

Chapter NR 406

CONSTRUCTION OR MODIFICATION AND NEW
OPERATION PERMITS

NR 406.01	Applicability; purpose		and new operation permit requirements
NR 406.02	Definitions		
NR 406.03	Permit requirements and exemptions for construction or modification and new operation permits	NR 406.05	Elective operation permits
		NR 406.06	Indirect sources exempt from construction or modification and new operation permit requirements
NR 406.04	Direct sources exempt from construction or modification	NR 406.07	Scope of permit exemption

NR 406.01 Applicability; purpose. (1) **APPLICABILITY.** This chapter applies to all air contaminant sources which may be required under s. 144.391, Stats., to obtain construction or modification and new operation permits. In accordance with s. 144.391 (6), Stats., this chapter exempts sources of certain sizes and types from the requirement to obtain a permit. This chapter also applies to air contaminant sources authorized to obtain an elective operation permit under s. 144.391, Stats.

(2) **PURPOSE.** This chapter is adopted under ss. 144.31, 144.391 (6), 144.393, 144.394 and 144.396, Stats., to exempt types of stationary sources from the requirement to obtain an air pollution control permit and to establish permit approval criteria to be used by the department for construction or modification and new operation permits.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; am. Register, April, 1988, No. 388, eff. 5-1-88.

NR 406.02 Definitions. In addition to the definitions in this section, the definitions contained in ch. NR 400 apply to the terms used in this chapter.

(1) "Highway project" means all or a portion of a proposed new or modified section of highway. Where an environmental impact document is to be prepared, the highway project may be taken to cover the same length of highway.

(2) "Intersection boundary" means a line surrounding an intersection which is drawn to include the peak hour queue for each intersection approach and the area on either side of each such queue within a distance of one queue length, measured perpendicular to the queue.

(3) "Metropolitan county" means a county which has been designated as either a metropolitan statistical area or a primary metropolitan statistical area by the U.S. department of commerce, national bureau of standards in Federal Information Processing Standards Publication 8-5, October 31, 1984. The 19 Wisconsin counties which have been so designated are the counties of Brown, Calumet, Chippewa, Dane, Douglas, Eau Claire, Kenosha, La Crosse, Marathon, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, St. Croix, Washington, Waukesha and Winnebago.

Note: See Federal Information Processing Standards Publication 8-5, 1984 October 31, Metropolitan Statistical Areas (including CMSAs, PMSAs, and NECMAs), U.S. department of commerce, national bureau of standards. Copies of this publication are available for inspection in the offices of the department of natural resources, secretary of state and revisor

Register, September, 1990, No. 417

of statutes, Madison, Wisconsin, or may be obtained for personal use from the national technical information service, U.S. department of commerce, Springfield, VA 22161.

(4) "Modified intersection" means an intersection which will have at least part of the new roadway surface, which is within the new intersection boundary, on land currently used for roadway within the boundary of an existing intersection.

(5) "Modified road or highway segment" means a road or highway segment which will have at least part of its roadway surface located on land currently used for roadway. In addition, a proposed road, ramp or lane which will carry traffic in only one direction shall be considered a modified road or highway segment if it will be less than one half mile in length and will not create a new traffic movement.

(6) "Municipal garbage and refuse" means garbage and refuse, as those terms are defined in ch. NR 500, which are primarily generated by residential activities but which may include minor amounts of commercial and industrial garbage and refuse that are in the total waste stream and are not hazardous. Municipal garbage and refuse does not include sludge which is generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility.

(7) "New road or highway segment" means a road or highway segment which will have its roadway surface located entirely on land not currently used for roadway and which is not a modified road or highway segment.

(8) "Parking capacity" means the maximum number of vehicles which a parking facility is designed to hold based on an allotment of not more than 350 square feet of stall and aisle area per vehicle.

(9) "Peak hour queue" means the line of waiting vehicles produced during the highest hour of traffic volume measured, estimated or projected for a given year, at a location where traffic flow is restricted.

(10) "Peak hour volume" means the highest one-hour traffic volume in a calendar year.

