Chapter NR 408

CONSTRUCTION PERMITS FOR DIRECT MAJOR SOURCES IN NONATTAINMENT AREAS

Note: The preexisting sections NR 408.01 and 408.02 were repealed, sections NR 408.025 to 408.07 were renumbered to NR 406.08 to 406.13 and am.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

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

Note: Permit application requirements for indirect sources are contained in ch. NR 411.

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

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

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

(1) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, determined as follows:

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

(b) For any emissions unit, other than an electric utility steam generating unit as specified in par. (c), which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

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

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

(a) Any applicable standards in chs. NR 440 and 446 to 449.

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

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

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

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

(4) "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the act (42 USC 7401 to 7671q) which would be emitted from any proposed major source or major modification which the department, on a case−by−case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems and techniques, including clean fuels, fuel cleaning or treatment or innovative fuel combination techniques for control of the air contaminant. In no event may application of best available control technology result in emissions of any air contaminant which would exceed the emissions allowed by any applicable standard under chs. NR 440 and 446 to 449. Emissions from any source utilizing clean fuels or any other means to comply with this subsection may not be allowed to increase above the levels that would have been required prior to enactment of the 1990 clean air act amendments on November 15, 1990. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of a design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(5) "Building, structure, facility or installation" means all of the air contaminant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person, or persons under common control, except the activity of any vessel. Air contaminant sources shall be considered as part of the

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

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

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

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

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

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

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

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

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

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

(13) "Emissions unit" means any part of a stationary source, including point and area sources, which emits or would have the potential to emit any pollutant, including fugitive emissions, subject to regulation under the act or under chs. NR 400 to 499.

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

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

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

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

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

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

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

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

(20) "Major modification" means any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase of any pollutant subject to regulation under the act. Further:

(a) Any physical change in, or change in the method of operation of a major source of VOCs located in an extreme nonattainment area for ozone which results in any increase in emissions of VOCs from any discrete operation, emissions unit or other pollutant emitting activity at the source shall be considered a major modification for ozone.

(b) Any net emissions increase that is considered significant for VOCs shall be considered significant for ozone.

(c) For the purpose of applying the requirements of s. NR 408.03 (6) to major sources of nitrogen oxides located in ozone nonattainment areas or in ozone transport regions, any significant net emissions increase of nitrogen oxides is considered significant for ozone, in addition to any separate requirements for nitrogen oxides.

(d) For the purposes of applying the requirements of s. NR 408.03 (5) to major sources of PM_{10} precursors, any significant net emissions increase of a PM_{10} precursor is considered significant for PM_{10}.

(e) A physical change or change in the method of operation does not include:

1. Routine maintenance, repair and replacement.

2. Use of an alternative fuel or raw material by reason of an order under section 2(a) and (b) of the federal energy supply and environmental coordination act of 1974 (15 USC 791 to 798), or by reason of a natural gas curtailment plan pursuant to the federal power act (16 USC 791a to 828c).

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

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

5. Use of an alternative fuel or raw material by a stationary source which:

a. The source was capable of accommodating before December 21, 1976, unless a change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to this chapter or ch. NR 405 or 406 or under an operation permit issued pursuant to ch. NR 407.

b. The source is approved to use under any permit issued under this chapter or ch. NR 405, 406 or 407.

6. An increase in the hours of operation or in the production rate, unless the change is prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to ch. NR 405 or 406 or this chapter, or under operation permits issued pursuant to ch. NR 407.

7. Any change in ownership at a stationary source.

8. The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the department determines that the addition, replacement or use renders the unit less environmentally beneficial, or except when the department determines both of the following:

a. There is reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any air contaminant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of title I of the act (42 USC 7401 to 7515), if any.

b. The increase will cause or contribute to a violation of any ambient air quality standard or air quality increment, or visibility limitation.

9. The installation, operation, cessation or removal of a temporary clean coal technology demonstration project, provided that the project complies with both of the following:

a. The state implementation plan.

b. Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(21) "Major source" means the following:

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

a. 70 tpy of PM_{10}, or where applicable, a PM_{10} precursor, in any serious nonattainment area for PM_{10}.

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

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

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

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

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

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

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

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

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

1. 100 tpy or more of nitrogen oxides in:

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

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

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

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

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

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

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

(d) For purposes of implementing the requirements of s. NR 408.03 (4), a stationary source that is major for any PM_{10} precursor shall be considered major for PM_{10}.

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

1. Carbon black plants (furnace process).
2. Coal cleaning plants (with thermal dryers).
3. Coke oven batteries.
4. Charcoal production plants.
5. Chemical process plants.
6. Fuel conversion plants.
7. Fossil fuel−fired boilers (or combination thereof) totaling more than 250 million Btu per hour heat input.
8. Fossil fuel−fired electric plants of more than 250 million Btu per hour heat input.
9. Glass fiber manufacturing plants.
10. Hydrofluoric acid plants.
11. Iron and steel mills.
12. Kraft pulp mills.
13. Lime plants.
14. Municipal incinerators (or combinations thereof) capable of charging more than 50 tons of refuse per day.
15. Nitric acid plants.
16. Petroleum refineries.
17. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
18. Phosphate rock processing plants.
19. Portland cement plants.
20. Primary aluminum ore reduction plants.
21. Primary copper smelters.
22. Primary lead smelters.
23. Primary zinc smelters.
24. Secondary metal production plants.
25. Sintering plants.
26. Sulfuric acid plants.
27. Sulfur recovery plants.
28. Taconite ore processing plants.

