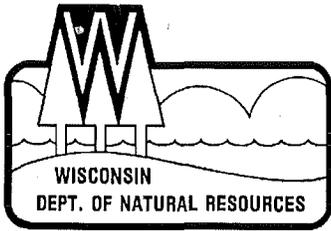


CR 95-68



George E. Meyer
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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STATE OF WISCONSIN)
)
DEPARTMENT OF NATURAL RESOURCES) ss

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, George E. Meyer, Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. AM-9-95 was duly approved and adopted by this Department on June 29, 1995. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.



IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Natural Resources Building in the City of Madison, this 1st day of September, 1995.

George E. Meyer
George E. Meyer, Secretary

(SEAL)

1-1-96



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ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD REPEALING, RENUMBERING,
RENUMBERING AND AMENDING, AMENDING AND CREATING RULES

The Wisconsin Natural Resources Board adopts an order to repeal NR 400.02(61m), 405.02(5), 405.04(3), 415.09(1)(a) to (e), 417.06(3), 417.07(6)(a)1. to 5. and (b) to (d) and (9), 418.025(2)(intro.) and (a) to (e), 418.03(2)(intro.) and (a) to (e), 418.04(2)(a) to (e), 418.05(2), (3)(a) to (e), 418.06(2)(b) to (e), 418.07(2)(intro.) and (a) to (e), 421.04(4), 422.05(3), 422.09(2)(c), (3)(a), (c), (e), (f) and (h) and (4)(a), (c) and (e), 423.03(6)(b)1. to 5., 424.03(2)(b)1. and 2., 425.03(2)(a)1. to 5. and (b), (3)(a)1. to 7., (c)2., (d)1. to 4., (e)1. to 6. and (f), (4)(a)1. to 5. and (b), (5)(a)1. to 4., (b) and (c) and (6)(b)1. to 3., 439.095(2)(a) and (b), 447.02(4), 484.03(5) and (6), 484.11(1)(c), 485.045(1)(a), 488.06(1)(d) Note and 493.02(2); to renumber NR 400.02(100)(u), 411.02(6) and Note, 418.06(2)(f), 419.02(1m), (1p), (1s), (1t), (1u), (2), (3), (3c), (3e), (3m), (4), (6), (6m) and (7), 420.02(28), 421.02(2e) to (13), 422.02(1e) to (6), (7m) to (11m), (12d) to (33j), (34) to (47e), (48) to (52) and 499.07(2)(a) to (m); to renumber and amend NR 417.07(6)(a)(intro.), 418.025(2)(f), 418.03(2)(f), 418.07(2)(f), 419.02(8), 422.02(7), (12), (33m) and (47m), 424.03(2)(b)(intro.), 425.03(2)(a)(intro.), (4)(a)(intro.) and (5)(a)(intro.) and 499.07(2)(n)(intro.); to amend NR 30.03(2)(f), 30.04(2)(f), 400 Note, 400.02(41), (77), (79), (90) and (100)(t), 400.03(2), 401.04, 404.04(2)(a)1. and 2. and (6), 404.06(1)(a) and (4)(b), 405.01(2) Note, 405.02(1)(d), (2)(intro.), (3)(intro.) and (a), (4)(a)(intro.), 1. and 2. and (b)1. and 2., (7), (12), (21)(intro.), (b)3. and 5.a. and b., 6. and 8.a., (22)(a)1. and 2., (24)(d), (25g)(b) and (d), (25m)(a) and (c), (25s)(intro.) and (a), (27)(c) and (28), 405.04(1)(a) and (e), (4)(intro.) and (a), 405.05(1), (4)(intro.), (5) and (6), 405.07(3), (4)(intro.) and (b)27. and (5), 405.08(3), 405.10(4), 405.14(1), (2) and (4) 405.15(2)(d), 406.04(1)(intro.), (g), (h), (j) and (2)(intro.), (c), (f)3m., (h) and (i), (4)(a)6., 406.11(1)(f), 407.03(1)(g), (h), (o), (2)(b) and (4), 407.05(4)(c)1. and Table 2 footnote 8, 407.09(4)(a)3.c., 408.02(4), (20)(e)5.a. and b. and (21)(intro.), 409.02(76)(intro.), 409.06(8)(d), 415.02(5), 415.04(1)(b), (2)(a)(intro.), (b)(intro.) and (c)(intro.), (3)(a) and (4)(b), 415.05(2), 415.07(1)(a)(intro.), (b)(intro.) and 2., 415.075(2)(a)5., 415.08(1), 415.09(1)(intro.) and (3), 417.01(1), 417.02(intro.), 417.06(1) and (2), 417.07(7)(a)(intro.) and 1. to 3., 418.01(1), 418.04(1)(a)2. and (2)(intro.), 418.05(3)(intro.) and (4)(intro.), 418.06(2)(intro.), 419.02(intro.), 420.02(intro.), 420.03(1)(b), 420.035(2)(b) and (3)(c), 420.04(2)(a)(intro.) and 2., 420.045(1)(a), (b)(title), (c), (d)1.(intro.) and (e) and (10)(intro.), 421.02(intro.), 421.05(2)(a)(intro.), (2)(e)1. and 2., 421.06(2)(e)1. and 2., 422.03(intro.), (2), (3), (4), (4m)(b) and (c) and (5)(intro.), 422.04(1)(a), (2)(intro.) and (3)(b)(intro.), 422.132(1)(intro.) and (2)(b), 422.14(2)(c)(intro.), 423.02(intro.), 423.03(4)(intro.) and (m), (5)(intro.), (6)(a)(intro.) and (b)(intro.) and (9), 424.03(1)(a)3. and 4., 425.03(3)(a)(intro.), (b), (d)(intro.), (e)(intro.), (6)(b)(intro.), (7)(e), (7m)(intro.) and (a) and (8), 425.035(2)(f) and (3)(a)3. Note, 425.04(1)(b), 426.04, 429.02(intro.) and (1), 436.02(intro.), 436.05(2)(b) and (5), 438.03(1)(b) and Table 1, 439.03(1)(c) and (4)(a)(intro.), 439.075(2)(a)(intro.) and 4., 439.095(2)(intro.), 445.01(1), 445.02(intro.), (2) and (6), 445.04(3)(c)6., (4r)(a)Note and (b)4., (6)(a)(intro.), (b)4. and Tables 2, 3 and 5, 445.05(3)(a) and (c)7., (4r)(b)4. and (6)(bm)4.(intro.), (c) and (e), 447.02(intro.), (16) and (18) Note, 447.07(3)(a) and (d)(intro.), 447.12(3)(b) Note, 447.16(2) 447.18(1) Note, 448.02(intro.), 448.04(2), 449.02(intro.), 449.09(6)(a)3. and 4., (d)2. and (e)1.(intro.), 449.12(3)(a) and (b)5., 484.04(18), 484.05(3), 484.11(1)(a), 488.02(2) Note, 488.03(3)(b) Note, 488.04(3) Note, 488.08, 488.11(1)(b), 493.02(intro.), 493.04(2) and (3), 499.06(2)(intro.), (e) and (g) and 499.07(2)(intro.); and to create NR 400.02(53s) Note, (100)(u) and (v), 405.02(21m), (22m), 406.04(7), 419.02(10), 421.05(2)(e)3., 421.06(2)(e)3., 422.03(7), 424.03(2)(c), 425.03(14), 436.05(2)(bm) and 484.04(18m) relating to clarification and cleanup changes in NR 30 and throughout the NR 400 series.



AM-9-95

Analysis Prepared by the Department of Natural Resources

Authorizing statutes: ss. 144.31(1)(a), 144.391(6) and 227.11(2)(a), Stats.

Statutes interpreted: s. 144.31(1)(f), Stats. The State Implementation Plan developed under that provision is revised.

These rule changes affect Wisconsin's existing environmental protection air pollution control rules. Changes affecting most elements of the air pollution control program are made, including; definition of terms, permitting, compliance schedules, emission testing, emission limitations, emission monitoring and incorporation by reference. These changes also affect diverse source categories and pollutants. However, these changes are of a cleanup nature, and are intended to correct errors in content or style, or to improve consistency or clarify existing policy or procedures.

The consent of the Attorney General and the Revisor of Statutes will be sought for the incorporation by reference of two appendices in Title 40 of the Code of Federal Regulations containing test methods and the incorporation by reference of a previously approved document from the American Conference of Governmental Industrial Hygienists for two additional citations.

SECTION 1. NR 30.03(2)(f) is amended to read:

NR 30.03(2)(f) No permit ~~will~~ may be issued to burn material that violates the air pollution standards in s. NR ~~154.10~~ 429.04.

SECTION 2. NR 30.04(2)(f) is amended to read:

NR 30.04(2)(f) No permit ~~will~~ may be issued to burn materials that violate the air pollution standards in s. NR 429.04.

SECTION 3. NR 400 Note is amended to read:

NR 400 Note: Chapter 144, Stats., directs the department of natural resources to organize a comprehensive program to enhance the quality, management, and protection of the state's air resources. Chapters NR 400 to 499 are ~~one~~ the central part of that program. Chapter 144, Stats., also ~~stresses~~ addresses the role of county government in establishing local air pollution control programs in cooperation with the department.

The objectives of these rules are to maintain standards of air quality at a level which will provide adequate protection to public health and welfare, and ~~to prevent detrimental effect~~ effects on property and our environment.

Nothing in chs. NR 400 to 499 or in ch. 144, Stats., prohibits a county or local jurisdiction from adopting more restrictive ordinances where local conditions indicate their need. Chapters NR 400 to 499, all or in part, may be adopted by reference by a county or municipality.

It is the department's policy to seek reasonable uniformity among local air pollution control ordinances in order to make the statewide comprehensive program more effective and less complicated for all persons concerned.

Chapters NR 400 to 499 are subject to periodic revision to reflect changing federal mandates, advancing control technology, increasing knowledge of the effect on health of sub-acute long term exposure to air pollutants and increased knowledge of the effect of pollutants on plant life, animal life, soils, and water resources.

SECTION 4. NR 400.02(41) is amended to read:

NR 400.02(41) "Fuel" means any solid, liquid or gaseous materials used to produce useful heat or power by burning.

SECTION 5. NR 400.02(53s) Note is created to read:

NR 400.02(53s) Note: Definitions for "major source" which apply in different situations are given in ss. NR 405.02(22), 407.02(17), 408.02(21), 411.02(5) and 468.20(2)(l).

SECTION 6. NR 400.02(60m) is repealed.

SECTION 7. NR 400.02(77), (79), (90) and (100)(t) are amended to read:

NR 400.02(77) "Reference method" means any method of sampling and analyzing for an air pollutant as described in Appendix A of 40 CFR part 60, Appendix B of 40 CFR part 61 or Appendix A of 40 CFR part 63, all incorporated by reference in s. NR 484.04.

(79) "Replacement of a source" means the physical dismantling of a stationary source and the substitution of that source with a stationary source which is similar in operating capacity and function.

(90) "Standard conditions" means a temperature of 20°C (293 K, 68°F) and a pressure of 760 millimeters of mercury (101.3 kPa, 29.92 inches of mercury in Hg).

(100)(t) 1,1-Difluoroethane (HFC-152a), ~~and~~.

SECTION 8. NR 400.02(100)(u) is renumbered 400.02(100)(w).

SECTION 9. NR 400.02(100)(u) and (v) are created to read:

NR 400.02(100)(u) Parachlorobenzotrifluoride (PCBTF).

(v) Cyclic, branched or linear completely methylated siloxanes.

SECTION 10. NR 400.03(2) is amended to read:

NR 400.03(2) Other units of measure:

Btu or BTU - British thermal unit

°C - degree Celsius (centigrade)

cc - cubic centimeters

cfm - cubic feet per minute

Ci - curie

d - day

dcf - dry cubic feet

dcm - dry cubic meters

dscf - dry cubic feet at standard conditions

dscm - dry cubic meters at standard conditions

eq - equivalent

°F - degree Fahrenheit

ft - foot

ft² - square feet

ft³ - cubic feet

gal - gallon

gr - grain

hr - hour

in or " - inch

in Hg - inches of mercury

in H₂O - inches of water

l - liter

lb - pound

lpm - liter per minute

mil - 10⁻³ in

min - minute

ml - milliliter— 10^{-3} liter

mmBtu - million Btu

mrem - millirem— 10^{-3} rem

oz - ounce

pCi - picocurie— 10^{-12} curie

ppm or ppmv - parts per million (by volume)

psia - pounds per square inch absolute

psig - pounds per square inch gauge

°R - degree Rankine

v/v - volume per volume

yd² - square yards

yr - year

μl - microliter— 10^{-6} liter

μm - micrometer— 10^{-6} meter (micron)

SECTION 11. NR 401.04 is amended to read:

NR 401.04 COMPLIANCE REQUIRED. The failure to identify, in a document issued under s. NR 401.025(2), a specific source in or near a nonattainment area which is otherwise subject to RACT emission limitations does not relieve ~~such~~ the source from compliance.

SECTION 12. NR 404.04(2)(a)1. and 2. and (6) are amended to read:

1. 80 micrograms per cubic meter (~~+03~~ 0.03 ppm) - annual arithmetic mean.
2. 365 micrograms per cubic meter (~~+14~~ 0.14 pm) - maximum 24-hour average concentration, not to be exceeded more than once per year.

(6) NITROGEN DIOXIDE: PRIMARY AND SECONDARY STANDARDS. The primary and secondary standards for nitrogen dioxide are: 100 micrograms per cubic meter (~~+05~~ 0.05 ppm) - annual arithmetic mean.

SECTION 13. NR 404.06(1)(a) and (4)(b) are amended to read:

NR 404.06(1)(a) The department and any person conducting ambient air quality monitoring on its behalf shall use only reference or equivalent methods as specified in sub. (2) or (3) for all ambient air quality monitoring for any air contaminant identified in s. NR 404.04. The ambient monitoring shall conform with the department's ~~handbooks~~ guidebooks, plans and procedures for air monitoring quality assurance.

(4)(b) The department shall publish, revise and maintain quality assurance plans and ~~handbooks~~ guidebooks which describe the activities and procedures of the quality assurance and quality control systems.

SECTION 14. NR 405.01(2) Note is amended to read:

NR 405.01(2) Note: Throughout the proposed rule, changes have been made which result in the provisions of this PSD rule differing from 40 CFR ~~at~~ 51.166, the federal regulation on which it is based. In this rule, the term "air contaminant" is substituted for the term "pollutant" in the federal regulation and the term "~~administrator of U.S. EPA~~" for "~~administrator~~", "~~federal clean air act~~" for "~~act~~" and "~~department~~" for "the State", "the Governor" and "reviewing authority". The federal definition for "building, structure, facility or installation" is applied to the phrase "facility, building, structure, equipment, vehicle or action" — a similar term which appears in Wisconsin's statutory provisions on air pollution. In addition, cross references in the federal regulation have been changed in the rule to comparable provisions in Wisconsin's rule (e.g., "40 CFR Parts 60 and 61" has been changed to "chs. NR 440 and ~~445 446~~ to 449"). Eliminated from the rule are provisions of the federal regulations which do not apply to the state's PSD program (i.e., provisions governing ~~U.S. EPA approval of plan revisions~~).

SECTION 15. NR 405.02(1)(d), (2)(intro.), (3)(intro.) and (a), (4)(a)(intro.), 1. and 2. and (b)1. and 2. are amended to read:

NR 405.02(1)(d) 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 the 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 ~~administrator of the U.S. environmental protection agency~~ 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 ~~administrator~~ department if ~~the administrator~~ the department determines such a period to be more representative of normal source post-change operations.

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

(3)(intro.) "Baseline area" means any intrastate area, and every part thereof, designated as attainment or unclassifiable under ~~§~~ section 107(d)(1)(D) or (E) of the ~~federal clean air~~ act (42 USC 7407(d)(1)(D) or (E)) in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) of the air contaminant for which the minor source baseline date is established. Area redesignations under ~~§~~ section 107(d)(1)(D) or (E) of the act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a minor source baseline date; or

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

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

2. The allowable emissions of major stationary sources which commenced construction before ~~January 6, 1975~~ the major source baseline date, but were not in operation by the applicable minor source baseline date.

(b)1. Actual emissions from any major stationary source on which construction commenced after ~~January 6, 1975; and~~ the major source baseline date.

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

SECTION 16. NR 405.02(5) is repealed.

SECTION 17. NR 405.02(7) and (12) are amended to read:

NR 405.02(7) "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the ~~federal clean air act~~ which would be emitted from any proposed major stationary source or major modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts, and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including clean fuels, fuel cleaning or treatment or innovative fuel combination techniques for control of the air contaminant. In no event may application of best available control technology result in emissions of any air contaminant which would exceed the emissions allowed by any applicable standard under chs. NR 440 and 445 to 449 and under ~~sections~~ sections 111 and 112 of the act (42 USC 7411 and 7412). Emissions from any source utilizing clean fuels or any other means to comply with this subsection may not be allowed to increase above the levels that would have been required under this subsection as it existed prior to enactment of the 1990 ~~federal~~ clean air act amendments. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(12) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any air contaminant subject to regulation under the ~~federal clean air act~~.

SECTION 18. NR 405.02(21)(intro.), (b)3. and 5.a. and b., 6. and 8.a. are amended to read:

NR 405.02(21)(intro.) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any air contaminant subject to regulation under the ~~federal clean air act~~.

(b)3. Use of an alternative fuel by reason of an order or rule under section 125 of the ~~federal clean air~~ act;

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

b. The source is approved to use under any permit issued under this chapter or ch. NR 406; 407 or 408.

6. An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to this chapter, ch. NR 406 or 408 or 40 CFR 52.21 or under an operation permit issued pursuant to ch. NR 407.

8.a. When the department has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any ~~criteria~~ pollutant for which a national ambient air quality standard has been adopted 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 ~~federal clean air~~ act, if any; and

SECTION 19. NR 405.02(21m) is created to read:

NR 405.02(21m) "Major source baseline date" means:

- (a) In the case of particulate matter and sulfur dioxide, January 6, 1975.
- (b) In the case of nitrogen dioxide, February 8, 1988.

SECTION 20. NR 405.02(22)(a)1. and 2. are amended to read:

NR 405.02(22)(a)1. Any of the following stationary sources of air contaminants which emits, or has the potential to emit, 100 tons per year or more of any air contaminant subject to regulation under the ~~federal clean air~~ act: Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal

incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totalling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

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

SECTION 21. NR 405.02(22m) is created to read:

NR 405.02(22m)(a) "Minor source baseline date" means the earliest date after the trigger date on which the owner or operator of a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations.