(11) "Road or highway segment" means a continuous length of road or highway outside of intersection boundaries. If the road or highway crosses the boundary between a metropolitan county and a non-metropolitan county, the portion on each side of this boundary is a separate road or highway segment.

(12) "Traffic volume" means the number of vehicles that pass a particular point on a road or highway during a specific time period.

History: Cr. (intro.), renum from NR 154.01, Register, September, 1986, No. 369, eff. 10-1-86; r. (1), r. and recr. (2), renum. (3) to (7) and (9) to be NR 400.02 (17m), (43m), NR 406.02 (1), NR 400.02 (46s), NR 406.02 (6) and (10), cr. (3) to (5), (7), (9) and (11), (12) renum. from NR 400.02 (98) and am., Register, April, 1988, No. 388, eff. 5-1-88; correction in (6) made under s. 13.93 (2m) (6) 7, Stats., Register, April, 1988, No. 388.

NR 406.03 Permit requirements and exemptions for construction or modification and new operation permits. No person may commence construction, reconstruction, replacement, relocation or modification of a stationary source or operate the constructed, reconstructed, replaced, relocated

Register, September, 1990, No. 417

or modified stationary source unless the person has a construction or modification and new operation permit for the source or unless the source is exempt from the requirement to obtain a permit under s. 144.391 (4) or (5), Stats., or under this chapter. Applications for the construction or modification and new operation permit shall be submitted on forms which are available from the department at its Madison headquarters and district offices.

History: Renum. from NR 154.04 (1), Register, September, 1986, No. 369, eff. 10-1-86.

NR 406.04 Direct sources exempt from construction or modification and new operation permit requirements. (1) **SPECIFIC CATEGORIES OF EXEMPT SOURCES.** The following categories of direct sources are exempt from the requirement to obtain a construction or modification and new operation permit unless the construction, reconstruction, replacement, relocation or modification of the source is prohibited by any permit, plan approval or special order applicable to the source or the source is required to obtain a permit because of incremental growth as determined under sub. (7):

(a) Fuel burning equipment which will not burn any hazardous waste identified under ch. NR 181, or which has been issued a permit under ch. NR 181, and which is designed to burn the following fuels at the rates indicated:

1. Coal, coke or other solid fuels, except wood, at a heat input rate of not more than one million BTU per hour;

2. Wood alone or wood in combination with gaseous or liquid fuels at a heat input rate of not more than 5 million BTU per hour;

3. Residual or crude oil at a heat input rate of not more than 5 million BTU per hour;

4. Distillate oil at a heat input rate of not more than 10 million BTU per hour; and

5. Gaseous fuel at a heat input rate of not more than 30 million BTU per hour.

(b) Equipment designed to incinerate solid wastes, which are not pathological wastes and are not hazardous wastes under ch. NR 181, at a rate of not more than 500 pounds per hour.

(c) Equipment designed to dry grain at a rate of not more than 1,500 bushels per hour at 5% moisture extraction.

(d) Portland concrete batching plants which are not major sources.

(e) Storage tanks containing petroleum liquid or organic compounds which are not VOCs with a maximum capacity of not more than 40,000 gallons.

(f) VOC storage tanks with a maximum capacity of not more than 10,000 gallons.

(g) Painting or coating operations, including associated cleaning operations, which use or will use not more than 250 total gallons of paint, coatings and solvents per month or which emit or will emit not more than 1666 pounds of volatile organic compounds per month, without considering pollution control equipment.

(h) Graphic arts operations, including associated cleaning operations, which use or will use not more than 250 total gallons of coatings, inks and solvents per month or which emit or will emit not more than 1666 pounds of organic compounds per month, without considering pollution control equipment.

(i) Research and testing. 1. Equipment used or to be used for the purpose of testing or research provided:

a. A complete application for exemption is made describing the proposed testing or research and including an operating schedule and the types and quantities of emissions anticipated; and

b. The department determines that the equipment to be used and the anticipated emissions from the testing or research will not present a significant hazard to public health, safety or welfare or to the environment and approves the application for exemption.