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

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

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

(23) (a) "Net emissions increase" means the amount by which the sum of the following exceeds zero:

1. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source.

2. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

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

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

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

(c) An increase or decrease in actual emissions is creditable only if the department has not relied on it in issuing a permit for the source under this chapter, which permit is in effect when the increase in actual emissions from the particular change occurs.

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

(e) A decrease in actual emissions is creditable only to the extent that:

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

2. It is federally enforceable at and after the time that actual construction on the particular change begins.

3. The department has not relied on it in issuing any permit under ch. NR 405, 406, 407 or this chapter or the state has not relied on it in demonstrating attainment or reasonable further progress.

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

5. The unit was actually operated and emitted the air contaminant for which the decrease is being sought. Reductions of permitted emissions for units that were never operated cannot be considered creditable emissions decreases.

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

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

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

1. For ozone: rural transport, marginal, moderate, serious, severe and extreme.

2. For PM_{10}: moderate and serious.

3. For carbon monoxide: moderate and serious.

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

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

(26) "PM_{10} precursor" means, for the purposes of implementing the requirements of s. NR 408.03 (4), sulfur dioxide, nitrogen oxides or volatile organic compounds.

(27) "Pollution control project" means any activity or project at an existing electric utility steam generating unit for purposes of reducing emissions from the unit. Activities or projects are limited to:

(a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators.

(b) An activity or project to accommodate switching to a fuel which is less polluting than the fuel used prior to the activity or project, including but not limited to natural gas or coal re–burning, or the co– firing of natural gas and other fuels for the purpose of controlling emissions.

(c) A permanent clean coal technology demonstration project conducted under title II, section 101 (d) of the further continuing appropriations act of 1985, 42 USC 5903 (d), or subsequent appropriations, up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. environmental protection agency.

(d) A permanent clean coal technology demonstration project that constitutes a repowering project.

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

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

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

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

(a) Consider all relevant information, including but not limited to, historical operational data, the company's own representa-

tions, filings with the state or federal regulatory authorities, and compliance plans under title IV of the act.

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

(31) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself. For the purpose of this chapter, secondary emissions shall be specific, well defined, quantifiable and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any off−site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major source or major modification. Secondary emissions do not include tailpipe emissions from any source regulated under title II of the act or any emissions from in−transit marine vessels.

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

1. Carbon monoxide: 100 tons per year (tpy).
2. Nitrogen oxides: 40 tpy.
3. Sulfur dioxide: 40 tpy.
4. Particulate matter: 25 tpy.
5. PM_{10}: 15 tpy.
6. Ozone: 40 tpy of VOC.
7. Lead: 0.60 tpy.

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

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

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

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

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

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

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

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

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

History: Cr. Register, May, 1993, No. 449, eff. 6−1−93; am. (21) (a) 1. intro., cr. (21) (f), Register, June, 1995, No. 474, eff. 7−1−95**;** am. (4), (5), (20) (e) 5. a. and b., (21) (intro.), Register, December, 1995, No. 480, eff. 1−1−96; am. (1)(b), (c), (4), (6), (8) (intro.), (20) (e) 2., 3., 8., 9. (intro.), (21) (b) 1. a., (e) 29., (23) (b) (intro.), 1., (24) (a), (b) 1., (25), (29), Register, December, 1996, No. 492, eff. 1−1−97.

NR 408.03 Source applicability and exemptions. **(1)** No person may begin actual construction of a major source or major modification to which the requirements of this chapter apply unless the person has a permit which states that the stationary source or modification will meet the requirements of ss. NR 408.04 to 408.10.

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

(3) The requirements of ss. NR 408.04 to 408.10 shall apply with respect to any air contaminant for which an applicable source is major and in the case of a modification, would result in a significant net emissions increase for that pollutant.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

History: Cr. Register, May, 1993, No. 449, eff. 6–1–93.

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

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

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

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

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

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

(a) Offsets shall be of the same air contaminant class, that is, volatile organic compounds, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide or lead.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(9) Credit for an emissions reduction may be claimed to the extent that the department has not relied on it in issuing any permit under ch. NR 405, 406, 407 or this chapter or the state has not relied on it in demonstrating attainment or reasonable further progress. Incidental emissions reductions which are not otherwise required under the act or chs. NR 400 to 499 may be creditable as emissions reductions for such purposes if the emissions reductions meet the applicable requirements of subs. (1) and (2).

History: Cr. Register, May, 1993, No. 449, eff. 6–1–93; am. (4) (intro.), (a), (5), Register, December, 1996, No. 492, eff. 1–1–97; am. (2) (intro.), (a) and (8), Register, October, 1999, No. 526, eff. 11–1–99.

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

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

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

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

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

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

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

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

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

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

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

be the date on which the department received all required information.

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

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

(b) Make available in at least one location in each area in which the proposed source would be constructed a copy of all materials the applicant has submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

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

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

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

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

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

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

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

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

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

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

(4) At the time that a particular source or modification becomes a major source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of ss. NR 408.04 to 408.09 and this section shall apply to the source or modification as though construction has not yet commenced on the source or modification.

History: Cr. Register, May, 1993, No. 449, eff. 6–1–93; am. (4), Register, December, 1996, No. 492, eff. 1–1–97.