The trigger date is:

1. In the case of particulate matter and sulfur dioxide, August 7, 1977.
2. In the case of nitrogen dioxide, February 8, 1988.

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

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

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

SECTION 22. NR 405.02(24)(d), (25g)(b) and (d), (25m)(a) and (c), (25s)(intro.) and (a), (27)(c) and (28) are amended to read:

NR 405.02(24)(d) An increase or decrease in actual emissions of sulfur dioxide, nitrogen ~~dioxide~~ oxides or particulate matter measured as PM₁₀ which occurs before the applicable minor source baseline date is credible only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(25g)(b) Was equipped prior to ~~shut-down~~ shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;

(d) Is otherwise in compliance with the requirements of the ~~clean-air~~ act.

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

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

(25s)(intro.) "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 administrator~~ department determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the ~~administrator~~ department shall:

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

(27)(c) "Significant" means, any emissions rate in reference to a net emissions increase or the potential of a source to emit an air contaminant subject to regulation under the ~~federal clean air~~ act ~~that other than air contaminants listed in par. (a) does not list, any emissions rate~~ or under section 112(b) of the act (42 USC 7412(b)).

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

SECTION 23. NR 405.04(1)(a) and (e) are amended to read:

NR 405.04(1)(a) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under sections 2 (a) and (b) of the energy supply and environmental coordination act of 1974 ~~or any superseding legislation~~, over the emissions from such sources before the effective date of such an order.

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

SECTION 24. NR 405.04(3) is repealed.

SECTION 25. NR 405.04(4)(intro.) and (a) are amended to read:

NR 405.04(4)(intro.) For purposes of excluding concentrations pursuant to sub. (1)(e), the administrator ~~of U.S. EPA~~ may approve a plan revision that:

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

SECTION 26. NR 405.05(1), (4)(intro.), (5) and (6) are amended to read:

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

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

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

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

SECTION 27. NR 405.07(3), (4)(intro.) and (b)27. and (5) are amended to read:

NR 405.07(3) The requirements of ss. NR 405.08 to 405.11 apply only to any major stationary source or major modification that would be constructed in an area which is designated as attainment or unclassifiable under section 107(a)(1)(D) or (E) of the ~~federal clean air act; and,~~

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

(b)27. Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the ~~federal clean air act; or,~~

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

SECTION 28. NR 405.08(3) is amended to read:

NR 405.08(3) A major modification shall apply best available control technology for each air contaminant for which it would be a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the ~~pollutant~~ air contaminant would occur as a result of a physical change or change in the method of operation in the unit.

SECTION 29. NR 405.10(4) is amended to read:

NR 405.10(4) Written approval of the administrator ~~of U.S. EPA~~ shall be obtained for any modification or substitution.

SECTION 30. NR 405.14(1), (2) and (4) are amended to read:

NR 405.14(1) NOTICE TO EPA. The department shall transmit to the administrator ~~of U.S. EPA~~ a copy of each permit application relating to a major stationary source or major modification and provide notice to the administrator ~~of U.S. EPA~~ of every action related to the consideration of such permit.

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

(4) CLASS I VARIANCES. The owner or operator of a proposed major source or major modification may demonstrate to the federal land manager that the emissions from the source would have no adverse impact on the air quality-related values, including visibility, of these lands, notwithstanding that the change in air quality resulting from emissions from the source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with this demonstration and so certifies to the department, the department may, provided that applicable requirements of this chapter are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of particulate matter measured as PM₁₀, sulfur dioxide, and nitrogen dioxide

would not exceed the following maximum allowable increases over minor source baseline concentration for these air contaminants.

<u>Pollutant</u>	<u>Maximum Allowable Increase ($\mu\text{g}/\text{m}^3$)</u>
PM ₁₀	
Annual arithmetic mean	17
24-hour maximum	30
Sulfur Dioxide	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen Dioxide	
Annual arithmetic mean	25

SECTION 31. NR 405.15(2)(d) is amended to read:

NR 405.15(2)(d) Send a copy of the notice of public comment to the applicant, the administrator of ~~U.S. EPA~~ and to officials and agencies having cognizance over the location where the proposed ~~concentration~~ construction would occur as follows; any other state or local air pollution control agencies; the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency; and any state, federal land manager, or Indian governing body whose lands may be affected by emissions from the major source or major modification.

SECTION 32. NR 406.04(1)(intro.), (g), (h), (j) and (2)(intro.), (c), (f)3m., (h) and (i) and (4)(a)6. are amended to read:

NR 406.04(1)(intro.) **SPECIFIC CATEGORIES OF EXEMPT SOURCES.** The following categories of direct sources are exempt from the requirement to obtain a construction permit unless 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 under ch. NR 408 because of a significant net increase in the emissions ~~{of}~~ an air contaminant for which the area is designated nonattainment:

(g) Painting or coating operations, including associated cleaning operations, which emit or will emit not more than 1666 pounds of volatile organic compounds per month, which are measured prior to entering any emission control devices unless the emissions of any single hazardous air pollutant as listed under section 112(b) of the act equal or exceed 10 tons per year or the cumulative emissions of hazardous air pollutants listed under section 112(b) of the act equal or exceed 25 tons per year.

(h) Graphic arts operations, including associated cleaning operations, which emit or will emit not more than 1666 pounds of volatile organic compounds per month, which are measured prior to entering any emission control devices unless the emissions of any single hazardous air pollutant as listed under section 112(b) of the act equal or exceed 10 tons per year or the cumulative emissions of hazardous air pollutants listed under section 112(b) of the act equal or exceed 25 tons per year.

(j) A laboratory which emits volatile 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 unless the emissions of any single hazardous air pollutant as ~~defined by s.~~ listed under section 112(b) of the federal clean air act equal or exceed 10 tons per year or the cumulative emissions of hazardous air pollutants listed under section 112(b) of the act equal or exceed 25 tons per year. Hourly emissions shall be determined, based on the quantitative estimate of air contaminants before they enter any emission control devices, by dividing the total uncontrolled emissions which would have occurred 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.

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

(c) The maximum theoretical emissions from the source for particulate matter, nitrogen oxides or volatile organic compounds do not exceed 5.7 pounds per hour for each air contaminant;

(f)3m. The maximum theoretical emissions from the source of any hazardous air contaminant listed in Table 5 of s. NR 445.04 are not greater than the emission rate listed in ~~Table 5 of s. NR 445.04~~ that table for the air contaminant for the respective stack height; ~~and~~.

(h) The source is not required to obtain a permit under ch. NR 408 because of a significant net increase in the emissions [of] an air contaminant for which the area is designated nonattainment; ~~and~~.

(i) The source is not subject to any standard or regulation under ~~s. section~~ 111 or 112 of the ~~federal clean air act~~.

(4)(a)6. The use will not subject the source to any standard or regulation under ~~s. section~~ 112 of the ~~federal clean air act~~.

SECTION 33. NR 406.04(7) is created to read:

NR 406.04(7) CONDITIONS FOR SPECIFIC EXEMPTIONS. In order to be eligible for a specific exemption under sub. (1)(d), (g), (h), (j), (m), (o), (y) or (z), the owner or operator of a direct stationary source shall keep and maintain records of materials used, emissions or production rates, that are adequate to demonstrate that the source qualifies for the exemption. The owner or operator of a direct stationary source shall begin keeping these records no later than the effective date of this subsection [revisor inserts date] or the date that the source commences operation, whichever is later, and maintain them for a minimum of 5 years. After the effective date of this subsection [revisor inserts date], any direct stationary source that ever exceeds any level listed in sub. (1)(d), (g), (h), (j), (m), (o), (y) or (z) is not eligible for the exemption under that subsection.

SECTION 34. NR 406.11(1)(f) is amended to read:

NR 406.11(1)(f) Failure to file annual emission inventory reports. An intentional failure by the permit holder to file annual ~~air~~ emission inventory reports required under ch. NR 438.

SECTION 35. NR 407.03(1)(g), (h), (o), (2)(b) and (4) are amended to read:

NR 407.03(1)(g) Painting or coating operations, including associated quality assurance laboratories and cleaning operations which emit or will emit not more than 1,666 pounds of volatile organic compounds per month, which are measured prior to entering any emission control devices unless the emissions of any single hazardous air pollutant as listed under section 112(b) of the act equal or exceed 10 tons per year or the cumulative emissions of hazardous air pollutants listed under section 112(b) of the act equal or exceed 25 tons per year.

(h) Graphic arts operations, including associated quality assurance laboratories and cleaning operations which emit or will emit not more than 1,666 pounds of volatile organic compounds per month, which are measured prior to entering any emission control devices unless the emissions of any single hazardous air pollutant as listed under section 112(b) of the act equal or exceed 10 tons per year or the cumulative emissions of hazardous air pollutants listed under section 112(b) of the act equal or exceed 25 tons per year.

(o) A laboratory which emits volatile 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 unless the emissions of any single hazardous air pollutant as ~~defined by s.~~ listed under section 112(b) of the act (42 USC 7412(b)) equal or exceed 10 tons per year or the cumulative emissions of all such hazardous air pollutants listed under section 112(b) of the act equal or exceed 25 tons per year. Hourly emissions shall be determined, based on the quantitative estimate of air contaminants before they enter any emission control devices, by dividing the total uncontrolled emissions which would have occurred 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.

(2)(b) The maximum theoretical emissions from the source for particulate matter, nitrogen oxides or volatile organic compounds do not exceed 5.7 pounds per hour for each air contaminant;

(4) CONDITIONS FOR SPECIFIC EXEMPTIONS. In order to be eligible for a specific exemption under sub. (1)(d), (g), (h), (o), (s), ~~or (sm),~~ (w) or (x), the owner or operator of a direct stationary source shall keep and maintain records of materials used, emissions or production rates, whichever is appropriate, that are adequate to demonstrate that the source qualifies for the exemption. The owner or operator of a direct

stationary source shall begin keeping these records no later than January 1, 1994 or the date that the source commences operation, whichever is later, and maintain them for a minimum of 5 years. After January 1, 1994, any direct stationary source that ever exceeds any level listed in sub. (l)(d), (g), (h), (o), (s), ~~or (sm)~~, (w) or (x) is not eligible for the exemption under that subsection.

SECTION 36. NR 407.05(4)(c)1. is amended to read:

NR 407.05(4)(c)1. The maximum theoretical emissions of all air contaminants from all emissions units, operations and activities except for those exempted under subd. 9. or 10. Fugitive emissions from emissions units, operations and activities shall be included in the permit application in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source. Maximum theoretical fugitive emissions shall be calculated using average operating conditions and average weather conditions. Only sources which manufacture or process pesticides, rodenticides, insecticides, herbicides or fungicides shall include emissions of air contaminants identified as pesticides, rodenticides, insecticides, herbicides and fungicides in Table 2 in their permit applications. When preparing its application, the owner or operator of a facility may rely on information in an approved material safety data sheet. Trace contaminants need not be reported if they constitute less than 1% of the material, or 0.1% of the material if the air contaminant is ~~footnoted as a suspected or confirmed human carcinogen by the American conference of governmental industrial hygienists in the 1994-1995 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, incorporated by reference in s. NR 484.14~~ listed in Table 3 of s. NR 445.04.

SECTION 37. NR 407.05 Table 2 footnote 8 is amended to read:

NR 407.05 Table 2 footnote

8. Glycol ethers means any compound which can be described by the following chemical formula: $R(OCH_2CH_2)_n-OR'$

where: $n = 1, 2$ or 3

R = alkyl C7 or less

or R = phenyl or alkyl substituted phenyl

R' = H or, alkyl C7 or less or ester, sulfate, phosphate, nitrate or sulfonate

(i.e. any group that will readily come off)

SECTION 38. NR 407.09(4)(a)3.c. is amended to read:

NR 407.09(4)(a)3.c. A requirement that the compliance certification include the information listed in s. NR 439.03~~(7)~~(8);

SECTION 39. NR 408.02(4), (20)(e)5.a. and b. and (21)(intro.) are amended to read:

NR 408.02(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 federal clean air act 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 federal clean air act amendments. 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.

(20)(e)5.a. The source was capable of accommodating before December 21, 1976, unless such a change would be prohibited under any federally enforceable permit condition which was established after

December ~~42~~ 21, 1976 pursuant to this chapter or ch. NR 405 or 406 or under an operation permits 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.

(21)(intro.) "Major source" means the following:

SECTION 40. NR 409.02(76)(intro.) is amended to read:

NR 409.02(76)(intro.) "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 ~~s. 3005 of the solid waste disposal act (42 USC 6925)~~. The term solid waste incinerator does not include:

SECTION 41. NR 409.06(8)(d) is amended to read:

NR 409.06(8)(d) Modifying the federal power act (16 USC 791a et seq.) or affecting the authority of the federal energy regulatory commission under the federal power act; or

SECTION 42. NR 411.02(6) and Note as affected by Clearinghouse Rule 94-184 is renumbered 400.02(53p) and Note.

SECTION 43. NR 415.02(5) is amended to read:

NR 415.02(5) "Process weight" means the total weight of all materials that can be introduced into any direct source operation based on the design capacity of the source or a capacity level approved by the department, except liquid fuels, gaseous fuels and air.

SECTION 44. NR 415.04(1)(b), (2)(a)(intro.), (b)(intro.) and (c)(intro.), (3)(a) and (4)(b) are amended to read:

NR 415.04(1)(b) Application of asphalt, ~~oil~~, water, suitable chemicals or plastic covering on dirt roads, material stockpiles and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem.

(2)(a)(intro.) Storage piles having a material transfer greater than 100 tons in any year are subject to the following requirements:

(b)(intro.) Materials handling operations are subject to the following requirements:

(c)(intro.) Process fugitive emissions are subject to the following control requirements:

(3)(a) Be paved with asphalt, concrete or other material approved by the department, or use other methods of dust control which the department approves as representing RACT for the particular road, driveway or trafficable area. Such other methods of dust control which may be approved the department include but are not limited to periodic application of water, ~~oil~~ or suitable chemicals. In reviewing and acting upon plans required by sub. (5) for compliance with this subsection, the department shall consider the effects of the use of paving or other methods of dust control upon the rate and volume of surface water runoff and water quality.

(4)(b) If unpaved, roadways and public trafficable areas covered by this subsection shall be paved with asphalt, concrete or other material approved by the department, or use other methods of dust control which the department approves as representing RACT for the particular roadway or public trafficable area. Such other methods of dust control which may be approved by the department include but are not limited to periodic application of water, ~~oil~~ or suitable chemicals. In reviewing and acting upon plans required by sub. (5) for compliance with this subsection, the department shall consider the effects of the use of paving or other methods of dust control upon the rate and volume of surface water runoff and water quality. This paragraph does not apply to roadways or to public trafficable areas which have less than 20,000 contiguous square feet of unpaved surface area.

SECTION 45. NR 415.05(2) is amended to read:

NR 415.05(2) All direct and portable sources on which construction or modification is commenced after April 1, 1972 shall meet the emission limitations of this subsection. The allowable emissions of particulate matter are calculated by the use of the equation

$$E = 3.59 P^{0.62}$$

for process weight rates up to 60,000 pounds per hour and by use of the equation

$$E = 17.31 P^{0.16}$$

for process weight rates of 60,000 pounds per hour or more, where E is the allowable emissions in pounds per hour and P is the process weight rate in tons per hour. If the calculated emission rate is less restrictive than the applicable concentration specified under sub. (1) based on the maximum exhaust flow rate and normal exhaust gas temperature, the limitation under sub. (1) shall apply.

SECTION 46. NR 415.07(1)(a)(intro.), (b)(intro.) and 2. are amended to read:

NR 415.07(1)(a)(intro.) Incinerators located throughout the state; emissions ~~in excess~~ of:

(b)(intro.) Incinerators located in subregion 1 of the Lake Michigan Intrastate AQCR or in the Southeastern Wisconsin Intrastate AQCR; in addition to meeting the emission limits of par. (a) these incinerators shall, ~~by July 31, 1975,~~ meet the following emission limits:

2. Prefabricated domestic incinerators below 5 cubic feet capacity may not exceed the performance emission requirements prescribed by the American National Standards Institute for domestic incinerators, standard Z21.6, incorporated by reference in ~~ch. NR 484 s.~~ NR 484.11.

SECTION 47. NR 415.075(2)(a)5. is amended to read:

NR 415.075(2)(a)5. The use of blast hole stemming materials that have been approved by either the department or the department of industry, labor and human relations.

SECTION 48. NR 415.08(1) is amended to read:

NR 415.08(1) This section applies to all coking operations ~~upon which construction or modification commenced before September 1, 1981. Notwithstanding any other provision of chs. NR 415 and 431, all requirements of this section shall be met on or before September 1, 1981.~~

SECTION 49. NR 415.09(1)(intro.) is amended to read:

NR 415.09(1)(intro.) GENERAL COMPLIANCE SCHEDULE. If a source on which construction or modification was last commenced on or before July 1, 1975, other than a heatset web offset press, fails to meet a particulate emission limitation in this chapter because of the inclusion of condensible particulate matter, as defined in s. NR 439.02(4), in the determination of emission rates or concentrations, the owner or operator of the source ~~may not exceed the following increments of progress in achieving compliance with that limit: shall~~ achieve final compliance with the applicable limitation by October 1, 1990.

SECTION 50. NR 415.09(1)(a) to (e) are repealed.

SECTION 51. NR 415.09(3)(intro.) is amended to read:

NR 415.09(3)(intro.) VARIANCE. Notwithstanding sub. ~~(1) or~~ (2), the owner or operator of a source constructed or modified on or before July 1, 1975 which fails to meet a particulate emission limitation in this chapter because of the inclusion of condensible particulate matter, as defined in s. NR 439.02(4), in the determination of emission rates or concentrations may request in writing a variance from the emission limitation from the department ~~under par. (a) or (b) on or before October 1, 1990 if the source is other than a heatset web offset press; or~~ under par. (a) on or before July 1, 1993 if the source is a heatset web offset press.

SECTION 52. NR 417.01(1) is amended to read:

NR 417.01(1) APPLICABILITY. This chapter applies to all air contaminant sources which emit sulfur dioxide or other sulfur compounds and to their owners ~~or~~ and operators.

SECTION 53. NR 417.02(intro.) is amended to read:

NR 417.02 DEFINITIONS. (intro.) 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:

SECTION 54. NR 417.06(1) and (2) are amended to read:

NR 417.06(1) The emission of TRS from all recovery furnace stacks may not exceed 0.50 pound of reduced sulfur compounds (as sulfur) per equivalent ton of air-dried kraft pulp, or from each recovery furnace stack 17.5 ppm, expressed as hydrogen sulfide on a dry gas basis, whichever is the more restrictive. New direct sources shall meet such other limit of TRS that proves to be reasonably attainable utilizing the latest in design of recovery furnace equipment, controls, and procedures. ~~All existing direct sources shall be in compliance with this requirement by not later than July, 1976.~~

(2) Noncondensibles from digesters and multiple-effect evaporators shall be treated to reduce the emission of TRS equal to the reduction achieved by thermal oxidation in a lime kiln. ~~All existing direct sources shall be in compliance with this requirement by not later than July, 1973.~~

SECTION 55. NR 417.06(3) is repealed.