2. The department shall approve or deny the application in writing within 45 days of receiving a complete application for exemption under this paragraph. The department may provide public notice of an application for research and testing exemption, may provide an opportunity for public comment and an opportunity to request a public hearing and may hold a public hearing on any application under this paragraph. The department shall make all nonconfidential information available to the public upon request.

(j) A laboratory which emits organic compounds, sulfur dioxide, carbon monoxide, nitrogen oxides or particulate matter or a combination thereof at a rate of less than 5.7 pounds per hour. Emissions shall be determined, without considering pollution control equipment, by dividing the total emissions during a calendar month by the total hours of operation of the laboratory during that calendar month. A laboratory is in operation if laboratory apparatus or equipment is in use.

(k) Equipment whose primary purpose is to transport or sort paper.

(l) Water chlorination facilities.

(2) GENERAL CATEGORY OF EXEMPT SOURCES. In addition to the specific categories of exempt sources identified in sub. (1), no construction or modification and new operation permit is required prior to commencing construction, reconstruction, replacement, relocation or modification and operation of a direct source if:

(a) The construction, reconstruction, replacement, relocation or modification and operation of the source is not prohibited by any permit, plan approval or special order applicable to the source;

(b) The source will not emit sulfur dioxide, carbon monoxide or nitrogen oxides at a rate of more than 9 pounds per hour for each pollutant emitted, without considering pollution control equipment;

(c) The source will not emit particulate matter or organic compounds at a rate of more than 5.7 pounds per hour for each pollutant emitted, without considering pollution control equipment;

(cm) The source will not emit PM10 at a rate of more than 3.4 pounds per hour, without considering pollution control equipment;

(d) The source will not emit lead at a rate of more than 0.13 pounds per hour, without considering pollution control equipment;

(e) The source will not emit any of the following air contaminants at a rate greater than the applicable emission rate listed:

1. Fluorides, 3 tons per year;
2. Hydrogen sulfide, 10 tons per year;
3. Reduced sulfur compounds, 10 tons per year;
4. Total reduced sulfur, 10 tons per year;
5. Vinyl chloride, 1 ton per year.

(f) 1. The source's potential emissions at full capacity, without considering pollution control equipment, of any hazardous air contaminant listed in Table 1 or Table 4 of s. NR 445.04 are not greater than the emission rate listed in Table 1 or Table 4 of s. NR 445.04 for the air contaminant for the respective stack height;

2. The source manufactures or processes pesticides, rodenticides, insecticides, herbicides or fungicides and its potential emissions at full capacity, without considering pollution control equipment, of any hazardous air contaminant listed in Table 2 of s. NR 445.04 are not greater than the emission rate listed in the table for the air contaminant for the respective stack height;

3. The source's potential emissions at full capacity, without considering pollution control equipment, of any hazardous emission contaminant listed in Table 3 of s. NR 445.04 do not exceed the emission rate contained in Table 3 of s. NR 445.04; and

4. The source does not combust municipal solid waste (as defined in s. NR 500.03 (86)) or infectious wastes;

(g) The source will not emit any air contaminant not mentioned in par. (b), (c), (d), (e) or (f), at a rate of more than 6 pounds per hour for each pollutant emitted, without considering pollution control equipment; and

(h) The source is not required to obtain a permit because of incremental growth as determined under sub. (7).

(3) DETERMINING HAZARDOUS EMISSIONS. (a) For the purpose of determining emissions under sub. (2) (f), the owner or operator of a source may rely on information on an approved material safety data sheet if the approved material safety data sheet lists a hazardous air contaminant listed in Tables 1 to 4 of s. NR 445.04 and the hazardous air contaminant listed in Table 1, 2, or 4 of s. NR 445.04 constitutes 10,000 parts per million or more of the material or the hazardous air contaminant listed in Table 3 constitutes 1,000 parts per million or more of the material. If an approved material safety data sheet for a material is not classified as proprietary and does not list a hazardous air contaminant in Tables 1 to 4 of s. NR 445.04 at or above the amounts listed in this paragraph, that material will be presumed not to result in emissions of a hazardous air contaminant unless a hazardous air contaminant is formed in processing of the material.

