an applicable requirement proposed in the request for revision and an existing permit provision, the source shall comply with the existing permit provision.

(3) Fast−track Revisions. The following procedures shall apply to requests for fast−track revisions submitted under sub. (2):

(a) The designated representative shall serve a copy of a request for a fast−track revision on the administrator, the department, the public service commission of Wisconsin and any other state or local utility regulatory authority with jurisdiction over the owners of any source or any unit covered by the permit, the state or local air pollution agency for any affected state and any interested person. Within 5 business days of serving the copies, the designated representative shall provide public notice of the request for revision by publication in a newspaper of general circulation in the area where the source is located or in the official state newspaper. The department shall provide the notice to any person or group that requests the notice. The notice shall be designed to give public notice of the substance of the requested permit revision and of the opportunity for public comments.

(b) Anyone who wishes to comment shall have a period of 30 days, commencing on the date of publication of the notice under par. (a), to comment on the request for a fast−track revision. Comments shall be submitted in writing to the department and to the designated representative.

(c) Within 90 days of the close of the public comment period provided under par. (b), the department shall consider the request for fast−track revision and the comments received on it and, after review, in whole or in part or with changes or conditions as appropriate, disapprove the request for revision. A fast−track revision shall be subject to the same provisions for review by the administrator and affected states as are applicable to a significant permit revision under sub. (2).

(4) Administrative Permit Revision. (a) Requests for the following revisions shall be processed as administrative permit revisions:

1. Revisions to a permit to include a compliance option that has previously been conditionally approved by the department, provided that the following requirements are met:

a. The designated representative shall notify the department in writing that the conditionally−approved compliance option will be pursued beginning January 1 of a specified year. If the conditionally−approved compliance option includes a plan involving units at more than one affected source, the designated representative of each source governed by the plan shall sign and certify the notification in accordance with 40 CFR 72.21. The notification

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is the date the chapter was last published.
shall be subject to the limitations on activation under subd. 1. b.
and 40 CFR 72.40 to 72.44.

b. The notification under subd. 1. a. shall specify the first cal-
endar year and the last calendar year for which the conditionally−
approved compliance option is to be activated. A conditionally−
approved compliance option shall be activated, if at all, before
the date of any enforceable milestone applicable to the compliance
option. The date of activation of the compliance option may not
be a defense against failure to meet the requirements applicable
to that compliance option during each calendar year for which
the compliance option is activated.

2. Changes in the designated representative or alternate des-
ignated representative, provided that a new certificate of represen-
tation has been submitted to the administrator.

3. Correction of typographical errors.

4. Changes in names, addresses, or telephone or facsimile
numbers.

5. Changes in the owners or operators, provided that a new
certificate of representation is submitted to the administrator at
least 30 days prior to the changes.

6. Termination of a compliance option in the permit, provided
that the following requirements for termination are met:

a. This procedure may not be used to terminate a phase II
repowering extension plan after December 31, 1999 or to termi-
nate a phase I extension plan.

b. The designated representative for a unit may request ter-
mination of a compliance option by notifying the department in
writing that an approved compliance option will be terminated
beginning January 1 of a specified year. If the compliance option
includes a plan involving units at more than one affected source,
the designated representative of each source governed by the plan
shall sign and certify the notification in accordance with 40 CFR
72.21. The notification shall be subject to the limitations on ter-
mination under this paragraph, 40 CFR 72.40 to 72.44 and regula-
tions implementing section 407 of the act (42 USC 76511).

c. The notification under subd. 6. b. shall specify the calendar
year for which the termination will take effect.

7. Changes in a substitution or reduced utilization plan that
do not result in the addition of a new substitution unit or a new
compensating unit under the plan.

8. Changes in the date, specified in a permit, of commence-
ment of operation of qualifying phase I technology, provided
that the new date is in accordance with the phase I extension plan
requirements in 40 CFR 72.42.

9. Changes in the date, specified in a permit, of commence-
ment of operation or a change in the deadline for continuous emis-
sion or opacity monitor certification, provided that they are in
accordance with the standard requirements for permits in 40 CFR
72.9.

10. The addition of or change in a nitrogen oxides alternative
emissions limitation demonstration period, provided that the
requirements of 40 CFR part 76 are met.

11. The addition of a NOX early election plan that was
approved by the administrator under 40 CFR 76.8.

12. The addition of an exemption for which the requirements
have been met under 40 CFR 72.7 or 72.8 or which was approved
by the department under s. NR 409.055.

13. When an EPA issued phase I acid rain portion of an opera-
tion permit is revised by EPA as a permit modification under 40
CFR 72.81, the revision to the department issued portion of an opera-
tion permit.

14. Incorporation of changes that the administrator has deter-
mined to be similar to those listed in subds. 1. to 12.

(b) 1. Requests for administrative revisions shall be processed
in accordance with s. NR 407.11 (3) and (4). The department shall
take final action on a request for the addition of an alternative
emissions limitation demonstration period within 90 days of
receipt of the requested revision and may take action without pro-
viding prior public notice.

2. The department may, on its own motion, make an adminis-
trative permit revision under par. (a) 3., 4., 11. or 12. at least 30
days after providing notice to the designated representative of the
revision and without providing any other public notice.

(c) The department shall designate the permit revision under
par. (b) as having been made as an administrative permit revision.
The department shall submit the revised portion of the permit to the
administrator.

(d) The provisions for review by the administrator and affected
states applicable to a significant permit revision under sub. (2) do not
apply to an administrative permit revision.