SECTION 56. NR 417.07(6)(a)(intro.) is renumbered 417.07(6) and amended to read:

NR 417.07(6) When a source is subject to the emission limitations of sub. (2), the owner or operator shall ~~meet the following deadlines in achieving~~ achieve final compliance with those emission limitations; and so certify to the department on or before December 31, 1987.

SECTION 57. NR 417.07(6)(a)1. to 5. and (b) to (d) are repealed.

SECTION 58. NR 417.07(7)(a)(intro.) and 1. to 3. are amended to read:

NR 417.07(7)(a)(intro.) For purposes of determining compliance with the emission limitations of sub. (2) or the alternate emission limitations of sub. (5), the owner or operator of the source shall ~~outline the specific~~

~~methods for demonstrating compliance with the emission limitations, to the satisfaction of the department, in the compliance plans submitted under sub. (6)(a)1, (b)2, or (c)1. The compliance demonstrations shall consist of~~
use one or more of the following:

1. Installation, calibration, maintenance and operation of a continuous emission monitor, utilizing equipment and procedures reviewed and approved by the department under s. NR 439.09.
2. Collection and analysis of fuel used, utilizing equipment and procedures reviewed and approved by the department; under s. NR 439.08.
3. ~~Stack emissions~~ Emission testing, utilizing equipment and procedures reviewed and approved by the department; ~~and~~ under s. NR 439.07.

SECTION 59. NR 417.07(9) is repealed.

SECTION 60. NR 418.01(1) is amended to read:

NR 418.01(1) APPLICABILITY. This chapter applies to all direct air contaminant sources which are located in the specific geographic areas described in this chapter and which emit sulfur dioxide or other sulfur compounds and to all owners ~~of~~ and operators of these sources.

SECTION 61. NR 418.025(2)(intro.) and (a) to (e) are repealed.

SECTION 62. NR 418.025(2)(f) is renumbered 418.025(2) and amended to read:

NR 418.025(2) ~~Notwithstanding the increments of progress specified in this subsection, all~~ All sources to which sub. (1) applies shall achieve final compliance and so certify to the department on or before December 31, 1982.

SECTION 63. NR 418.03(2)(intro.) and (a) to (e) are repealed.

SECTION 64. NR 418.03(2)(f) is renumbered 418.03(2) and amended to read:

NR 418.03(2) ~~Notwithstanding the increments of progress specified in this subsection, all~~ All boilers to which sub. (1) applies shall achieve final compliance and so certify to the department on or before December 31, 1982.

SECTION 65. NR 418.04(1)(a)2. and (2)(intro.) are amended to read:

NR 418.04(1)(a)2. Q, when different fuels are burned in combination. Q is determined by the following equation:

$$Q = \frac{X(3.28) + Y(1.60) + Z(0.5)}{X + Y + Z}$$

where Q is the sulfur dioxide emission limit for a stack expressed in pounds of sulfur dioxide per million ~~BTU~~ Btu heat input, X is the percent of total heat input derived from solid fossil fuel, Y is the percent of total heat input derived from residual fuel oil, and Z is the percent of total heat input derived from all other fuels.

(2)(intro.) When a source is subject to the emission limitations of sub. (1), the owner or operator ~~may not exceed the following increments of progress in achieving compliance, commencing on December 1, 1983;~~ shall achieve final compliance with the applicable emission limitations and so certify to the department by November 9, 1985.

SECTION 66. NR 418.04(2)(a) to (e) are repealed.

SECTION 67. NR 418.05(2) is repealed.

SECTION 68. NR 418.05(3)(intro.) is amended to read:

NR 418.05(3)(intro.) When a source is subject to the emission limitations of sub. (1), the owner or operator shall ~~meet the following deadlines in achieving compliance with those emission limitations;~~ achieve

final compliance with the applicable emission limitations and so certify to the department on or before November 9, 1985.

SECTION 69. NR 418.05(3)(a) to (e) are repealed.

SECTION 70. NR 418.05(4)(intro.) is amended to read:

NR 418.05(4)(intro.) For purposes of determining compliance with the emission limitations of ~~sub. (1) and (2)~~ this section, the owner or operator of a source described in sub. (1) ~~or (2)~~ shall ~~outline the specific methods for demonstrating compliance with the emission limitations to the satisfaction of the department in the compliance plans submitted under sub. (3)(a).~~ The compliance demonstrations shall use methods which include, but are not be limited to, the following requirements:

SECTION 71. NR 418.06(2)(intro.) is amended to read:

NR 418.06(2)(intro.) When a source is subject to sub. (1) the owner or operator shall ~~meet the following deadlines in achieving compliance with the emission limitations of sub. (1):~~

SECTION 72. NR 418.06(2)(b) to (e) are repealed.

SECTION 73. NR 418.06(2)(f) is renumbered 418.06(2)(b).

SECTION 74. NR 418.08(2)(intro.) and (a) to (e) are repealed.

SECTION 75. NR 418.08(2)(f) is renumbered 418.07(2) and amended to read:

NR 418.08(2) ~~Achieve~~ The owner or operator of a source subject to sub. (1) shall achieve final compliance with the emission limitations of sub. (1) and so certify to the department before February 1, 1985 for sources covered by sub. (1)(a)5. and (b)3.; before July 1, 1985 for sources covered by sub. (1)(a)3.; before

January 1, 1986 for sources covered by sub. (1)(a)1., 2., 4. and 6.; and before September 1, 1986 for sources covered by sub. (1)(b)1. and 2.

SECTION 76. NR 419.02(intro.) is amended to read:

NR 419.02 DEFINITIONS. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions in this section apply to the terms used in this chapter and in chs. NR 419 420 to 425. ~~In addition, the definitions in ch. NR 400 apply to the terms used in this chapter.;~~

SECTION 77. NR 419.02(1m), (1p), (1s), (1t), (1u), (2), (3), (3c) and (3e) as affected by Clearinghouse Rule 95-025 are renumbered 419.02(2) to (10).

SECTION 78. NR 419.02(11) is created to read:

NR 419.02(11) "Maximum theoretical emissions" means the quantity of VOC emissions that theoretically could be emitted by a stationary source without consideration of control devices based on the design capacity or maximum production capacity of the source and 8,760 hours of operation per year. In determining the maximum theoretical emissions for a source, the design capacity or maximum production capacity shall include the use of necessary coatings and inks with the highest VOC content used in practice by the source. When appropriate, and upon request by the source owner or operator, maximum theoretical emissions may be limited by the imposition of conditions in a federally enforceable permit. Such conditions shall be used in place of design capacity or maximum production capacity in calculating the maximum theoretical emissions for the source and may include, among other things, the establishment of production limitations, capacity limitations, or limitations on the VOC content of coatings or inks, or the hours of operation of any emission source, or a combination of any such limitations. Production or capacity limitations shall be established on the basis of no longer than one month and may allow for averaging for up to 12 consecutive months.

SECTION 79. NR 419.02(3m), (4), (6), (6m) and (7) are renumbered 419.02(12) and (14) to (17).

SECTION 80. NR 419.02(8) is renumbered 419.02(18) and amended to read:

NR 419.02(18) "Virgin petroleum liquid" means ~~crude petroleum, petroleum, condensate and any finished or intermediate products manufactured in or extracted in a petroleum refinery or in a similar facility~~ petroleum liquid which has not been contaminated by compounds not initially present through use or mixture with other liquids. Virgin petroleum liquids include gasoline, diesel fuel, kerosene, distillate fuel oils, residual fuel oils, ~~or~~ and other products produced through distillation of petroleum or through redistillation, cracking, extraction or reforming of unfinished petroleum derivatives.

SECTION 81. NR 420.02(intro.) is amended to read:

NR 420.02 DEFINITIONS. (intro.) The definitions contained in chs. NR 400 and 419 apply to the terms used in this chapter. In addition, the following definitions in this section apply to the terms used in chs. NR 420 to 425-; ~~In addition, the definitions in chs. NR 400 and 419 apply to the terms used in this chapter.~~

SECTION 82. NR 420.02(28) is renumbered 419.02(13).

SECTION 83. NR 420.03(1)(b) is amended to read:

NR 420.03(1)(b) Storage vessels for the crude petroleum or condensate stored, processed or treated at a drilling and production facility outside a ~~standard metropolitan statistical area~~ county prior to custody transfer.

SECTION 84. NR 420.035(2)(b) and (3)(c) are amended to read:

NR 420.035(2)(b) The owner or operator of ~~the~~ a gasoline dispensing ~~facilities~~ facility subject to par. (a) shall ensure that each pressure vacuum valve installed on a storage tank vent pipe is certified by the California air resources board under section 41954 of the California health and safety code, and is maintained in good working order.

(3)(c) The owner or operator of a gasoline dispensing facility on which construction was ~~commenced~~ commenced after August 1, 1994 and which is subject to the vapor control requirements of sub. (2) shall install

a pressure vacuum valve on each stationary gasoline storage tank vent pipe before the tank is first filled with gasoline.

SECTION 85. NR 420.04(2)(a)(intro.) and 2. are amended to read:

NR 420.04(2)(a)(intro.) Applicability. Subject to the provisions of s. NR 425.03, this subsection applies to the unloading, loading, and storage facilities of all bulk gasoline plants which have an average daily throughput of 15,000 liters (4,000 gallons) of gasoline or more on a 30-day rolling average; and to all delivery vessels involved in such loading or unloading operations, except as provided in subs. 1. and 2. Any plant that becomes or is subject to this subsection shall remain subject to this subsection even if its throughput later falls below the applicability thresholds. The requirement of pars. (b) to (g) do not apply to the following:

2. Bulk plant unloading facilities, the delivery vessels receiving gasoline from bulk plants, and the operation of transferring gasoline from bulk plant to delivery vessel when the transfer takes place outside the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago or when the gasoline is delivered exclusively to facilities exempted from the requirements of sub. (3) by sub. (3)(a)1., 2., 3., 4., 5. or 6. However, ~~this subsection does~~ the requirements of pars. (b) to (g) do apply if gasoline is transferred during the ozone season to a delivery vessel whose last previous delivery was to a gasoline dispensing facility, either inside or outside Wisconsin, which is required to have a vapor balance system.

SECTION 86. NR 420.045(1)(a), (b)(title), (c), (d)1.(intro.) and (e) and (10)(intro.) are amended to read:

NR 420.045(1)(a) Applicability. This section applies to all gasoline dispensing facilities located in the counties of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha ~~which dispense more than 10,000 gallons of gasoline per month~~ except as specified in pars. (b), ~~(c)~~ and (d).

(b)(title) Non-highway mobile source exemption.

(c) Throughput exemption. A gasoline dispensing facility is exempt from the requirements of ~~this section subs. (2) to (9)~~ if the facility never dispenses greater than 10,000 gallons of gasoline per month, on average, for any 24 month period beginning with calendar years 1991 and 1992. The calculation of the average monthly quantity of gasoline dispensed at a facility may not include any period of time when the facility was non-operational. The owner or operator of such a gasoline dispensing facility shall comply with the reporting requirements of sub. (10).

(d)1.(intro.) A gasoline dispensing facility is exempt from the requirements of ~~this section subs. (2) to (9)~~ if all of the following criteria in this subdivision are met:

(e) Exceeding thresholds. Any gasoline dispensing facility which exceeds an applicable gallons of gasoline per month threshold established in par. (c) or (d) for any 24 month period after calendar years 1991 and 1992 is subject to ~~this section~~ the requirements of subs. (2) to (9) and shall comply with the requirements of s. NR 425.035 for reporting throughput and for installing and beginning operation of a vapor recovery system.

(10)(intro.) REPORTING. The owner or operator of a gasoline dispensing facility for which claims an exemption from meeting the requirements of ~~this section subs. (2) to (9)~~ is claimed by use of sub. (1)(c) or (d), and which has at least 2000 gallons of stationary gasoline storage tank capacity, shall, beginning in 1993, submit an annual report to the department by March 1 of each year for gasoline dispensed during the preceding year. These annual reports shall contain, at a minimum, all of the following:

SECTION 87. NR 421.02(intro.) is amended to read:

NR 421.02 DEFINITIONS. (intro.) The definitions contained in chs. NR 400, 419 and 420 apply to the terms used in this chapter. In addition, the following definitions in this section apply to the terms used in this chapter and in chs. NR 421 422 to 425. ~~In addition, the definitions in chs. NR 400, 419 and 420 apply to the terms used in this chapter.;~~

SECTION 88. NR 421.02(2e) to (13) are renumbered 421.02(3) to (22).

SECTION 89. NR 421.04(4) is repealed.

SECTION 93. NR 421.06(2)(e)3. is created to read:

NR 421.06(2)(e)3. Notwithstanding subd. 1., if less than or equal to 2% of the valves monitored pursuant to subd. 1. are found not to leak for 5 consecutive quarters, monitoring of valves under subd. 1. shall not be required for the following 3 consecutive quarters. Monitoring shall be conducted during the next quarter and every fourth quarter thereafter. If, during monitoring required under this subdivision, more than 2% of valves monitored are found to leak, quarterly monitoring under subd. 1. shall be reinstated in the next quarter.

SECTION 94. NR 422.02(1e), (1m), (1s), (1x), (2), (3), (3e), (3m), (4), (5) and (6) as affected by Clearinghouse Rules 94-141, 94-211, 94-213 and 94-218 are renumbered 422.02(2) to (12).

SECTION 95. NR 422.02(7) is renumbered 422.02(13) and amended to read:

NR 422.02(13) "Class II hardboard paneling finish" means a finish that meets the specifications of ~~ANSI/AHA~~ ANSI/AHA A135.5-1988 as approved by the American National Standards Institute. This standard is incorporated by reference in ~~ch. NR 484 s. NR 484.11.~~

SECTION 96. NR 422.02(7m), (8) to (11) and (11m) as affected by Clearinghouse Rule 94-141 are renumbered 422.02(14) to (19).

SECTION 97. NR 422.02(12) is renumbered 422.02(20) and amended to read:

422.02(20) "Cutback asphalt" means any asphalt ~~cement~~ which has been liquefied by blending with petroleum solvents (diluent) other than residual oils. Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt ~~cement~~ to perform its function. Asphalt which contains less than 5% by weight petroleum solvents (~~disregarding any residual oils added~~), is not included in this definition.

SECTION 98. NR 422.02(12d) to (33j) as affected by Clearinghouse Rules 94-141, 94-211, 94-213 and 94-218 are renumbered 422.02(21) to (66).

SECTION 90. NR 421.05(2)(a)(intro.), (e)1. and 2. are amended to read:

NR 421.05(2)(a)(intro.) Equip each vent from reaction tanks, and all blending tanks and thinning tanks, with an emission control system which meets one of the conditions listed in this paragraph. Any equally effective control method or equivalent system approved by the department under this paragraph shall be submitted to, and will not become effective for federal purposes until approved by, the administrator of the U.S. ~~environmental protection agency~~ or designee as a source-specific revision to the department's state implementation plan for ozone. The emission control system shall be:

(e)1. Monitor each valve, pump, sealed agitator, compressor, ~~flange~~ and relief valve that is located within 2.0 meters (6.6 feet) of a permanent support surface once during each calendar quarter.

2. Monitor all other valves, pumps, sealed agitators, compressors, ~~flanges~~, and relief valves, and all flanges, once during each calendar year.

SECTION 91. NR 421.05(2)(e)3. is created to read:

NR 421.05(2)(e)3. Notwithstanding subd. 1., if less than or equal to 2% of the valves monitored pursuant to subd. 1. are found not to leak for 5 consecutive quarters, monitoring of valves under subd. 1. shall not be required for the following 3 consecutive quarters. Monitoring shall be conducted during the next quarter and every fourth quarter thereafter. If, during monitoring required under this subdivision, more than 2% of valves monitored are found to leak, quarterly monitoring under subd. 1. shall be reinstated in the next quarter.

SECTION 92. NR 421.06(2)(e)1. and 2. are amended to read:

NR 421.06(2)(e)1. Monitor each valve, pump, sealed agitator, compressor, ~~flange~~ and relief valve that is located within 2.0 meters (6.6 feet) of a permanent support surface once during each calendar quarter.

2. Monitor all other valves, pumps, sealed agitators, compressors, ~~flanges~~, and relief valves, and all flanges, once during each calendar year.

SECTION 99. NR 422.02(33m) is renumbered 422.02(67) and amended to read:

422.02(67) "Pretreatment coat" means a coating applied directly to metal substrates and which contains at least ~~1/2~~ 0.50% acid by weight, and is used to provide surface etching, corrosion resistance and enhanced adhesion of subsequent coatings.

SECTION 100. NR 422.02(34), (34m), (34s), (34v), (35) to (37), (37s), (37v), (38) to (41), (41m), (41p), (41s), (41v), (41w), (41y), (42), (42m), (42n), (42o), (42q), (42s), (42u), (43), (43m), (44), (44m), (45), (46), (46m), (47) and (47e) as affected by Clearinghouse Rules 94-141, 94-211 and 94-213 are renumbered 422.02(68) to (102).

SECTION 101. NR 422.02(47m) is renumbered 422.02(103) and amended to read:

422.02(103) "Traffic marking material" means any substance, either solid or liquid at time of application, used to provide ~~land~~ lane delineation or other traffic guidance or information on paved surfaces. Markings provided by traffic marking material include, but are not limited to, centerlines, edgelines, lane lines, turn arrows, parking stall markings, crosswalks, curb markings, railroad markings and airport taxi and runway markings.

SECTION 102. NR 422.02(48) to (52) as affected by Clearinghouse Rules 94-141, 94-211 and 94-213 are renumbered 422.02(104) to (112).

SECTION 103. NR 422.03(intro.), (2), (3) as affected by Clearinghouse Rule 94-213, (4), (4m)(b) and (c) and (5)(intro.) are amended to read:

NR 422.03(intro.) Sections NR 422.04 to 422.155 apply to any facility which contains one or more of the surface coating or printing process lines described in ss. NR 422.05 to 422.155, except as specified in this section. If VOC emissions exceed an exemption level given in this section, the exemption will no longer apply to the source. Exempt facilities are subject to the recordkeeping requirements of s. NR 439.04(4). ~~Exempt facilities~~ Exemptions include:

(2) Surface coating facilities as described under s. NR 422.15 or 422.155 which are located in the county of Brown, Calumet, Dane, Dodge, Fond du Lac, Jefferson, Outagamie, Rock or Winnebago and which have ~~maximum theoretical~~ actual emissions of VOCs from all surface coating process lines meeting the applicability requirements of s. NR 422.15 or 422.155 within the facility of less than ~~or equal to~~ 10 tons per year with all emission control equipment inoperative.