(b) For the purpose of determining emissions under sub. (2) (f), the owner or operator of a source may rely upon mass balance, or other use,

consumption and analytical methodologies for calculating potential emissions. However, the department may require that a stack test be conducted to affirm the accuracy of emission estimations.

(c) For the purpose of determining emissions under sub. (2) (f), the owner or operator of a source is not required to consider indoor fugitive emissions in calculating emissions of any substance in Table 1, 2 or 4 of s. NR 445.04.

(d) For the purpose of determining emissions under sub. (2) (f), the owner or operator of a source is not required to consider emissions resulting directly from naturally occurring constituents in windblown soil.

(4) EXEMPT MODIFICATIONS OF EXISTING SOURCES. The following are in addition to the exempt modifications listed in s. 144.391 (4), Stats.

(a) *Use of alternate fuel or raw material.* No construction or modification and new operation permit is required for a source to use an alternate fuel or raw material which the source is designed to burn or use if:

1. The source has continuously had such design capability as a result of construction or modification which commenced before April 1, 1972; and

2. Such use will not cause or exacerbate the violation of an ambient air quality standard or an ambient air increment;

3. Such use is not prohibited by any permit, plan approval or special order applicable to the source; and

4. The source is subject to an emission limit under s. NR 445.04 or 445.05 and has an air pollution control permit which regulates a substance in Table 1 or 2 of s. NR 445.04 and the product of the following equation is equal to or less than 1.0:

$$\frac{\text{TLV (old substance)}}{\text{TLV (new substance)}} \times \frac{\text{Emissions (proposed new substance)}}{\text{Emissions (permitted old substance)}} =$$

(b) *VOC RACT compliance.* No construction or modification and new operation permit is required for the modification of a source which is made primarily for the purpose of complying with the requirements of a RACT compliance plan approved under chs. NR 419 to 425, or a VOC RACT variance approved under s. NR 436.05, if the modification does not cause or exacerbate the violation of an ambient air quality standard or ambient air increment for any air contaminant other than ozone.

(c) *Resumption of operation.* No construction or modification and new operation permit is required for the resumption of operation of a source after a period of closure if the source was never included and never required to be included in the source inventory as an existing source covered by plans under s. 144.31 (1) (f), Stats., and the resumption of operation of the source will not cause or exacerbate the violation of an ambient air quality standard or an ambient air increment and will not result in the emission of a new air contaminant and the resumption of operation is not prohibited by any permit, plan approval or special order applicable to the source.

(d) *Addition of new emissions unit or other modification.* No construction or modification and new operation permit is required prior to com-
Register, September, 1990, No. 417

mencing modification of a source which is modified by the addition of a new emissions unit or by any other modification if:

1. The modification is not prohibited by any permit, plan approval or special order applicable to the source;

2. The modification is exempt under sub. (1) or the emissions from the modification do not exceed the exemption levels set forth in sub. (2) (b), (c), (d), (e) and (f); and

3. The source is not required to obtain a permit because of incremental growth as determined under sub. (7).

(5) EXEMPT RELOCATIONS. (a) In addition to the approved relocated sources which are exempt from the need for an additional permit under s. 144.391 (5), Stats., and the relocation of an emissions unit within the contiguous property of an attainment area major source, no construction or modification and new operation permit is required for the relocation of an emissions unit within the contiguous property of a minor source or a nonattainment area major source if:

1. The relocation of the emissions unit is not prohibited by any permit, plan approval or special order applicable to the source;

2. The emissions unit will not be modified;

3. The emissions unit meets all applicable emission limitations; and

4. The emissions unit's stack height or stack gas exit velocity or temperature will not be decreased.

(b) If the criteria in par. (a) 1., 2., and 3. are met but the emissions unit's stack height or stack gas exit velocity or temperature will be decreased, no construction or modification and new operation permit is required for the relocation of the emissions unit if the allowable emissions from the source will not cause or exacerbate the violation of an ambient air quality standard or ambient air increment.