5) AUTOMATIC PERMIT REVISIONS. The following permit revi-
sions shall be deemed to revise automatically, and become a part
of, the affected source’s permit by operation of law without any
further action or review by the department:

(a) Upon recordation by the administrator under 40 CFR 73.10
to 73.53, all allowance allocations to transfers to, and deductions
from an affected source’s allowance tracking system account.

(b) Incorporation of an offset plan that has been approved by
the administrator under 40 CFR 77.4.

6) PERMIT REVISIONS BY THE DEPARTMENT. (a) 1. The depart-
ment, on its own motion, shall revise an acid rain program of an
operation permit whenever any of the following occurs:

a. Any additional requirement under the acid rain program
becomes applicable to any affected source governed by the
permit.

b. The department determines that the permit contains a mate-
rial mistake or that an inaccurate statement was made in establish-
ing the emissions standards or other terms or conditions of the per-
mit, unless the mistake or statement is corrected in accordance
with sub. (4).

c. The department determines that the permit must be revised
or revoked to assure compliance with acid rain program require-
ments.

2. No later than January 1, 1999, the department shall revise
any permits of affected sources to add the acid rain program
nitrogen oxides requirements, consistent with 40 CFR part 76, pro-
vided that the designated representative of the affected source
submits a timely and complete acid rain portion of an operation
permit application for nitrogen oxides, in accordance with 40 CFR
72.21. The revision may not affect the duration of the acid rain
portion of an operation permit.

(b) Permit revisions under this subsection shall be processed
in accordance with s. NR 407.14 (3) and (4). When revising a per-
mit to an affected source under this subsection, the department
shall make a determination on the approvability of a revised per-
mit which would change the provisions, or add the requirements,
for which the reopening was necessary. The revised permit shall
contain the following elements:

1. All elements required for acid rain permit content under 40
CFR 72.50.

2. The applicable acid rain emissions limitation for sulfur
dioxide.

3. The applicable acid rain emissions limitation for nitrogen
oxides.

History: Cr. Register, December, 1993, No. 456, eff. 1−1−94; renum.
from NR 407.11 and am. (1) (a), (d), (e), (f), (g) (intro.), (d), (3) and (4) (a) 1. a., b., b., cr.
(4) (a) 11., 12., Register, April, 1995, eff. 5−1−95; renum. (4) (a) 11. and 12. to be (4)
(a) 13. and 14. am. (1) (a), (d), (e), (f), (g) (3) and (4) (a) 10., 14., and (6) (a) 2., cr. (1)
(g), (4) (a) 11., 12., (4) (c) and (d), r. and rcr. (4) (b) and (6) (a) 1., Register, Novem-
ber, 1999, No. 527, eff. 12−1−99.

NR 409.13 Compliance certification. (1) ANNUAL
COMPLIANCE CERTIFICATION REPORT. (a) Applicability and dead-
line. For each calendar year in which a unit is subject to the acid
rain emissions limitations, the designated representative of the
source at which the unit is located shall submit to the administrator

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and to the department, within 60 days after the end of the calendar year, an annual compliance certification report for the unit in compliance with 40 CFR 72.90. For the purpose of determining compliance with the acid rain emissions limitations and reduction requirements, total tons for a year shall be calculated as the sum of all recorded hourly emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with 40 CFR part 75, with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one ton and any fraction of a ton less than 0.50 ton deemed not to equal any ton.

(b) Satisfying other requirements. The submission of complete compliance certifications in accordance with par. (a) and 40 CFR part 75 shall be deemed to satisfy the requirement to submit compliance certifications under this chapter and chs. NR 406 and 407 with regard to the acid rain portion of the source’s operation permit.

(2) Units with repowering extension plans. (a) Design and engineering and contract requirements. No later than January 1, 2000, the designated representative of a unit governed by an approved repowering plan shall submit to the administrator and the department:

1. Satisfactory documentation of a preliminary design and engineering effort.

2. A binding letter agreement for the executed and binding contract, or for each in a series of executed and binding contracts, for the majority of the equipment to repower the unit using the technology conditionally−approved by the administrator under 40 CFR 72.44 (d) (3).

3. The letter agreement under subd. 2. shall be signed and dated by each party and specify:
   a. The parties to the contract;
   b. The date each party executed the contract;
   c. The unit to which the contract applies;
   d. A brief list identifying each provision of the contract;
   e. Any dates to which the parties agree, including construction completion date;
   f. The total dollar amount of the contract; and
   g. A statement that a copy of the contract is on site at the source and shall be submitted upon written request of the administrator or the department.

(b) Removal from operation to repower. The designated representative of a unit governed by an approved repowering plan shall notify the administrator and the department in writing at least 60 days in advance of the date on which the existing unit is to be removed from operation so that the qualified repowering technology can be installed, or is to be replaced by another unit with the qualified repowering technology, in accordance with the plan.

(c) Commencement of operation. Not later than 60 days after the unit repowered under an approved repowering plan commences operation at full load, the designated representative of the unit shall submit a report to the administrator and the department comparing the actual hourly emissions and percent removal of each pollutant controlled at the unit to the actual hourly emissions and percent removal at the existing unit under the plan prior to repowering, determined in accordance with 40 CFR part 75.

(d) Decision to terminate. If at any time before the end of the repowering extension and before completion of construction and startup testing, the owners and operators decide to terminate good faith efforts to design, construct and test the qualified repowering technology on the unit to be repowered under an approved repowering plan, then the designated representative shall submit a notice to the administrator and the department by the earlier of the end of the repowering extension or a date within 30 days of the decision, stating the date on which the decision was made.

History: Cr. Register, April, 1995, No. 472, eff. 5–1–95.