(3) Surface coating facilities as described under ss. NR 422.05 to 422.08, 422.09, 422.10 to 422.13, 422.15 and 422.155 which are located outside the counties of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha, and Winnebago and which have total emissions of VOCs from the facility, with all emission control equipment inoperative, of less than ~~or equal to~~ 100 tons per year.

(4) Printing facilities as described under s. NR 422.14 which are located in the ~~counties~~ county of Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha and have maximum theoretical emissions of VOCs from the facility of less than ~~or equal to~~ 25 tons per year, or are located outside the counties of Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha and have maximum theoretical emissions of VOCs from the facility of less than ~~or equal to~~ 100 tons per year.

(4m)(b) Located in the county of Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha and which have maximum theoretical emissions of VOCs from all screen printing units at the facility of less than ~~or equal to~~ 25 tons per year; ~~or,~~

(c) Located in the county of Kewaunee, Manitowoc or Sheboygan and which have maximum theoretical emissions of VOCs from all screen printing units at the facility of less than ~~or equal to~~ 100 tons per year.

(5)(intro.) Surface coating process sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance where all of the following conditions are met:

SECTION 104. NR 422.03(7) is created to read:

NR 422.03(7) Any coating or ink or group of coatings or inks applied at a facility where the aggregate usage of the coating or ink or group of coatings or inks at the facility is less than or equal to 55 gallons when averaged over any 12 consecutive months.

SECTION 105. NR 422.04(1)(a), (2)(intro.) and (3)(b)(intro.) are amended to read:

NR 422.04(1)(a) No owner or operator of a coating line subject to an emission limitation contained in ss. NR 422.05 to 422.08, 422.09 to 422.12, 422.132 to 422.135, 422.15 or 422.155 and complying with the emission limitation by means of this subsection may cause, allow or permit the daily volume-weighted average VOC content to exceed the emission limitation to which the coatings are subject. For purposes of this paragraph, daily volume-weighted average VOC content shall be calculated by using the following equation:

$$\text{VOC}_A = \left[\sum_{i=1}^n C_i V_i \right] / V_T$$

where:

VOC_A is the volume-weighted average VOC content of 2 or more coatings applied on a coating line during any day in kilograms per liter (pounds per gallon) of coating, excluding water

i is the subscript denoting an individual coating

n is the number of different coatings subject to the same numerical emission limitation applied during any day on a coating line

C_i is the VOC content of each coating (i) as applied during any day on the coating line in kilograms per liter (pounds per gallon) of coating, excluding water

V_i is the volume of each coating (i), excluding water, as applied during any day on the coating line in liters (gallons)

V_T is the total volume of all n coatings subject to the same emission limitation, excluding water, applied during any day on the coating line in liters (gallons)

(2) GENERAL METHODS. (intro.) The surface coating emission limitations shall be achieved by one of the following:

(3)(b)(intro.) Compliance under the option provided in this subsection must be approved by the department. This requires that all of the following conditions are met:

SECTION 106. NR 422.05(3) is repealed.

SECTION 107. NR 422.09(2)(c), (3)(a), (c), (e), (f) and (h) and (4)(a), (c) and (e) are repealed.

SECTION 108. NR 422.132(1)(intro.) and (2)(b) are amended to read:

NR 422.132(1)(intro.) APPLICABILITY. Except as provided in pars. (a) to (c), this section applies to the wood entry or passage door coating lines of any wood entry or passage door coating facility. This section does not apply to any of the following:

(2)(b) An owner or operator of a wood entry or passage door coating facility shall only apply coatings using electrostatic application, flow coating, dip coating, a low-pressure spray method, paint brush, hand roller or roll coater. All application equipment shall be in proper operating condition and used in accordance with proper operating procedures.

SECTION 109. NR 422.14(2)(c) is amended to read:

NR 422.14(2)(c) The owner or operator installs and operates one of the following:

SECTION 110. NR 423.02(intro.) is amended to read:

NR 423.02 DEFINITIONS. (intro.) ~~In addition to the definitions in this section, the~~ The definitions contained in chs. NR 400, 419, 420 and 421 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

SECTION 111. NR 423.03(4)(intro.) and (m), (5)(intro.), (6)(a)(intro.) and (b)(intro.) are amended to read:

NR 423.03(4) OPEN TOP VAPOR DEGREASERS. (intro.) Except as provided under sub. (2)(a), (b), (d) and (h), the owner or operator of an open top vapor degreaser shall do all of the following:

(m) Provide a permanent, conspicuous label, summarizing the operating procedures of pars. (e) to (i), and ~~(g)~~ (q) if applicable, and provide supervision or instruction adequate to ensure that the procedures are followed; ~~and~~.

(5) CONVEYORIZED VAPOR DEGREASERS. (intro.) Except as provided under sub. (2)(a), (b), (e) and (h), the owner or operator of a conveyORIZED vapor degreaser shall do all of the following:

(6)(a)(intro.) Control requirements. Except as provided under sub. (2)(a), (b), ~~and (f) and (h)~~, the owner or operator of a conveyORIZED non-vapor degreaser shall:

(b)(intro.) Compliance schedule. The owner or operator of a conveyORIZED non-vapor degreaser subject to the control requirements of par. (a)2. shall ~~meet the following schedule:~~ achieve final compliance on or before May 1, 1988.

SECTION 112. NR 423.03(6)(b)1. to 5. are repealed.

SECTION 113. NR 423.03(9) is amended to read:

NR 423.03(9) EQUIVALENT CONTROL. Any equivalent control system approved by the department under sub. (3)(d)3. or (j), (4)(c)5. or (p), (5)(c)3., (6)(a)2. b. or (7)(d)3. shall be submitted to, and will not become effective for federal purposes until approved by, the administrator ~~of the U.S. environmental protection agency or designee~~ as a source-specific revision to the department's state implementation plan for ozone.

SECTION 114. NR 424.03(1)(a)3. and 4. are amended to read:

NR 424.03(1)(a)3. Enclosed paint spraying operations from which volatile organic compound emissions are never greater than 13.6 kilograms (30 pounds) in any day ~~and never greater than 2.8 kilograms (6.2 pounds) in any hour.~~

4. All other process lines from which volatile organic compound emissions are never greater than 6.8 kilograms (15 pounds) in any day ~~and never greater than 1.4 kilograms (3.1 pounds) in any hour.~~

SECTION 115. NR 424.03(2)(b)(intro.) is renumbered 424.03(2)(b) and amended to read:

NR 424.03(2)(b) Process lines on which construction or modification commenced on or after August 1, 1979, and which are not subject to emission limitations listed elsewhere in chs. NR 419 to 423 shall control volatile organic compound emissions by at least 85%.

SECTION 116. NR 424.03(2)(b)1. and 2. are repealed.

SECTION 117. NR 424.03(2)(c) is created to read:

NR 424.03(2)(c) Where 85% control as required under either par. (a) or (b) has been demonstrated to be technologically infeasible for a specific process line, the owner or operator shall use the latest available control techniques and operating practices demonstrating best current technology, as approved by the department.

SECTION 118. NR 425.03(2)(a)(intro.) is renumbered 425.03(2) and amended to read:

NR 425.03(2) PROCESS AND EMISSION CONTROL EQUIPMENT INSTALLATIONS. Except as provided under sub. (5) and s. NR 425.04, the owner or operator of a VOC emission source proposing to install and operate VOC emission control equipment or replacement process equipment to comply with the emission limiting requirements of chs. NR 419 to 424 ~~may not exceed the deadlines specified for the following increments of progress as measured from~~ shall achieve final compliance within 26 months of the date specified in the effective date table for that source.

SECTION 119. NR 425.03(2)(a)1. to 5. and (b) are repealed.

SECTION 120. NR 425.03(3)(a)(intro.) is amended to read:

NR 425.03(3)(a)(intro.) Except as provided under pars. (b) to (e) and subs. (5) and (7m), the owner or operator of a VOC source proposing to employ low solvent content coating or ink application technology to comply with the requirements of chs. NR 419 to 424 ~~may not exceed the deadlines specified for the following increments of progress as measured from~~ shall achieve final compliance within 28 months of the date specified in the effective date table for that source.

SECTION 121. NR 425.03(3)(a)1. to 7. are repealed.

SECTION 122. NR 425.03(3)(b) is amended to read:

NR 425.03(3)(b) The owner or operator of a can coating or flexible packaging facility proposing to employ low solvent content coating technology to comply with the requirements of s. NR 422.05(2)(d) or 422.07(2) may exceed ~~each of the deadlines~~ the deadline in par. (a) ~~2 to 7~~ by 12 months in developing acceptable can end sealing compounds or coatings for hydrophobic flexible packaging substrates.

SECTION 123. NR 425.03(3)(c)2. is repealed.

SECTION 124. NR 425.03(3)(d)(intro.) is amended to read:

NR 425.03(3)(d)(intro.) The owner or operator of a miscellaneous metal parts and product coating facility proposing to employ low solvent content coating technology to comply with the requirements of s. NR 422.15 may, for extreme performance coatings requiring prolonged product quality evaluation periods, extend final compliance ~~provided;~~ to accommodate the prolonged evaluation period but in no case beyond December 31, 1985.

SECTION 125. NR 425.03(3)(d)1. to 4. are repealed.

SECTION 126. NR 425.03(3)(e)(intro.) is amended to read:

NR 425.03(3)(e)(intro.) Where the department determines that the low solvent content coating or ink application technology has been sufficiently researched and developed for a particular application, the owner or operator of a VOC source proposing to comply with the requirements of chs. NR 419 to 424 through application of low solvent content coatings or inks ~~may not exceed the deadlines specified for the following increments of progress as measured from~~ shall achieve final compliance within 21 months of the date specified in the effective date table for that source.

SECTION 127. NR 425.03(3)(e)1. to 6. and (f) are repealed.

SECTION 128. NR 425.03(4)(a)(intro.) is renumbered 425.03(4) and amended to read:

NR 425.03(4) EQUIPMENT MODIFICATION. Except as provided under subs. (5) and (7m), the owner or operator of a VOC source proposing to comply with the requirements of chs. NR 419 to 424 by modification of existing processing or emission control equipment ~~may not exceed the deadlines specified for the following increments of progress as measured from~~ shall achieve final compliance within 20 months of the date specified in the effective date table for that source.

SECTION 129. NR 425.03(4)(a)1. to 5. and (b) are repealed.

SECTION 130. NR 425.03(5)(a)(intro.) is renumbered 425.03(5) and amended to read:

NR 425.03(5) ALTERNATE COMPLIANCE SCHEDULES. Notwithstanding the deadlines specified in subs. (2) to (4) for any particular source the department may issue or approve a separate compliance schedule ~~with earlier deadlines, if it finds that such a schedule would be feasible, or with later deadlines if it finds that those specified in subs. (2) to (4) would not be feasible. The alternate compliance schedule may be proposed by the owner or operator of a VOC source. If the alternate compliance schedule provides later deadlines, the following conditions shall be met:~~ All alternate compliance schedules proposed or promulgated under this subsection shall provide for compliance of the source with the requirements of chs. NR 419 to 424 not later than December 31, 1982 or, where the owner or operator proposes to comply through development of a new surface coating which is subject to approval by a federal agency, not later than December 31, 1985.

SECTION 131. NR 425.03(5)(a)1. to 4., (b) and (c) are repealed.

SECTION 132. NR 425.03(6)(b)(intro.) is amended to read:

NR 425.03(6)(b)(intro.) Except as provided under sub. (7m), the owner or operator of a source required to undertake a phased compliance program ~~may not exceed the following deadlines:~~ shall achieve final compliance on or before the date specified in the applicable rule or approved compliance plan, but not later than December 31, 1987.

SECTION 133. NR 425.03(6)(b)1. to 3. are repealed.

SECTION 134. NR 425.03(7)(e) is amended to read:

NR 425.03(7)(e) Where a source is not otherwise subject to requirements of this chapter and was previously unregulated under chs. NR 419 to 424, the final compliance plan shall specify reasonable measures to minimize emissions of VOCs during the interim period prior to the final compliance date.

SECTION 135. NR 425.03(7m)(intro.) and (a) are amended to read:

NR 425.03(7m)(intro.) COMPLIANCE SCHEDULE DELAYS. Notwithstanding any compliance schedule approved or issued under this section, the department may approved a new compliance schedule which provides additional time for ~~completion of an increment of progress~~ achieving compliance, provided:

(a) That the owner or operator of the source is able to document to the department's satisfaction that the source is unable to meet the applicable deadline under this section ~~for the increment of progress~~ due to circumstances beyond the owner or operator's control which could not reasonably have been avoided by using all prudent planning;

SECTION 136. NR 425.03(8) is amended to read:

NR 425.03(8) NEW AND MODIFIED SOURCES. Any source on which construction or modification commenced on or after the date specified for ~~such~~ the source category in the effective date table shall meet the emission limitations of chs. NR 419 to 425 upon startup unless the owner or operator of the source demonstrates, to the satisfaction of the department, that compliance upon startup would be technologically infeasible. Such sources shall instead meet a department-specified compliance schedule which provides for interim emission limitations and for ultimate compliance with the emission limitations of chs. NR 419 to 425. Ultimate compliance shall be as soon as practicable but in no event later than the final compliance date applicable to the source ~~would have been required to meet under sub. (2), (3), (4) or (6) if it had been constructed or modified prior to the date specified in the effective date table~~ this chapter or chs. NR 419 to 424.

SECTION 137. NR 425.03(14) is created to read:

NR 425.03(14) ASPHALT SURFACING MATERIALS. (a) This subsection applies only to a facility which prior to the effective date of this rule ... [revisor inserts date] applied an asphalt surfacing material not subject to s. NR 422.16, but which, as a result of the amendment to s. NR 422.02(20) which became effective on the effective date of this rule ... [revisor inserts date], became subject to s. NR 422.16.

(b) The owner or operator of any facility identified under par. (a) shall:

1. Notify the department's bureau of air management in writing by 90 days after the effective date of this rule ... [revisor inserts date]. This notification shall include the name and location of the affected facility and the name, or other unique descriptor, of the asphalt surfacing material identified under par. (a).

2. Achieve final compliance with s. NR 422.16 no later than 3 years after the effective date of this rule ... [revisor inserts date].

(c) The compliance schedule in par. (b) shall only apply to the asphalt surfacing material affected by the amendment to s. NR 422.02(20) which became effective on the effective date of this rule ... [revisor inserts date].

SECTION 138. NR 425.035(2)(f) and (3)(a)3. Note are amended to read:

NR 425.035(2)(f) Certification that the owner of the gasoline dispensing facility is an independent small business marketer if the owner claims exemption from the requirements of s. NR 420.045(2) to (9) by use of s. NR 420.045(1)(d).

(3)(a)3. Note: Operation of a vapor recovery system for the sole purpose of confirming that the system is operating properly is allowed before the system must be in compliance with s. NR 420.045(2).

SECTION 139. NR 425.04(1)(b) is amended to read:

NR 425.04(1)(b) Except for the provisions of s. NR 419.03(1) and (2), the requirements of chs. NR 419 to 425 do not apply to the use or application of insecticides, pesticides or herbicides or to the use or emission of ~~trichlorotrifluoroethane (CFC 113), ethane, methane, methylene chloride or methyl chloroform.~~

organic compounds which have been determined to have negligible photochemical reactivity as listed in s. NR 400.02(100).

SECTION 140. NR 426.04 is amended to read:

NR 426.04 (title) CUPOLA EMISSION LIMITATIONS. No person may cause, allow or permit significant emissions of carbon monoxide from any new cupola the construction or modification of which commenced after April 1, 1972 to be emitted to the ambient air unless such emissions are incinerated at 1,300°F for 0.3 second, or reduced by some other means an equivalent amount. Compliance with this limitation shall be shown to the department on initial startup of the source.

SECTION 141. NR 429.02(intro.) and (1) are amended to read:

NR 429.02 DEFINITIONS. (intro.) ~~In addition to the definitions in this section, the~~ 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) "Open burning" means oxidation from which the products of combustion are emitted directly into the ambient air without passing through a stack or chimney. Open burning does not include the combustion occurring at a properly operated air curtain destructor.

SECTION 142. NR 436.02(intro.) is amended to read:

NR 436.02 DEFINITIONS. (intro.) ~~In addition to the definitions in this section, the~~ 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:

SECTION 143. NR 436.05(2)(b) is amended to read:

NR 436.05(2)(b) Construction or modification of the air contaminant source for which a revision is requested was commenced ~~on or before October 1, 1979~~ the effective date of the requirement for which the revision is requested.

SECTION 144. NR 436.05(2)(bm) is created to read:

NR 436.05(2)(bm) A written request from the owner of operator for a revision is received by the department before the date specified for achieving final compliance with the requirement for which the revision is requested.

SECTION 145. NR 436.05(5) is amended to read:

NR 436.05(5) EFFECTIVE DATE OF VARIANCES. When the department grants, modifies or revokes a source-specific revision to a general RACT requirement which has been approved by the administrator of the U.S. environmental protection agency as part of the state implementation plan, ~~such~~ the revision will not become effective until both the following conditions have been met:

(a) ~~¶~~ The revision has been submitted to the administrator pursuant to applicable law, including but not limited to 42 USC ~~s.~~ 7410, ~~as amended,~~ and 40 CFR parts 51 and 52, ~~as amended,~~ and all such requirements have been met, ~~and.~~

(b) ~~¶~~ The revision has been approved by the administrator or designee as a revision to the state implementation plan.