(6) EXEMPT REPLACEMENTS. No construction or modification and new operation permit is required for the replacement of a source if:

(a) The replacement is for only a portion of a basic emissions unit;

(b) Such replacement is not prohibited by any permit, plan approval or special order applicable to the source; and

(c) The essential components of the basic emissions unit are not replaced through several partial replacements within a 12-month period.

(7) INCREMENTAL GROWTH. Subsequent to May 1, 1983, if a person constructs or modifies a direct source in increments which individually are exempt from the requirements for a permit under this section, the person is required to obtain a construction or modification and new operation permit for the source prior to commencing construction or modification of the increment which, in combination with the other increments occurring since July 1, 1975 or since the date of the last air pollution control permit or plan approval issued to the stationary source, whichever is later, will:

(a) Emit sulfur dioxide, carbon monoxide or nitrogen oxides at a rate of more than 9 pounds per hour for each pollutant emitted, without considering pollution control equipment;

(b) Emit particulate matter or organic compounds at a rate of more than 5.7 pounds per hour for each pollutant emitted, without considering pollution control equipment; or

(c) Emit any of the following air contaminants at a rate greater than the applicable emission rate listed:

1. Fluorides, 3 tons per year;
2. Hydrogen sulfide, 10 tons per year;
3. Reduced sulfur compounds, 10 tons per year;
4. Total reduced sulfur, 10 tons per year;
5. Vinyl chloride, 1 ton per year.

History: Cr. Register, March, 1972, No. 195, eff. 4-1-72; r. and recr. Register, June, 1975, No. 234, eff. 7-1-75; am. (1), renum. (2) and (3) to be (3) and (4) and am., cr. (2), Register, April, 1977, No. 256, eff. 5-1-77; r. and recr. Register, April, 1983, No. 328, eff. 5-1-83; reprinted to correct error in (2) (a) 8., Register, July, 1983, No. 331; renum. from NR 154.04 (2) to (6), Register, September, 1986, No. 369, eff. 10-1-86; am. (1) (intro.), (e) and (f), (2) (intro.) and (g), (4) (a) (intro.), r. (1) (m) to (o), renum. (3) (intro.), (a) to (c), (7) (a) to (c) to be (4) (intro.), (e) 1. to 3., NR 406.07 (1) and (2) and NR 406.04 (7) and am. (4) (intro.), (e) 3., NR 406.07 and NR 406.04 (7), cr. (4) (e) (intro.), Register, April, 1988, No. 388, eff. 5-1-88; r. (2) (e) and (4) (d), renum. (2) (d), (f), (g) and (4) (e) to be (2) (e), (g), (h) and (4) (d) and am. (2) (g), cr. (2) (d), (f), (3) and (4) (a) 4., am. (4) (a) 2. and 3., Register, September, 1988, No. 393, eff. 10-1-88; cr. (2) (cm), Register, December, 1988, No. 396, eff. 1-1-89.

NR 406.05 Elective operation permits. The department may issue elective operation permits for air contaminant sources in accordance with ss. 144.391 and 144.392, Stats.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; am. Register, April, 1988, No. 388, eff. 5-1-88.

NR 406.06 Indirect sources exempt from construction or modification and new operation permit requirements. (1) SPECIFIC CATEGORIES OF EXEMPT SOURCES. The following categories of indirect sources are exempt from the requirement to obtain a construction or modification and new operation permit unless the construction, reconstruction, replacement, relocation or modification of the source is prohibited by any permit, plan approval or special order applicable to the source or the source is required to obtain a permit because of incremental growth as determined under sub. (3).

(a) *Indirect sources with associated parking.* If the indirect source will not be a road or highway project, no permit is required if the source will be:

1. A new indirect source located in a metropolitan county with a parking capacity of less than 1000 cars in its associated parking areas.
2. A modified indirect source located in a metropolitan county with a parking capacity increase of less than 1000 cars in its associated parking areas.
3. A new indirect source located outside the metropolitan counties with a parking capacity of less than 1500 cars in its associated parking areas.