SECTION 146. NR 438.03(1)(b) and Table 1 are amended to read:

NR 438.03(1)(b) When preparing its emission inventory report, the owner or operator of a facility may rely on information in an approved material safety data sheet. Trace contaminants need not be reported if they constitute less than 1% of the material, or 0.1% of the material if the air contaminant is ~~footnoted as a suspected or confirmed human carcinogen by the American conference of governmental industrial hygienists in the 1994-1995 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, incorporated by reference in s. NR 484.11 listed in Table 3 of s. NR 445.04.~~

Table 1

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Acetaldehyde	75-07-0	6,000

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Acetamide	60-35-5	6,000
Acetic acid	64-19-7	6,000
Acetic anhydride	108-24-7	4,436
Acetonitrile	75-05-8	6,000
Acetophenone	98-86-2	6,000
2-Acetylaminofluorene	53-96-3	6,000
Acrolein	107-02-8	91
Acrylamide	79-06-1	105
Acrylic acid	79-10-7	6,000
Acrylonitrile	107-13-1	12
Adriamycin	23214-92-8	12
Aflatoxins	1402-68-2	12
Aldrin	309-00-2	91
Allyl alcohol	107-18-6	1,829
Allyl chloride	107-05-1	1,093
Aluminum alkyls	7429-90-5 ²	725
Aluminum pyro powders	7429-90-5 ²	1,829
Aluminum soluble salts	7429-90-5 ²	725
2-Aminanthraquinone	117-79-3	125
4-Aminobiphenyl	92-67-1	12
Amitrole	61-82-5	73
³ Ammonia	7664-41-7	6,000
Aniline	62-53-3	3,648
Anisidine	29191-52-4	125
o-Anisidine and o-anisidine hydrochloride	90-04-0 ²	125
Antimony & compounds, as Sb	7440-36-0 ²	179
ANTU	86-88-4	105
Arsenic and inorganic compounds, as As	7440-38-2 ²	12
³ Arsine	7784-42-1	73
Asbestos, all forms	1332-21-4 ²	12
Atrazine	1912-24-9	1,829
Azathioprine	446-86-6	12
Azinphos-methyl	86-50-0	73
Barium, soluble compounds, as Ba	7440-39-3 ²	179
Benomyl	17804-35-2	3,648
Benz(a)anthracene	56-55-3	12
Benzene	71-43-2	150
Benzidine	92-87-5	1.0
Benzo(b)fluoranthene	205-99-2	12
Benzo(j,k)fluorene	206-44-0	12
Benzo(a)phenanthrene (<u>Chrysene</u>)	218-01-9	12
Benzo(a)pyrene	50-32-8	12
Benzotrithloride	98-07-7	125
Benzoyl peroxide	94-36-0	1,829
Benzyl chloride	100-44-7	1,829
Beryllium and beryllium compounds, as Be	7440-41-7 ²	12
Biphenyl	92-52-4	547
N,N-Bis (2-chloroethyl)-2-naphthylamine (Chloronaphazine)	494-03-1	12
Bischloroethyl nitrosourea	154-93-8	12
Bis(chloromethyl) ether (BCME) and technical grade	542-88-1	0.050
Borates, tetra, sodium salts, decahydrate	1303-96-4 ²	1,829
Borates, tetra, sodium salts, pentahydrate	1303-96-4 ²	368
Boron tribromide	10294-33-4	2,218
³ Boron trifluoride	7637-07-2	662
Bromacil	314-40-9	3,648
³ Bromine	7726-95-6	252
³ Bromine pentafluoride	7789-30-2	252
Bromoform	75-25-2	6,000
1,3-Butadiene	106-99-0	6,000
1,4-Butanediol dimethanesulphonate (Myleran)	55-98-1	12
2-Butoxyethanol (EGBE)	111-76-2	6,000
n-Butyl acrylate	141-32-2	6,000

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
n-Butyl alcohol	71-36-3	6,000
n-Butylamine	109-73-9	3,332
tert-Butyl chromate, as Cr	1189-85-1	0.050
n-Butyl glycidyl ether (BGE)	2426-08-6	6,000
n-Butyl lactate	138-22-7	6,000
o-sec-Butylphenol	89-72-5	6,000
p-tert-Butyltoluene	98-51-1	6,000
Cadmium and cadmium compounds, as Cd	7440-43-9 ²	12
Calcium cyanamide	156-62-7	179
Calcium hydroxide	1305-62-0	1,829
Calcium oxide	1305-78-8	725
Camphor (synthetic)	76-22-2	4,373
Caprolactam vapor	105-60-2	6,000
Captafol	2425-06-1	37
Captan	133-06-2	1,829
Carbaryl	63-25-2	1,829
Carbofuran	1563-66-2	37
Carbon black	1333-86-4	1,272
Carbon dioxide	124-38-9	100,000 tons
Carbon disulfide	75-15-0	6,000
Carbon monoxide	630-08-0	10,000
Carbon tetrabromide	558-13-4	515
Carbon tetrachloride	56-23-5	12
Carbonyl fluoride	353-50-4	1,829
Carbonyl sulfide	463-58-1	6,000
Catechol (Pyrocatechol)	120-80-9	6,000
Cesium hydroxide	21351-79-1	725
Chloramben	133-90-4	6,000
Chlorambucil	305-03-3	12
Chlordane	57-74-9	179
Chlorinated camphene (Toxaphene)	8001-35-2 ²	179
Chlorinated dioxins and furans (total equivalents)		0.00005
Chlorinated diphenyl oxide	55720-99-5	179
³ Chlorine	7782-50-5	1,093
³ Chlorine dioxide	10049-04-4	105
³ Chlorine trifluoride	7790-91-2	88
Chloroacetic acid	79-11-8	6,000
2-Chloroacetophenone	532-27-4	6,000
Chlorobenzene (Monochlorobenzene)	108-90-7	6,000
Chlorobenzilate	510-15-6	6,000
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea(CCNU)	13010-47-4	12
³ Chlorofluorocarbon-11 (CFC-11, R-11, Trichlorofluoromethane)	75-69-4	6,000
³ Chlorofluorocarbon-12 (CFC-12, R-12, Dichlorodifluoromethane)	75-71-8	6,000
³ Chlorofluorocarbon-13 (CFC-13, R-13, Chlorotrifluoromethane)	75-72-9	6,000
³ Chlorofluorocarbon-111 (CFC-111)	954-56-3	6,000
³ Chlorofluorocarbon-112 (CFC-112)	76-12-0	6,000
³ Chlorofluorocarbon-113 (CFC-113, R-113, Trichlorotrifluoroethane)	76-13-1	6,000
³ Chlorofluorocarbon-114 (CFC-114, R-114, Dichlorotetrafluoroethane)	76-14-2	6,000
³ Chlorofluorocarbon-115 (CFC-115, R-115, Monochloropentafluoroethane)	76-15-3	6,000
³ Chlorofluorocarbon-211 (CFC-211, R-211)		6,000
³ Chlorofluorocarbon-212 (CFC-212, R-212)		6,000
³ Chlorofluorocarbon-213 (CFC-213, R-213)		6,000
³ Chlorofluorocarbon-214 (CFC-214, R-214)		6,000
³ Chlorofluorocarbon-215 (CFC-215, R-215)		6,000
³ Chlorofluorocarbon-216 (CFC-216, R-216)		6,000
³ Chlorofluorocarbon-217 (CFC-217, R-217)		6,000
Chloroform	67-66-3	125
Chloromethyl methyl ether (CMME)	107-30-2	0.050
1-Chloro-1-nitropropane	600-25-9	3,648
Chloropicrin (Trichloronitromethane)	76-06-2	252
beta-Chloroprene	126-99-8	6,000

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
o-Chlorostyrene	2039-87-4	6,000
o-Chlorotoluene	95-49-8	6,000
Chlorpyrifos	2921-88-2	73
Chromium (II) compounds, as Cr	7440-47-3 ²	179
Chromium (III) compounds, as Cr	7440-47-3 ²	179
Chromium (VI) compounds, as Cr, water soluble	7440-47-3 ²	18
Chromium (VI) compounds, as Cr, water insoluble	7440-47-3 ²	1.0
Chromium (metal)	7440-47-3	179
Chromyl chloride, as Cr	14977-61-8	0.050
Cobalt, as Co, metal, dust	7440-48-4 ²	18
³ Coke oven emissions		12
Copper, dust & mists, as Cu	7440-50-8	368
p-Cresidine	120-71-8	125
Cresol, all isomers	1319-77-3	6,000
m-Cresol	108-39-4	6,000
o-Cresol	95-48-7	6,000
p-Cresol	106-44-5	6,000
Crotonaldehyde	123-73-9 ²	2,943
Cruformate	299-86-5	1,829
Cumene	98-82-8	6,000
Cyanamide	420-04-2	725
Cyanides, (inorganics), as CN	143-33-9 ²	1,829
Cyanogen	460-19-5	6,000
Cyanogen chloride	506-77-4	137
Cyclohexanol	108-93-0	6,000
Cyclohexanone	108-94-1	6,000
Cyclohexylamine	108-91-8	6,000
Cyclopentadiene	542-92-7	6,000
Cyclophosphamide	50-18-0	12
Cyhexatin	13121-70-5	1,829
2,4-D, salts and esters	94-75-7	6,000
DDE	3547-04-4 72-55-9	6,000
Dacarbazine	4342-03-4	12
Demeton	8065-48-3	37
Diacetone alcohol	123-42-2	6,000
2,4-Diaminoanisole sulfate	39156-41-7	125
2,4-Diaminotoluene (2,4-Toluediamine)	95-80-7 ²	125
Diazinon	333-41-5	37
Diazomethane	334-88-3	147
Dibenz(a,h)acridine	226-36-8	12
Dibenz(a,j)acridine	224-42-0	12
Dibenz(a,h)anthracene	53-70-3	12
7H-Dibenzo(c,g)carbazole	194-59-2	12
Dibenzofurans	132-64-9	6,000
Dibenzo(a,h)pyrene	189-64-0	12
Dibenzo(a,i)pyrene	189-55-9	12
³ Diborane	19287-45-7	37
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	125
1,2-Dibromoethane (EDB)	106-93-4	125
2-N-Dibutylaminoethanol	102-81-8	5,109
Dibutyl phthalate	84-74-2	1,829
o-Dichlorobenzene	95-50-1	6,000
p-Dichlorobenzene	106-46-7	6,000
3,3'-Dichlorobenzidine	91-94-1	125
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	73
1,1-Dichloroethane	75-34-3	6,000
1,2-Dichloroethane (EDC)	107-06-2	12
1,2-Dichloroethylene	540-59-0	6,000
Dichloroethyl ether	111-44-4	6,000
1,1-Dichloro-1-nitroethane	594-72-9	3,648
Dichloropropene	542-75-6	1,829
2,2-Dichloropropionic acid	75-99-0	2,186

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Dichlorvos	62-73-7	368
Dicrotophos	141-66-2	91
Dicyclopentadiene	77-73-6	6,000
Diekdrin	60-57-1	91
Diethanolamine	111-42-2	5,477
Diethylamine	109-89-7	6,000
2-Diethylaminoethanol	100-37-8	6,000
Diethylene triamine	111-40-0	1,461
Di(2-ethylhexyl) phthalate (DEHP)	117-81-7	125
Diethyl phthalate	84-66-2	1,829
Diethyl sulfate	64-67-5	12
Diethylstilbestrol (DES)	56-53-1	12
Diglycidyl ether (DGE)	2238-07-5	179
Diisobutyl ketone (DIBK)	108-83-8	6,000
Diisopropylamine	108-18-9	6,000
3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4	125
Dimethyl acetamide	127-19-5	6,000
Dimethylamine	124-40-3	6,000
4-Dimethylaminoazobenzene	60-11-7	125
Dimethylaniline (N,N-Dimethylaniline)	121-69-7	6,000
3,3'-Dimethylbenzidine (o-Tolidine)	119-93-7	125
Dimethyl carbamoyl <u>Dimethylcarbamoyl</u> chloride	79-44-7	125
N,N-Dimethylformamide	68-12-2	6,000
1,1-Dimethylhydrazine	57-14-7	125
Dimethylphthalate	131-11-3	1,829
Dimethyl sulfate	77-78-1	12
Dinitrobenzene, all isomers	528-29-0 ²	368
Dinitro-o-cresol	534-52-1	73
2,4-Dinitrophenol	51-28-5	6,000
Dinitrotoluene	25321-14-6 ²	547
n-Dioctyl phthalate	117-84-0	6,000
1,4-Dioxane	123-91-1	125
Dioxathion	78-34-2	73
Diquat	85-00-7 ²	179
Disulfoton	298-04-4	37
Divinyl benzene	1321-74-0 ²	6,000
Endosulfan	115-29-7	37
Endrin	72-20-8	37
Epichlorohydrin	106-89-8	150
EPN	2104-64-5	179
1,2-Epoxybutane (1,2-Butylene oxide)	106-88-7	6,000
Ethanolamine	141-43-5	2,922
Ethion	563-12-2	147
2-Ethoxyethanol (EGEE)	110-80-5	3,280
2-Ethoxyethyl acetate (EGEEA)	111-15-9	6,000
Ethyl acrylate	140-88-5	6,000
Ethylamine (Ethanamine)	75-04-7	6,000
Ethyl amyl ketone	541-85-5	6,000
Ethyl benzene <u>Ethylbenzene</u>	100-41-4	6,000
Ethyl butyl ketone	106-35-4	6,000
Ethyl chloride (Chloroethane)	75-00-3	6,000
Ethylene chlorohydrin	107-07-3	662
Ethylenediamine	107-15-3	6,000
Ethylene glycol vapor	107-21-1	6,000
Ethylene oxide	75-21-8	12
Ethylene thiourea	96-45-7	125
Ethylenimine (<u>Aziridine</u>)	151-56-4	368
Ethylidene norbornene	16219-75-3	5,550
N-Ethylmorpholine	100-74-3	6,000
Ethyl silicate	78-10-4	6,000
Fensulfothion	115-90-2	37
Fenthion	55-38-9	73

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Fine mineral fibers (includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers $\frac{1}{4}$ or other mineral derived fibers) $\frac{1}{4}$ of average diameter 1 micrometer or less)		6,000
Fluorides, (inorganics), as F		915
³ Fluorine	7782-41-4	725
Fonofos	944-22-9	37
Formaldehyde	50-00-0	125
Furfural	98-01-1	2,922
Furfuryl alcohol	98-00-0	6,000
³ Germanium tetrahydride	7782-65-2	221
Glycidol	556-52-5	6,000
Glycol ethers ⁴		6,000
³ Halon-1211 (Bromochlorodifluoromethane)	353-59-3	6,000
³ Halon-1301 (Bromotrifluoromethane)	75-63-8	6,000
³ Halon-2402 (Dibromotetrafluoroethane)	124-73-2	6,000
Heptachlor	76-44-8	179
Hexachlorobenzene (HCB)	118-74-1	12
Hexachlorobutadiene	87-68-3	46
Hexachlorocyclopentadiene	77-47-4	37
Hexachloroethane	67-72-1	6,000
Hexachloronaphthalene	1335-87-1	73
Hexamethylene-1,6-diisocyanate (HDI)	822-06-0	6,000
Hexamethyl phosphoramidate	680-31-9	125
n-Hexane	110-54-3	6,000
sec-Hexyl acetate	108-84-9	6,000
Hexylene glycol	107-41-5	6,000
Hydrazine and hydrazine sulfate	302-01-2 ²	125
Hydrazobenzene	122-66-7	125
³ Hydrochlorofluorocarbon-21 (HCFC-21, Dichlorofluoromethane)	75-43-4	6,000
³ Hydrochlorofluorocarbon-22 (HCFC-22, R-22, Chlorodifluoromethane)	75-45-6	6,000
³ Hydrochlorofluorocarbon-31 (HCFC-31, R-31, Chlorofluoromethane)	593-70-4	6,000
³ Hydrochlorofluorocarbon-121 (HCFC-121)		6,000
³ Hydrochlorofluorocarbon-122 (HCFC-122)		6,000
³ Hydrochlorofluorocarbon-123 (HCFC-123, R-123)	306-83-2 ²	6,000
³ Hydrochlorofluorocarbon-124 (HCFC-124, R-124)	63938-10-3 ²	6,000
³ Hydrochlorofluorocarbon-131 (HCFC-131)		6,000
³ Hydrochlorofluorocarbon-132b (HCFC-132b)	1649-08-7	6,000
³ Hydrochlorofluorocarbon-133a (HCFC-133a)	75-88-7	6,000
³ Hydrochlorofluorocarbon-141b (HCFC-141b, R-141b)		6,000
³ Hydrochlorofluorocarbon-142b (HCFC-142b, R-142b)	75-68-3	6,000
³ Hydrochlorofluorocarbon-221 (HCFC-221)		6,000
³ Hydrochlorofluorocarbon-222 (HCFC-222)		6,000
³ Hydrochlorofluorocarbon-223 (HCFC-223)		6,000
³ Hydrochlorofluorocarbon-224 (HCFC-224)		6,000
³ Hydrochlorofluorocarbon-225(c)(a) (HCFC-225ca)		6,000
³ Hydrochlorofluorocarbon-225(c)(b) (HCFC-225cb)		6,000
³ Hydrochlorofluorocarbon-226 (HCFC-226)		6,000
³ Hydrochlorofluorocarbon-231 (HCFC-231)		6,000
³ Hydrochlorofluorocarbon-232 (HCFC-232)		6,000
³ Hydrochlorofluorocarbon-233 (HCFC-233)		6,000
³ Hydrochlorofluorocarbon-234 (HCFC-234)		6,000
³ Hydrochlorofluorocarbon-235 (HCFC-235)		6,000
³ Hydrochlorofluorocarbon-241 (HCFC-241)		6,000
³ Hydrochlorofluorocarbon-242 (HCFC-242)		6,000
³ Hydrochlorofluorocarbon-243 (HCFC-243)		6,000
³ Hydrochlorofluorocarbon-244 (HCFC-244)		6,000
³ Hydrochlorofluorocarbon-251 (HCFC-251)		6,000
³ Hydrochlorofluorocarbon-252 (HCFC-252)		6,000
³ Hydrochlorofluorocarbon-253 (HCFC-253)		6,000
³ Hydrochlorofluorocarbon-261 (HCFC-261)		6,000
³ Hydrochlorofluorocarbon-262 (HCFC-262)		6,000
³ Hydrochlorofluorocarbon-271 (HCFC-271)		6,000

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Hydrogenated terphenyls	61788-32-7	1,829
³ Hydrogen bromide	10035-10-6	2,218
³ Hydrogen chloride	7647-01-0	1,556
³ Hydrogen cyanide	74-90-8	2,218
³ Hydrogen fluoride	7664-39-3	557
³ Hydrogen peroxide	7722-84-1	547
³ Hydrogen sulfide	7783-06-4	5,109
Hydroquinone	123-31-9	725
2-Hydroxypropyl acrylate	999-61-1	1,093
Indeno(1,2,3-cd)pyrene	193-39-5	12
Indium	7440-74-6	37
³ Iodine	7553-56-2	221
Iron dextran complex	9004-66-4 ₂	12
Iron salts, soluble, as Fe		368
Isobutyl alcohol	78-83-1	6,000
Isooctyl alcohol	26952-21-6	6,000
Isophorone	78-59-1	5,550
Isophorone diisocyanate	4098-71-9	33
Isopropoxyethanol	109-59-1	6,000
Isopropylamine	75-31-0	4,373
N-Isopropylaniline	768-52-5	3,648
Isopropyl glycidyl ether	4016-14-2	6,000
Ketene	463-51-4	326
Lead compounds	7439-92-1 ²	6,000
Lindane and other hexachlorocyclohexane isomers	58-89-9 ²	12
Maleic anhydride	108-31-6	368
Manganese, as Mn, dust and compounds	7439-96-5 ²	1,114
Melphalan	148-82-3	12
³ Mercury alkyl compounds, as Hg	7439-97-6 ²	3.7
³ Mercury, all forms except alkyl, vapor, as Hg	7439-97-6 ²	18
³ Mercury aryl & inorganic compounds, as Hg	7439-97-6 ²	37
Mesityl oxide	141-79-7	6,000
Mestranol	72-33-3	12
Methacrylic acid	79-41-4	6,000
Methanol	67-56-1	6,000
Methomyl	16752-77-5	915
Methoxychlor	72-43-5	6,000
2-Methoxyethanol (EGME)	109-86-4	5,834
2-Methoxyethyl acetate (EGMEA)	110-49-6	6,000
4-Methoxyphenol	150-76-5	1,829
Methyl acrylate	96-33-3	6,000
Methylacrylonitrile	126-98-7	1,093
Methylamine	74-89-5	4,373
Methyl n-amyl ketone	110-43-0	6,000
N-Methyl aniline	100-61-8	725
Methyl bromide	74-83-9	6,000
Methyl n-butyl ketone (MBK)	591-78-6	6,000
Methyl chloride	74-87-3	6,000
³ Methyl chloroform (1,1,1-Trichloroethane, TCA)	71-55-6	6,000
Methyl 2-cyanoacrylate	137-05-3	2,922
Methylcyclohexanol	25639-42-3	6,000
o-Methylcyclohexanone	583-60-8	6,000
Methyl demeton	8022-00-2	179
4,4'-Methylene bis(2-chloroaniline) (MOCA)	101-14-4	125
Methylene bis(4-cyclohexylisocyanate)	5124-30-1	19
Methylene bisphenyl isocyanate (MDI)	101-68-8	44
³ Methylene chloride	75-09-2	6,000
4,4'-Methylenedianiline (and dihydrochloride)	101-77-9 ²	125
Methyl ethyl ketone (2-Butanone) (MEK)	78-93-3	6,000
Methyl ethyl ketone peroxide	1338-23-4	336
Methyl formate	107-31-3	6,000
Methyl hydrazine <u>Methylhydrazine</u>	60-34-4	336

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Methyl iodide	74-88-4	125
Methyl isoamyl ketone	110-12-3	6,000
Methyl isobutyl carbinol	108-11-2	6,000
Methyl isobutyl ketone (MIBK)	108-10-1	6,000
Methyl isocyanate	624-83-9	18
Methyl methacrylate	80-62-6	6,000
Methyl parathion	298-00-0	73
alpha α -Methyl styrene	98-83-9	6,000
Methyl tert-butyl ether (MTBE)	1634-04-4	6,000
Mevinphos (Phosdrin)	7786-34-7	37
Molybdenum, as Mo, soluble compounds	7439-98-7 ²	1,829
Monocrotophos	6923-22-4	91
Morpholine	110-91-8	6,000
Mustard gas	505-60-2	12
Naled	300-76-5	1,093
Naphthalene	91-20-3	6,000
2-Naphthylamine	91-59-8	12
Nickel compounds other than nickel subsulfide, as Ni	7440-02-0 ²	125
Nickel subsulfide	12035-72-2	12
Nitric acid	7697-37-2	1,829
p-Nitroaniline	100-01-6	1,093
Nitrobenzene	98-95-3	1,829
4-Nitrobiphenyl	92-93-3	6,000
p-Nitrochlorobenzene	100-00-5	233
Nitroethane	79-24-3	6,000
Nitrogen mustards (2,2'-Dichloro-N-methyldiethylamine)	51-75-2 ²	12
³ Nitrogen oxides		10,000
Nitromethane	75-52-5	6,000
4-Nitrophenol	100-02-7	6,000
2-Nitropropane	79-46-9	125
N-Nitrosodi-n-butylamine	924-16-3	12
N-Nitrosodiethanolamine	1116-54-7	12
N-Nitrosodiethylamine	55-18-5	12
N-Nitrosodimethylamine	62-75-9	12
p-Nitrosodiphenylamine	156-10-5	12
N-Nitrosodi-n-propylamine	621-64-7	12
N-Nitroso-N-ethylurea	759-73-9	12
N-Nitroso-N-methylurea	684-93-5	12
N-Nitrosomethylvinylamine	4549-40-0	12
N-Nitrosomorpholine	59-89-2	12
N'-Nitrosonomicotine	16543-55-8	12
N-Nitrosopiperidine	100-75-4	12
N-Nitrosopyrrolidine	930-55-2	12
N-Nitrososarcosine	13256-22-9	12
Nitrotoluene, all isomers	99-08-1 ²	4,016
Octachloronaphthalene	2234-13-1	37
Oestradiol	50-28-2	12
Oxalic acid	144-62-7	368
Oxymetholone	434-07-1	12
Paraquat (respirable sizes)	1910-42-5 ²	37
Parathion	56-38-2 ²	37
³ Particulate matter		10,000
PM ₁₀		10,000
Pentachloronaphthalene	1321-64-8	179
Pentachloronitrobenzene (Quintobenzene) (PCNB)	82-68-8	6,000
Pentachlorophenol	87-86-5	179
³ Perchloroethylene	127-18-4	6,000
Perchloromethyl mercaptan	594-42-3	294
Phenazopyridine and phenazopyridine hydrochloride	136-40-3 ²	12
Phenol	108-95-2	6,000
Phenothiazine	92-84-2	1,829
p-Phenylenediamine	106-50-3	37

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Phenyl ether vapor	101-84-8	2,554
Phenyl glycidyl ether (PGE)	122-60-1	2,186
Phenylhydrazine	100-63-0	3,831
Phenyl mercaptan	108-98-5	725
Phenytoin and sodium salt of phenytoin	57-41-0 ²	12
Phorate	298-02-2	18
Phosgene	75-44-5	147
³ Phosphine	7803-51-2	147
Phosphoric acid	7664-38-2	368
Phosphorus (yellow)	7723-14-0	37
Phosphorus oxychloride	10025-87-3	221
³ Phosphorus pentachloride	10026-13-8	368
Phosphorus pentasulfide	1314-80-3	368
³ Phosphorus trichloride	7719-12-2	547
Phthalic anhydride	85-44-9	2,186
Pindone	83-26-1	37
Platinum (metal)	7440-06-4	368
Platinum, soluble salts, as Pt	7440-06-4 ²	0.73
Polychlorinated biphenyls (PCB)	1336-36-3	0.050
Potassium hydroxide	1310-58-3	442
Procarbazine and procarbazine hydrochloride	366-70-1 ²	12
1,3-Propane sultone	1120-71-4	125
Propargyl alcohol	107-19-7	725
beta-Propiolactone	57-57-8	125
Propionaldehyde	123-38-6	6,000
Propoxur	114-26-1	179
Propylene dichloride	78-87-5	6,000
Propylene oxide	75-56-9	125
Propylenimine	75-55-8	125
Propylthiouracil	51-52-5	12
Pyrethrum	8003-34-7	1,829
Pyridine	110-86-1	5,477
Quinoline	91-22-5	6,000
Quinone	106-51-4	147
Reserpine	50-55-5	12
Resorcinol	108-46-3	6,000
Rhodium (metal)	7440-16-6	368
Rhodium, soluble compounds, as Rh	7440-16-6 ²	3.7
Rotenone (commercial)	83-79-4	1,829
Selenium and compounds, as Se	7782-49-2 ²	73
³ Silicon tetrahydride (Silane)	7803-62-5	2,554
Sodium bisulfite	7631-90-5	1,829
Sodium fluoroacetate	62-74-8	18
Sodium hydroxide	1310-73-2	442
³ Stibine (Antimony hydride)	7803-52-3	179
Stoddard solvent (Mineral spirits)	8052-41-3	6,000
Streptozotocin	18883-66-4	12
Strychnine	57-24-9	55
Styrene, monomer	100-42-5	6,000
Styrene oxide	96-09-3	6,000
Sulfotep (TEDP)	3689-24-5	73
³ Sulfur dioxide	7449-09-5 7446-09-5	10,000
Sulfuric acid	7664-93-9	368
Sulfur monochloride	10025-67-9	1,335
³ Sulfur tetrafluoride	7783-60-0	88
³ Sulfuryl fluoride	2699-79-8	6,000
Tellurium and compounds, as Te	13494-80-9 ²	37
TEPP	107-49-3	18
Terphenyls	26140-60-3	1,114
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.00005
1,1,2,2-Tetrachloroethane	79-34-5	2,554
Tetrachloronaphthalene	1335-88-2	725

Air Contaminant Name	CAS Number ¹	Reporting Level (lbs/yr)
Tetrahydrofuran	109-99-9	6,000
Thallium, soluble compounds, as Tl	7440-28-0 ²	37
² Thionyl chloride	7719-09-7	1,114
Thiourea	62-56-6	125
Thiram	137-26-8	1,829
Tin (metal)	7440-31-5	725
Tin organic compounds, as Sn	7440-31-5 ²	37
Tin oxide & inorganic compounds, except SnH ₄ , as Sn	7440-31-5 ²	725
Titanium tetrachloride	7550-45-0	6,000
Toluene (Toluol)	108-88-3	6,000
Toluene-2,4-diisocyanate (TDI)	584-84-9	15
m-Toluidine	108-44-1	3,280
o-Toluidine	95-53-4 ²	12
² Total reduced sulfur and reduced sulfur compounds		10,000
Tributyl phosphate	126-73-8	915
1,2,4-Trichlorobenzene	120-82-1	6,000
1,1,2-Trichloroethane	79-00-5	6,000
Trichloroethylene (TCE)	79-01-6	6,000
Trichloronaphthalene	1321-65-9	1,829
2,4,5-Trichlorophenol	95-95-4	6,000
2,4,6-Trichlorophenol	88-06-2	6,000
1,2,3-Trichloropropane	96-18-4	6,000
Triethylamine	121-44-8	6,000
Trifluralin	1582-09-8	6,000
Trimellitic anhydride	552-30-7	15
Trimethyl benzene, mixed isomers	25551-13-7 ²	6,000
2,2,4-Trimethylpentane	540-84-1	6,000
Triorthocresyl phosphate	78-30-8	37
Triphenyl phosphate	115-86-6	1,093
Tris(1-aziridinyl)phosphine sulfide	52-24-4	12
Tungsten - as W, insoluble compounds	7440-33-7 ²	1,829
Tungsten - as W, soluble compounds	7440-33-7 ²	368
Uranium (natural), soluble & insoluble compounds, as U	7440-61-1 ²	73
Urethane (Ethyl carbamate)	51-79-6	125
n-Valeraldehyde	110-62-3	6,000
Vanadium, as V ₂ O ₅ , respirable dust and fume	1314-62-1	179
Vinyl acetate	108-05-4	6,000
Vinyl bromide	593-60-2	6,000
Vinyl chloride	75-01-4	150
Vinyl cyclohexene dioxide	106-87-6	6,000
Vinylidene chloride	75-35-4	6,000
Vinyl toluene	25013-15-4 ²	6,000
³ Volatile organic compounds (Reactive organic gases) ²		6,000
Warfarin	81-81-2	37
Xylene, mixed isomers (Xylol)	1330-20-7	6,000
m-Xylene	108-38-3	6,000
o-Xylene	95-47-6	6,000
p-Xylene	106-42-3	6,000
m-Xylene-alpha, alpha', alpha'-diamine	1477-55-0	22
Xylidine, mixed isomers	1300-73-8 ²	912
Zirconium and compounds, as Zr	7440-67-7 ²	1,829

¹ Chemical Abstract Service or CAS numbers refer to the unique chemical abstracts service registry number assigned to a specific chemical, isomer or mixture of chemicals or isomers and recorded in the CAS chemical registry system by the Chemical Abstracts Service, P.O. Box 3012, Columbus OH 43210, phone 1-800-848-5638 ext. 2308.

² Indicates contaminants for which multiple CAS numbers may apply. For contaminants listed as a metal and its compounds, the given CAS number refers to the metal.

³ Indicates contaminants for which a fee will be assessed, under s. NR 410.04.

4 Glycol ethers means any compound which can be described by the following chemical formula:
 $R(OCH_2CH_2)_n-OR'$

Where: $n = 1, 2, \text{ or } 3$

R = alkyl C7 or less

or R = phenyl or alkyl substituted ~~phenol~~ phenyl

R' = H or alkyl C7 or less

or ester, sulfate, phosphate, nitrate or sulfonate

(i.e. any group that will readily come off).

5 Organic compounds which are not volatile organic compounds because of negligible photochemical reactivity are specified in s. NR 400.02(100).

SECTION 147. NR 439.03(1)(c) and (4)(a)(intro.) are amended to read:

NR 439.03(1)(c) After an operation permit has been issued to a source by the department, the owner or operator of the source shall annually, or more frequently if specified in an applicable requirement or in the permit, certify the source's compliance status with the operation permit in accordance with subs. ~~(7)~~ (8) and ~~(9)~~ (10). The methods used to determine compliance status under this paragraph shall be the same methods which are required under s. NR 407.09(1)(c)1.

(4)(a)(intro.) The owner or operator of a source shall report to the department the next business day following the onset, any malfunction or other unscheduled event at the source, not reported in advance to the department, which causes or may cause any emission limitation, including the ~~visual~~ visible emission limit, to be exceeded with the following exceptions:

SECTION 148. NR 439.075(2)(a)(intro.) and 4. are amended to read:

NR 439.075(2)(a)(intro.) Except as provided in sub. (4), the owner or operator of a source identified in this paragraph, with an emission point that has allowable emissions of particulate matter, sulfur dioxide or volatile organic compounds of 100 tons or more per year or allowable emissions of total reduced sulfur of 25 tons or more per year, shall perform compliance emission testing according to the testing schedules in sub. (3).

4. Compliance emission testing for volatile organic compounds is required for an emission point subject to an emission limitation in s. NR 421.03, 421.04, 422.05 to 422.08, 422.09 to 422.155, 423.05 or 424.03 to 424.05 which uses a control device to achieve compliance with the applicable requirements. This test shall include a determination of the overall control efficiency of the control device on the affected emission point.

SECTION 149. NR 439.095(2)(intro.) is amended to read:

NR 439.095(2)(intro.) EXEMPTIONS. The department may grant an exemption from any monitoring requirement of this section for any source which is subject to a continuous emission monitoring requirement under a new source performance standard in ch. NR 440.

SECTION 150. NR 439.095(2)(a) and (b) are repealed.

SECTION 151. NR 445.01(1) is amended to read:

NR 445.01(1) APPLICABILITY. (a) This chapter applies to all air contaminant sources which may emit hazardous pollutants and to their owners and operators. The emission limitations and control requirements of this chapter do not apply to a source of a hazardous air contaminant regulated under chs. NR 446 to 449 for the specific hazardous air contaminants regulated under those chapters or to a source which must meet a national emission standard for a hazardous air pollutant promulgated under section 112 of the federal clean air act (42 USC 7412) for the specific air pollutant regulated under that standard.

(b) Notwithstanding par. (a), after the effective date of emission limitations of this chapter, a source of hazardous air pollutants subject to a national emission standard under section 112 of the act shall continue to comply with the provisions of this chapter provided this is allowed by regulations promulgated under section 112 of the act ~~allow them to do so.~~

SECTION 152. NR 445.02(intro.), (2) and (6) are amended to read:

NR 445.02 DEFINITIONS. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions ~~in this section~~ apply to the terms used in this chapter and in chs. NR 445 446 to 484 468. ~~In addition, the definitions used in ch. NR 400 apply to the terms used in this chapter.~~

(2) "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), ~~and~~ cummingtonite-grunerite (amosite), anthophyllite, and actinolite-tremolite.

(6) "Hazardous air contaminant" means any air contaminant for which no ambient air quality standard is set in ch. NR 404 and which the department determines may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, or may pose a significant threat to human health or the environment. The term hazardous air contaminant includes, but is not limited to, the substances listed in Tables 1 to 4 5 in s. NR 445.04.

SECTION 153. NR 445.04(3)(c)6., (4r)(a)Note, (b)4. and (6)(a)(intro.) and (b)4. are amended to read:

NR 445.04(3)(c)6. Indoor emissions which are exhausted to the ambient air through general building ventilation and which have a threshold limit value established by the American conference of governmental and industrial hygienists in the threshold limit values and biological exposure indices for 1987-1988, incorporated by reference in s. NR 484.11, and for which the source demonstrates to the department that it is in compliance with applicable occupational safety and health administration requirements.

(4r)(a) Note: For the purposes of this ~~section~~ subsection a source shall be considered as a modified source and required to achieve compliance with the provisions of this ~~section~~ subsection only for those hazardous air contaminants not previously emitted or those hazardous air contaminants where there would be an allowed increase in emissions as a result of the modification.

(b)4. Indoor emissions which are exhausted to the ambient air through general building ventilation and which have a threshold limit value established by the American conference of governmental and industrial hygienists, in the threshold limit values and biological exposure indices for 1990-91, incorporated by reference in ~~ch. NR 484~~ s. NR 484.11, and for which the source is in compliance with applicable occupational safety and health administration requirements.

(6)(a) Compliance timing. Except as provided for in pars. (d) , (e) and (f), any source which commences construction or modification ~~on or~~ after October 1, 1988 shall meet the emission limitations in this section upon startup.

(b)4. 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 5 ~~of this section~~ and the hazardous air contaminant listed in Table 1, 2, 4 or 5 ~~of this section~~ constitutes 10,000 parts per million or more of the material or the hazardous air contaminant listed in Table 3 ~~of this section~~ 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 5 of this section at or above the amounts listed in this paragraph subdivision, that material will be presumed not to result in emissions of a hazardous air contaminant unless a hazardous air contaminant is formed in processing the material.