Register, September, 1990, No. 417

4. A modified indirect source located outside the metropolitan counties with a parking capacity increase of less than 1500 cars in its associated parking areas.

(b) *Road and highway projects.* If it is located outside the metropolitan counties, no permit is required for any new road or highway segment which will carry less than 4 lanes of traffic, for any new intersection each leg of which will carry less than 4 lanes of traffic, or for any modified road or highway segment or modified intersection which will have less than 2 additional lanes of traffic. In addition, no permit is required for any road or highway project which will meet all of the following criteria for location and anticipated traffic volumes within 10 years after construction or modification:

1. A peak hour volume of less than 1200 vehicles per hour on any new road or highway segment or new intersection leg located in a metropolitan county.

2. An increase in the peak hour volume of less than 1200 vehicles per hour on any modified road or highway segment located in a metropolitan county.

3. A peak hour volume of less than 1800 vehicles per hour on any new road or highway segment or new intersection leg located outside the metropolitan counties.

4. An increase in the peak hour volume of less than 1800 vehicles per hour on any modified road or highway segment located outside the metropolitan counties.

5. A maximum shift in the nearest roadway edge of less than 12 feet toward any potential receptor location within the new intersection boundary for any modified intersection.

(c) *Application of screening technique.* If a road or highway project is not exempt from permit requirements under par. (b), a person may apply for permit exemption by submitting the results of an approved screening analysis based on a line source dispersion model. The screening technique used must have been reviewed and approved by the department and the analysis must use receptor locations which have been approved by the department for each project as adequate to show the worst case ambient concentrations of carbon monoxide to which the public may be exposed. If the screening analysis results indicate that no receptor location will be exposed to more than 75% of any ambient air quality standard for carbon monoxide, no permit is required.

(2) EXEMPT MODIFICATION OF EXISTING SOURCES. In addition to the exempt modifications listed in s. 144.391 (4), Stats., no construction or modification and new operation permit is required for the resumption of operation of an indirect source after a period of closure if the source meets all the conditions specified in s. NR 406.04 (4) (c).

(3) INCREMENTAL GROWTH. If a person constructs or modifies an indirect source in increments which individually are exempt from the requirement for a permit under this section, the person is required to obtain a construction or modification and new operation permit for the source prior to commencing construction or modification of the increment which, in combination with the other increments occurring since July 1, 1975, or since the date of the last air pollution control permit or

plan approval issued to the source, whichever is later, will cause the applicable permit exemption criteria specified in sub. (1) to be exceeded.

History: Cr. Register, April, 1988, No. 388, eff. 5-1-88.

NR 406.07 Scope of permit exemption. (1) Exemption or the granting of an exemption under this chapter from the requirement to obtain a permit does not relieve any person from compliance with the emission limitations of chs. NR 400 to 499, the air quality requirements of ch. NR 404, the reporting requirements of ch. NR 101, or with any other provision of law.

(2) If a source undergoes a modification which is exempt from the requirement to obtain a construction or modification and new operation permit under s. NR 406.04 (4) or s. 144.391 (4), Stats., it will not for this reason be treated as a modified source for purposes of the emission limitations under chs. NR 400 to 499. If a source which is subject to an air pollution control permit, or a source which has submitted a compliance plan as required in s. NR 445.05, undergoes a modification by substituting a raw material which is subject to an emission limitation under s. NR 445.04 or 445.05 and the source replaces that material with another material subject to an emission limitation under s. NR 445.04 or 445.05 and the product of the equation in s. NR 406.04 (4) (a) 4. is equal to or less than 1.0, the source will not be treated as a modified source for purposes of the emission limitations of chs. NR 400 to 499.

History: renum. from NR 406.04 (7) (a) and (b), Register, April, 1988, No. 388, eff. 5-1-88; am. (2), Register, September, 1988, No. 393, eff. 10-1-88.