SECTION 154. NR 445.04 Tables 2 and 3 are amended to read:

Table 2
Hazardous Air Contaminants Which Are
Pesticides, Rodenticides, Insecticides,
Herbicides or Fungicides with
Acceptable Ambient Concentrations

Contaminant	CAS Number	Emission Rate in Pounds/Hour*	
		< 25 ft.	≥ 25 ft.
Aldrin	309-00-2	0.020880	0.086400
Amitrole	61-82-5	0.016560	0.067200
ANTU	86-88-4	0.024000	0.100800
Atrazine	1912-24-9	0.417600	1.752000
Azinphos-methyl	86-50-0	0.016560	0.067200
Benomyl	17804-35-2	0.832800	3.480000
Bromacil	314-40-9	0.832800	3.480000
Captafol	2425-06-1	0.008400	0.033600
Captan	133-06-2	0.417600	1.752000
Carbaryl	63-25-2	0.417600	1.752000
Carbofuran	1563-66-2	0.008400	0.033600
Chlordane	57-74-9	0.040800	0.170400
Chlorinated camphene	8001-35-2	0.040800	0.170400
1-Chloro-1-nitropropane	600-25-9	0.832800	3.480000
Chloropicrin (Trichloronitromethane)	76-06-2	0.057600	0.240000
Chlorpyrifos	2921-88-2	0.016560	0.067200
Crufomate	299-86-5	0.417600	1.752000
Cyhexatin	13121-70-5	0.417600	1.752000
Demeton	8065-48-3	0.008400	0.033600
Diazinon	333-41-5	0.008400	0.033600
Dibutyl phthalate	84-74-2	0.417600	1.752000
Dichloropropene	542-75-6	0.417600	1.752000
2,2-Dichloropropionic acid	75-99-0	0.499200	2.088000
Dichlorvos	62-73-7	0.084000	0.336000
Disrotophos	141-66-2	0.020880	0.086400
Dieldrin	60-57-1	0.020880	0.086400
Dinitro-o-cresol	534-52-1	0.016560	0.067200
Dioxathion	78-34-2	0.016560	0.067200

Diquat	85-00-7	0.040800	0.170400
Disulfoton	298-04-4	0.008400	0.033600
Endosulfan	115-29-7	0.008400	0.033600
Endrin	72-20-8	0.008400	0.033600
EPN	2104-64-5	0.040800	0.170400
Ethion	563-12-2	0.033600	0.139200
Fensulfothion	115-90-2	0.008400	0.033600
Fenthion	55-38-9	0.016560	0.067200
Fonofos	944-22-9	0.008400	0.033600
Heptachlor	76-44-8	0.040800	0.170400
Hexachlorobutadiene	87-68-3	0.010520	0.048000
Hexachlorocyclopentadiene	77-47-4	0.008400	0.033600
Methomyl	16752-77-5	0.208800	0.864000
Methyl bromide	74-83-9	1.665600	6.984000
Methyl demeton	8022-00-2	0.040800	0.170400
Methyl parathion	298-00-0	0.016560	0.067200
Mevinphos (Phosdrin)	7786-34-7	0.008400	0.033600
Monocrotophos	6923-22-4	0.020880	0.086400
Naled	300-76-5	0.249600	1.032000
Paraquat (respirable sizes)	<u>4685-14-7</u>		
	1910-42-5	0.008400	0.033600
Parathion	56-38-2	0.008400	0.033600
Phenothiazine	92-84-2	0.417600	1.752000
Phorate	298-02-2	0.004080	0.017040
Pindone	83-26-1	0.008400	0.033600
Propoxur	114-26-1	0.040800	0.170400
Pyrethrum	8003-34-7	0.417600	1.752000
Quinone	106-51-4	0.033600	0.139200
Rotenone (commercial)	83-79-4	0.417600	1.752000
Sodium fluoroacetate	62-74-8	0.004080	0.017040
Stibine (Antimony hydride)	7803-52-3	0.040800	0.170400
Strychnine	57-24-9	0.012480	0.050400
Sulfotep (TEDP)	3689-24-5	0.016560	0.067200
Sulfuryl fluoride	2699-79-8	1.665600	6.984000
TEPP	107-49-3	0.004080	0.017040
Thiram	137-26-8	0.417600	1.752000
Warfarin	81-81-2	0.008400	0.033600

* The notation (c) indicates those contaminants with ceiling limits which are emission rates averaged over a one-hour period. Those contaminants without such a notation are emission rates per hour averaged over a 24 hour period.

Table 3
 Hazardous Air Contaminants Without
 Acceptable Ambient Concentrations
 Requiring Application of
 A. Lowest Achievable Emission Rate for Sources of
 Group A Hazardous Air Contaminants,
 B. Best Available Control Technology for Sources of
 Group B Hazardous Air Contaminants¹

Contaminant	CAS Number	lbs/year ²
GROUP A CONTAMINANTS		
4-Aminobiphenyl	92-67-1	25.0
Arsenic and inorganic compounds, as As	7440-38-2	25.0
Asbestos	1332-21-4	25.0
Benzene	71-43-2	300.0
Benzidine	92-87-5	2.0
Bis(chloromethyl) ether(BCME) and technical grade	542-88-1	0.10
tert-Butyl chromate, as Cr	1189-85-1	0.10
Chloromethyl methyl ether(CMME)	107-30-2	0.10
Chromium (VI), water insoluble compounds, as Cr	7440-47-3	2.0
Chromyl chloride, as Cr	14977-61-8	0.10
Coke oven emissions		25.0
2-Naphthylamine	91-59-8	25.0
Nickel subsulfide	12035-72-2	25.0
Vinyl chloride	75-01-4	300.0
<i>Pharmaceuticals (a total of all listed compounds)</i>		25.0
Azathioprine	446-86-6	
N,N-Bis (2-chloroethyl)-2-naphthylamine (Chloronaphazine)	494-03-1	
1,4-Butanediol dimethanesulphonate (Myleran)	55-98-1	
Chlorambucil	305-03-3	
Cyclophosphamide	50-18-0	
Diethylstilbestrol (DES)	56-53-1	
Melphalan	148-82-3	
Mustard gas	505-60-2	
GROUP B CONTAMINANTS		
Acrylonitrile	107-13-1	25.0
Aflatoxins	1402-68-2	25.0
2-Aminoanthraquinone	117-79-3	250.0
Anisidine	29191-52-4	250.0
o-Anisidine and o-anisidine hydrochloride	90-04-0, 134-29-2	250.0
Benzotrichloride	98-07-7	250.0
Beryllium and beryllium compounds, as Be	7440-41-7	25.0
Cadmium and cadmium compounds, as Cd	7440-43-9	25.0

Contaminant	CAS Number	lbs/year ²
Carbon tetrachloride	56-23-5	25.0
Chloroform	67-66-3	250.0**
p-Cresidine	120-71-8	250.0
2,4-Diaminoanisole sulfate	39156-41-7	250.0
2,4-Diaminotoluene	95-80-7	250.0
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	250.0
1,2-Dibromoethane (EDB)	106-93-4	250.0
3,3'-Dichlorobenzidine	91-94-1	250.0
1,2-Dichloroethane (EDC)	107-06-2	25.0
Di(2-ethylhexyl)phthalate (DEHP)	117-81-7	250.0
Diethyl sulfate	64-67-5	25.0
3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4	250.0
4-Dimethylaminoazobenzene	60-11-7	250.0
3,3'-Dimethylbenzidine (o-Tolidine)	119-93-7	250.0
Dimethyl carbamoyl chloride	79-44-7	250.0
1,1-Dimethylhydrazine	57-14-7	250.0
Dimethyl sulfate	77-78-1	25.0
1,4-Dioxane	123-91-1	250.0
Epichlorohydrin	106-89-8	300.0
Ethylene oxide	75-21-8	25.0
Ethylene thiourea	96-45-7	250.0
Formaldehyde	50-00-0	250.0**
Hexachlorobenzene (HCB)	118-74-1	25.0
Hexamethyl phosphoramide	680-31-9	250.0
Hydrazine and hydrazine sulfate	302-01-2, 10034-93-2	250.0
Hydrazobenzene	122-66-7	250.0
Lindane and other hexachlorocyclohexane isomers	58-89-9	25.0
4,4'-Methylene bis(2-chloroaniline) (MOCA)	101-14-4	250.0
4,4'-Methylenedianiline (and dihydrochloride)	101-77-9, 13552-44-8	250.0
Methyl iodide	74-88-4	250.0
Nickel compounds other than nickel subsulfide, as Ni	7440-02-0	250.0
2-Nitropropane	79-46-9	250.0
Polychlorinated biphenyls (PCB)	1336-36-3	0.10
1,3-Propane sultone	1120-71-4	250.0
β -Propiolactone	57-57-8	250.0
Propylene oxide	75-56-9	250.0
Propylenimine	75-55-8	250.0
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.0001
Thiourea	62-56-6	250.0
o-Toluidine	95-53-4	25.0
Urethane (Ethyl carbamate)	51-79-6	250.0

Contaminant	CAS Number	lbs/year ²
<i>Polycyclic Organic Matter (a total of all listed compounds)</i>		250.0
Benz(a)anthracene	56-55-3	
Benzo(b)fluoranthene	205-99-2	
Benzo(a)pyrene	50-32-8	
Dibenz(a,h)acridine	226-36-8	
Dibenz(a,j)acridine	224-42-0	
Dibenz(a,h)anthracene	53-70-3	
7H-Dibenzo(c,g)carbazole	194-59-2	
Dibenzo(a,h)pyrene	189-64-0	
Dibenzo(a,i)pyrene	189-55-9	
Indeno(1,2,3-cd)pyrene	193-39-5	
<i>Pharmaceuticals (a total of all listed compounds)</i>		250.0
Adriamycin	23214-92-8	
Bischloroethyl nitrosourea	154-93-8	
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	13010-47-4	
Dacarbazine	4342-03-4	
Iron dextran complex	9004-66-4	
Mestranol	72-33-3	
Nitrogen mustard (2,2'-Dichloro-N-methyl-diethylamine)	51-75-2	
Oestradiol	50-28-2	
Oxymetholone	434-07-1	
Phenazopyridine and phenazopyridine hydrochloride	94-78-0, 136-40-3	
Phenytoin and sodium salt of phenytoin	57-41-0, 630-93-3	
Procarbazine and procarbazine hydrochloride	671-16-9, 366-70-1	
Propylthiouracil	51-52-5	
Reserpine	50-55-5	
Streptozotocin	18883-66-4	
Tris(1-aziridinyl)phosphine sulfide	52-24-4	
<i>Nitrosoamines (a total of all listed compounds)</i>		250.0
N-Nitrosodi-n-butylamine	924-16-3	
N-Nitrosodiethanolamine	1116-54-7	
N-Nitrosodiethylamine	55-18-5	
N-Nitrosodimethylamine	62-75-9	
p-Nitrosodiphenylamine	156-10-5	
N-Nitrosodi-n-propylamine	621-64-7	
N-Nitroso-N-ethylurea	759-73-9	
N-Nitroso-N-methylurea	684-93-5	
N-Nitrosomethylvinylamine	4549-40-0	
N-Nitrosomorpholine	59-89-2	
N'-Nitrosornicotine	16543-55-8	
N-Nitrosopiperidine	100-75-4	
N-Nitrosopyrrolidine	930-55-2	
N-Nitrososarcosine	13256-22-9	

- ¹ List of Group A and Group B substances taken from Fourth Annual Report on Carcinogens -- 1985 National Toxicology Program (NTP), U.S. Public Health Service, pursuant to Public Law 95-622.
- ² U.S. Environmental Protection Agency Carcinogen Assessment Group (CAG) reported unit risk values as of January 1, 1988 were used in assigning the de minimus minimis emission limit.
- ^{**} For existing sources, see s. NR 445.05(7).

SECTION 155. NR 445.04 Table 5 is amended to read:

Table 5
Hazardous Air Contaminants With Acceptable Ambient
Concentrations Based on the U.S. Environmental Protection Agency's
Reference Concentration Methodology

Contaminant	CAS Number	Emission Rate in lbs/yr with emission points		Reference Concentration (micrograms per cubic meter)	Total Uncer- tainty Factor	Date of last revision to Wis. Adm. Code
		<25 ft.	≥25 ft.			
Ammonia	7664-41-7	21,039	91,264	100	30	January 1, 1995
Bromomethane	74-83-9	631,174	2,737,907	3000	100	January 1, 1995
1,2-Dichloropropane	78-87-5	842	3651	4	300	January 1, 1995
1,3-Dichloropropene	542-75-6	4208	18,253	20	30	January 1, 1995
Diesel engine emissions		1052 ¹	4563 ¹	5	30	January 1, 1995
N,N-Dimethylformamide	68-12-2	6312	27,380	30	300	January 1, 1995
Epichlorohydrin	106-89-8	210	913	1	300	January 1, 1995
Ethyl chloride	75-00-3	2,103,914	9,126,358	10,000	300	January 1, 1995
Ethyl benzene	100-41-4	210,391	912,636	1000	300	January 1, 1995
n-Hexane	110-54-3	42,078	182,527	200	300	January 1, 1995
Mercury (inorganic)	7439-97-6	63	274	0.3	30	January 1, 1995
Methyl tert-butyl ether	1634-04-4	631,174	2,737,907	3000	100	January 1, 1995
Propylene glycol monomethyl ether	107-98-2	420,783	1,825,272	2000	300	January 1, 1995
Propylene oxide	75-56-9	6312	27,380	30	100	January 1, 1995
Styrene	100-42-5	210,391	912,636	1000	30	January 1, 1995
Toluene	108-88-3	84,157	365,054	400	300	January 1, 1995
Vinyl acetate	108-05-4	42,078	182,527	200	30	January 1, 1995

¹ As measured by federal test procedures for particulate diesel engine emissions.

SECTION 156. NR 445.05(3)(a) and (c)7., (4r)(b)4. and (6)(bm)4.(intro.), (c) and (e) are amended to read:

NR 445.05(3)(a) Group A. Except as provided in par. (c), the owner or operator of any facility on which construction or modification last commenced on or before October 1, 1988 and which emits any hazardous air contaminant listed in group A of Table 3 of s. NR 445.04 in amounts greater than those listed in group A of ~~Table 3 of s. NR 445.04~~ this table shall control emissions of those hazardous air contaminants to a level which is the lowest achievable emission rate. The lowest achievable emission rate shall be met by the emissions unit at the facility which emits the greatest amount of the hazardous air contaminant. If application of the lowest achievable emission rate to this emissions unit does not reduce facility emissions of the hazardous air contaminant to a level less than the rate listed in group A of Table 3 ~~of s. NR 445.04~~ for the hazardous air contaminant, then the lowest achievable emission rate shall be met by other emissions units at the facility which emit decreasingly smaller amounts of the hazardous air contaminant until emissions from the facility are below the emission rate listed in group A of Table 3 ~~of s. NR 445.04~~ or until all emissions units at the facility which emit at least 10% of the rate listed in group A of Table 3 ~~of s. NR 445.04~~ for the hazardous air contaminant have met the lowest achievable emissions rate. If application of lowest achievable emissions rate to these emissions units does not result in the control of at least 50% of the potential emissions of the hazardous air contaminant from the facility, then the department may require application of lowest achievable emission rate on a reasonable array of smaller emissions units which emit the hazardous air contaminant.

(c)7. Indoor emissions which are exhausted to the ambient air through general building ventilation and which have a threshold limit value established by the American conference of governmental industrial hygienists in the threshold limit values and biological exposure indices for 1987-1988, incorporated by reference in s. NR 484.11, and for which the source demonstrates to the department that it is in compliance with applicable occupational safety and health administration requirements.

(4r)(b)4. Indoor emissions which are exhausted to the ambient air through general building ventilation and which have a threshold limit value established by the American conference of governmental ~~and~~ industrial hygienists, in the threshold limit values and biological exposure indices for 1990-91, incorporated by reference in ~~ch. NR 484~~ s. NR 484.11, and for which the source is in compliance with applicable occupational safety and health administration requirements.

(6)(bm)4.(intro.) ~~Achieve final~~ Final compliance with sub. (4r)(a) shall be achieved according to the following schedule:

(c) Department review. The department shall review any compliance plan submitted under par. (a), (am) or (bm) to determine whether the control technology is adequate. Department approval, conditional approval or disapproval of any compliance plan shall be completed within 6 months after the applicable deadline date provided in par. (a)1. b., 2. b., 3. b., (am)2. or (bm)3. If the department does not complete its review and approve, disapprove or conditionally approve a source's compliance plan within 6 months after the applicable deadline date provided in par. (a)1. b., 2. b., 3. b., (am)2. or (bm)3., the source's compliance ~~requirements~~ deadline under par. (a)1. c., 2. c., 3. c., (am)3. or (bm)3 ~~4.~~ shall be extended by 6 additional months.

(e)1. The owner or operator of a source which has achieved compliance with this section by installing emission control equipment may not be required to install additional control equipment to achieve compliance with this section for a period of 10 years after the installation of the control equipment or the useful life of the control equipment as determined by the department, whichever is less. For the ~~purpose~~ purposes of this subdivision, increasing stack height, other dilution measures, or material reformulations may not be construed as installation of emission control equipment. Material reformulation which requires substantial capital expenditures for process equipment which was made with prior department approval and which results in a reduction of emissions of hazardous air contaminants which is sufficient to comply with the limitations of this section, may be construed as installation of emission control equipment under this subdivision.

2. The owner or operator of a source which has achieved compliance with sub. (4r)(a) may not be required to meet additional requirements under this section if the reference concentration, as listed in Table 5 of s. NR 445.04, is amended after the effective date of a national emission standard applicable to the source which is promulgated under section 112 of the act for that hazardous air contaminant.

SECTION 157. NR 447.02(intro.) is amended to read:

NR 447.02 Definitions. (intro.) ~~In addition to the definitions in this section, the~~ The definitions contained in chs. NR 400 and 445 apply to the terms used in this chapter. ~~The~~ In addition, the following definitions apply to the terms used in this chapter:

SECTION 158. NR 447.02(4) is repealed.

SECTION 159. NR 447.02(16) and (18) Note are amended to read:

NR 447.02(16) "Friable asbestos material" means any material containing more than 1 % asbestos as determined using the method specified in ~~appendix Appendix A of subpart~~ Subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy, incorporated by reference in ~~ch. NR 484 s. NR 484.04~~, that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. If the asbestos content of the friable ACM is less than 10%, as determined by a method other than point counting by polarized light microscopy (PLM), the asbestos content shall be verified by point counting using PLM.

(18) Note: Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in ~~the Occupational Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos in 29 CFR 1926.58, appendix Appendix G,~~ incorporated by reference in ~~ch. NR 484 s. NR 484.04~~.

SECTION 160. NR 447.07(3)(a) and (d)(intro.) are amended to read:

NR 447.07(3)(a) At least 10 working days before asbestos stripping or removal work or any other activity begins, such as site preparation that would ~~breakup~~ break up, dislodge or similarly disturb asbestos material, if the operation is described in s. NR 447.06(2)(a) ~~and or~~ (d)1. If the operation is as described in s. NR 447.06(2)(b), notification is required 10 working days before demolition begins.

(d)(intro.) For asbestos stripping or removal work in a demolition or renovation operation, described in s. NR 447.06(2)(a) ~~and or~~ (d)1., and for demolition described in s. NR 447.06(2)(b) that will begin on a date other than the one contained in the original notice, the owner or operator shall provide notice of the new start date to the department as follows:

SECTION 161. NR 447.12(3)(b) Note is amended to read:

NR 447.12(3)(b) Note: To obtain approval for an alternative method, a written application ~~shall~~ must be submitted to the administrator of the U.S. Environmental Protection Agency demonstrating that the following criteria are met:

1. The alternative method will control asbestos emissions equivalent to currently required methods.
2. The suitability of the alternative method for the intended application.
3. The alternative method will not violate other regulations.
4. The alternative method will not result in increased water pollution, land pollution or occupational hazards.

SECTION 162. NR 447.16(2) is amended to read:

NR 447.16(2) The information required by sub. (1) shall accompany the information required by 40 CFR 61.10, ~~incorporated by reference in ch. NR 484~~. Active waste disposal sites subject to s. NR 447.17 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of 40 CFR 61.10(a). The information described in this section shall be reported using the format of Appendix A of 40 CFR part 61, incorporated by reference in ~~ch. NR 484~~ s. NR 484.04, as a guide.

SECTION 163. NR 447.18(1) Note is amended to read:

NR 447.18(1) Note: To obtain approval, the owner or operator must provide the administrator with ~~the~~ an application to construct pursuant to 40 CFR ~~section~~ 61.07, ~~incorporated by reference in ch. NR 484~~. In addition to the information requirements of 40 CFR ~~section~~ 61.07(b)(3), the owner or operator must provide descriptions of:

1. The waste feed handling and temporary storage.
2. The process operating conditions.
3. The handling and temporary storage of the end product.
4. The protocol to be followed when analyzing output materials by transmission electron microscopy.

The performance test protocol, including provisions for obtaining information required under sub. (2), must also be provided. The administrator may require that a demonstration of the process be performed prior to approval of the application to construct.

SECTION 164. NR 448.02(intro.) is amended to read:

NR 448.02 DEFINITIONS. (intro.) ~~In addition to the definitions in this section, the~~ The definitions contained in chs. NR 400 and 445 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

SECTION 165. NR 448.04(2) is amended to read:

NR 448.04(2) ~~Emission~~ Emissions to the atmosphere from rocket-motor test sites may not cause time-weighted atmospheric ~~concentration~~ concentrations of beryllium to exceed 75 microgram minutes per cubic meter of air within the limits of 10 to 60 minutes accumulated during any 2 consecutive weeks, in any area in which an effect adverse to public health would occur.

SECTION 166. NR 449.02(intro.) is amended to read:

NR 449.02 DEFINITIONS. (intro.) ~~In addition to the definitions in this chapter, the~~ The definitions contained in chs. NR 400 and 445 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

SECTION 167. NR 449.09(6)(a)3. and 4., (d)2. and (e)1.(intro.) are amended to read:

NR 449.09(6)(a)3. For gas streams containing more than 10% oxygen the concentration of vinyl chloride as determined by ~~Test~~ Method 106 shall be corrected to 10% oxygen (dry basis) for determination of emissions by using the following equation:

$$C_{b \text{ (corrected)}} = C_b \frac{10.9}{20.9 - \text{percent } O_2}$$

where:

$C_{b \text{ (corrected)}}$ is the concentration of vinyl chloride in the exhaust gases, corrected to 10% oxygen,

C_b is the concentration of vinyl chloride as measured by ~~Test~~ Method 106

20.9 ~~equals~~ is the percent oxygen in the ambient air at standard conditions

10.9 is the percent oxygen in the ambient air at standard conditions minus the 10% oxygen to which the correction is being made

percent O₂ is the percent oxygen in the exhaust gas as measured by ~~Reference~~ Method 3 of 40 CFR part 60, Appendix A, incorporated by reference in ~~ch. NR 484.~~ s. NR 484.04

4. For those emission sources where the emission limit is prescribed in terms of mass rather than concentration, mass emissions in kilograms/ per 100 kilograms product shall be determined by using the following equation:

$$C_{BX} = [C_b(2.60)Q(10^{-6})] [100]/Z$$

where:

C_{BX} ~~equals is~~ the kilograms kg vinyl chloride/100 kilograms kg product

C_b is the concentration of vinyl chloride as measured by ~~Test~~ Method 106

2.60 equals the density of vinyl chloride at one atmosphere and 20°C in ~~kilograms/cubic meter~~ kg/m³

Q is the volumetric flow rate in ~~cubic meters/hour~~ m³/hr as determined by ~~Reference~~ Method 2 of 40 CFR part 60, Appendix A, incorporated by reference in ~~ch. NR 484~~ s. NR 484.04

10⁻⁶ is the conversion factor for parts per million

Z is the production rate (kilograms/hour)

(d)2. ~~Test~~ Method 107 of 40 CFR part 61, Appendix B, incorporated by reference in ~~ch. NR 484~~ s. NR 484.04, shall be used to determine the concentration of vinyl chloride in each inprocess wastewater stream subject to the emission limit prescribed in s. NR 449.06(5). The mass of vinyl chloride in kilograms/ per 100 kilograms product in each inprocess wastewater stream shall be determined by using the following equation:

$$C_{BX} = [C_d R(10^{-6})] [100]/Z$$

where:

C_{BX} ~~equals is~~ the kilograms kg vinyl chloride/100 ~~Kg~~ kg product

C_d is the concentration of vinyl chloride as measured by ~~Test Method 107 of 40 CFR part 61, Appendix B, incorporated by reference in ch. NR 484~~

R is the water flow rate in ~~liters/hour~~ l/hr determined in accordance with a method which has been submitted to and approved by the department

10^{-6} is the conversion factor for parts per million

Z is the production rate (~~kilograms/hour~~) (kg/hr), determined in accordance with a method which has been submitted and approved by the department

(e)1.(intro.) Except as provided in subd. 2., the vinyl chloride reactor opening loss shall be determined using the following equation:

$$C = W(2.60)(10^{-6})(C_b)/YZ$$

where:

C ~~equals~~ is the ~~kilogram~~ kg vinyl chloride emissions/~~kilogram~~ kg product

W is the capacity of the vinyl chloride reactor in ~~cubic meters~~ m^3

2.60 is the density of vinyl chloride at one atmosphere and 20°C in ~~kilogram/cubic meters~~ kg/m^3

10^{-6} is the conversion factor for ~~parts per million~~ ppm

C_b ~~equals parts per million~~ is ppm by volume vinyl chloride as determined by ~~Test Method 106 of 40 CFR part 61, Appendix B, incorporated by reference in ch. NR 484~~ s. NR 484.04, or by a portable hydrocarbon detector which measures hydrocarbons with a sensitivity of at least 10 ~~parts per million~~ ppm

Y is the number of batches since the vinyl chloride reactor was last opened to the atmosphere

Z is the average ~~kilogram~~ kg of polyvinyl chloride produced per batch in the ~~number of~~ batches since the vinyl chloride reactor was last opened to the atmosphere

SECTION 168. NR 449.12(3)(a) and (b)5. are amended to read:

NR 449.12(3)(a) The owner or operator shall include in the report a record of any emissions which averaged over any hour period (commencing on the hour) are in excess of the emission limits prescribed in s.

NR 449.04(1) or (2), 449.05(1) or 449.06(1)(a), (2), (3) or (4), or for any control system to which reactor emissions are required to be ducted in s. NR 449.06(1)(b) or to which fugitive emissions are required to be ducted in s. NR 449.07(2)(a)2., (b), (e), (f)2. or (i)2. The emissions shall be measured in accordance with s. NR 449.10.

(b)5. The report to the department by the owner or operator shall include the vinyl chloride content found in each sample required by subds. 1. and 2., averaged separately for each type of resin, over each calendar day and weighted according to the quantity of each grade of resin processed by the stripper or strippers that calendar day, according to the following equation:

$$A_{T_i} = \frac{\sum_{i=1}^n P_{G_i} M_{G_i}}{Q_{T_i}} = \frac{P_{G_1} M_{G_1} + P_{G_2} M_{G_2} + \dots + P_{G_n} M_{G_n}}{Q_{T_i}}$$

where:

A_{T_i} is the 24-hour average concentration of type T_i resin in ppm (dry weight basis)

Q_{T_i} is the total production of type T_i resin over the 24-hour period in kilograms

T_i is the type of resin

~~$i = 1, 2 \dots m$ where m is total number of resin types produced during the 24-hour period~~

M_{G_i} is the concentration of vinyl chloride in one sample of grade G_i resin in parts per million

P_{G_i} is the production of grade G_i resin represented by the sample in kilograms

G_i is the grade of resin (e.g., G_1 , G_2 and G_3)

n is the total number of grades of resin produced during the 24-hour period

SECTION 169. NR 484.03(5) and (6) are repealed.

SECTION 170. NR 484.04(18) is amended to read:

CFR Appendix Referenced.	Title	Incorporated by Reference For
NR 484.04(18) 40 CFR part 61 Appendix B	Test Methods	<u>NR 400.02(77)</u> NR 445.02(9m) NR 446 to NR 483

SECTION 171. NR 484.04(18m) is created to read:

CFR Appendix Referenced	Title	Incorporated by Reference For
NR 484.04(18m) 40 CFR part 63 Appendix A	Test Methods	NR 400.02(77)

SECTION 172. NR 484.05(3) as affected by Clearinghouse Rule 94-184 is amended to read:

Document Reference	Document Title	Incorporated by Reference For
NR 484.05(3) NTIS Order No. PB93-192664	Metropolitan Areas, 1993	NR 411.02(6) <u>400.02(53p)</u>

SECTION 173. NR 484.11(1)(a) is amended to read:

Document No.	Title	Incorporated by Reference For
NR 484.11(1)(a) ISBN: 0-936712-72-4	1987-1988 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices	NR 445.04(1)(a)1. NR 445.04(1)(a)2. NR 445.04(1)(b) NR 445.04(2)(a) NR 445.04(2)(b) <u>NR 445.04(3)(c)6.</u> NR 445.05(1)(a)1. NR 445.05(1)(a)2. NR 445.05(1)(b) NR 445.05(2)(a) NR 445.05(2)(b) <u>NR 445.05(3)(c)7.</u>

SECTION 174. NR 484.11(1)(c) is repealed.

SECTION 175. NR 485.045(1)(a) is repealed.

SECTION 176. NR 488.02(2) Note is amended to read:

NR 488.02(2) Note: "Ozone-depleting refrigerant" is defined in the referenced statute as "a substance used in refrigeration that is or contains a class I substance, as defined in 42 USC 7671 (3) or a class II substance, as defined in 42 USC 7671 (4)." Examples of ozone-depleting refrigerants include, but are not limited to, chlorofluorocarbons such as R-11, R-12, R-113, R-114, R-115, R-500, and R-502 and hydrochlorofluorocarbons such as R-22.

SECTION 177. NR 488.03(3)(b) Note is amended to read:

NR 488.03(3)(b) Note: Tanks used to transport or store recovered refrigerant should meet the appropriate federal department of transportation requirements as specified in ~~Title 49 of the Code of Federal Regulations~~ CFR parts 173, 178 and 179.

SECTION 178. NR 488.04(3) Note is amended to read:

NR 488.04(3) Note: Requests for forms for registration under this section, and other items listed in this rule chapter, should be directed to: Bureau of Air Management ~~CFC NR 488~~ Program, Department of Natural Resources, PO Box 7921, Madison, WI 53707.

SECTION 179. NR 488.06(1)(d) Note is repealed.

SECTION 180. NR 488.08 Note is amended to read:

Note: ~~For example, training~~ Training for refrigerant recovery from salvaged vehicle air conditioners can be provided by programs approved by the Wisconsin department of agriculture, trade and consumer protection. Training for refrigerant recovery from stationary equipment such as appliances can be provided by programs approved by the Wisconsin department of industry, labor and human relations.

SECTION 181. NR 488.11(1)(b) is amended to read:

NR 488.11(1)(b) Persons applying for annual registration to salvage or dismantle refrigeration equipment under s. NR 488.04 and who are already registered for refrigerant recovery with the department of agriculture,

trade & consumer protection under ch. ~~Ag~~ ATCP 136 or the department of industry, labor & human relations under ch. ILHR 45 and who salvage or dismantle as a minor activity incidental to providing service to their customers shall submit a nonrefundable fee of \$125.00.

SECTION 182. NR 493.02(intro.) is amended to read:

NR 493.02 DEFINITIONS. (intro.) ~~In addition to the definitions in this section, the~~ 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:

SECTION 183. NR 493.02(2) is repealed.

SECTION 184. NR 493.04(2) and (3) are amended to read:

NR 493.04(2) Emission control action programs as required under sub. (1) shall be in writing and show the source of air contamination, the approximate amount of reduction of contaminants, the approximate time required to ~~effect~~ affect the program, a brief description of the manner in which the reduction will be achieved during each stage of an air pollution episode declared under s. NR 493.03(2), and such other information as the department deems pertinent.

(3) The emission control action programs as required by sub. (1) shall be made available at all times on the premises of the operation to any person authorized to enforce the provisions of the department's episode procedure. A brief written description of the overall emission control action program, and the details of the program which ~~effect~~ affect specific functions of the overall operation, shall be posted at the locations where the functions are carried out.

SECTION 185. NR 499.06(2)(intro.), (e) and (g) are amended to read:

NR 499.06(2)(intro.) A shift operator's duties and responsibilities include, but are not limited to, all of the following:

(e) Communicating the operational status of the facility with the relieving shift operator at shift turnover; ~~and~~.

(g) For facilities without pollution control devices that do not require a chief facility operator, ~~the shift operator shall perform~~ performing the duties and responsibilities in sub. (1).

SECTION 186. NR 499.07(2)(intro.) is amended to read:

NR 499.07(2) TRAINING PROGRAM REQUIREMENTS. Training programs shall meet the requirements of this section and be approved by the department under s. NR 499.08. Training programs shall include, at a minimum, 24 hours of instruction for shift operators and an additional 8 hours of instruction for chief facility operators. ~~Training programs for operators shall include, at a minimum, instruction on the following subjects:~~

(a) Training programs for shift operators shall include, at a minimum, instruction on the following subjects:

SECTION 187. NR 499.07(2)(a) to (m) are renumbered 499.07(2)(a)1. to 13.

SECTION 188. NR 499.07(2)(n)(intro.) is renumbered 499.07(2)(b)(intro.) and amended to read:

NR 499.07(2)(b)(intro.) In addition to covering the subjects in par. (a), training programs for chief facility operators shall include instruction on the following subjects:

SECTION 189. CROSS-REFERENCE CHANGES. In the sections of the code listed in Column A, the cross-references shown in Column B are changed to the cross-references shown in Column C.

A	B	C
Code section	Old Cross-Reference	New Cross-Reference
NR 404.02(4m)	ch. NR 484 (1st ref.)	s. NR 484.04
NR 404.02(4m)	ch. NR 484 (2nd ref.)	s. NR 484.03
NR 404.02(8)	ch. NR 484	s. NR 484.04
NR 404.02(11)	ch. NR 484	s. NR 484.04
NR 404.04(5)	ch. NR 484	s. NR 484.04
NR 404.04(8)(b)3.	ch. NR 484	s. NR 484.04
NR 404.06(2)	ch. NR 484	s. NR 484.04

NR 404.06(3)(b)	ch. NR 484	s. NR 484.03
NR 405.02(8)	ch. NR 484	s. NR 484.05
NR 405.11(1)(e)	ch. NR 484	s. NR 484.04
NR 405.11(3)	ch. NR 484	s. NR 484.04
NR 406.02(3)	ch. NR 484	s. NR 484.05
NR 408.02(5)	ch. NR 484	s. NR 484.05
NR 410.02(4)	ch. NR 484	s. NR 484.05
NR 415.07(2)(a)4.	ch. NR 484	s. NR 484.11
NR 415.075(3)(c)	ch. NR 484	s. NR 484.04
NR 421.02(2e)	ch. NR 484	s. NR 484.05
NR 421.02(11e)	ch. NR 484	s. NR 484.05
NR 421.02(12m)	ch. NR 484	s. NR 484.04
NR 421.04(3)(c)1.	ch. NR 484	s. NR 484.11
NR 421.04(3)(c)2.	ch. NR 484	s. NR 484.05
NR 421.05(2)(e)	ch. NR 484	s. NR 484.04
NR 421.06(2)(e)	ch. NR 484	s. NR 484.04
NR 422.02(21m)	ch. NR 484	s. NR 484.11
NR 422.15(1)(intro.)	ch. NR 484	s. NR 484.05
NR 445.02(9m)	ch. NR 484	s. NR 484.04
NR 445.04(1)(a)1.	ch. NR 484	s. NR 484.11
NR 445.04(1)(a)2.	ch. NR 484	s. NR 484.11
NR 445.04(1)(b)	ch. NR 484	s. NR 484.11
NR 445.04(2)(a)	ch. NR 484	s. NR 484.11
NR 445.04(2)(b)	ch. NR 484	s. NR 484.11
NR 445.04(4)(a)1.	ch. NR 484	s. NR 484.11
NR 445.04(4)(a)2.	ch. NR 484	s. NR 484.11
NR 445.04(4)(b)	ch. NR 484	s. NR 484.11
NR 445.05(1)(a)1.	ch. NR 484	s. NR 484.11
NR 445.05(1)(a)2.	ch. NR 484	s. NR 484.11
NR 445.05(1)(b)	ch. NR 484	s. NR 484.11
NR 445.05(2)(a)	ch. NR 484	s. NR 484.11
NR 445.05(2)(b)	ch. NR 484	s. NR 484.11
NR 445.05(4)(a)1.	ch. NR 484	s. NR 484.11
NR 445.05(4)(a)2.	ch. NR 484	s. NR 484.11
NR 445.05(4)(b)	ch. NR 484	s. NR 484.11
NR 445.06(4)	ch. NR 484	s. NR 484.11
NR 446.02(10m)	ch. NR 484	s. NR 484.04
NR 447.02(1)(a)	ch. NR 484	s. NR 484.04
NR 447.02(27)	ch. NR 484	s. NR 484.04
NR 447.02(36)	ch. NR 484	s. NR 484.04
NR 447.04(2)(c)	ch. NR 484	s. NR 484.06
NR 447.09(1)(a)	ch. NR 484	s. NR 484.04
NR 447.12(4)(a)2.	ch. NR 484	s. NR 484.03
NR 447.13(1)(a)1.	ch. NR 484	s. NR 484.03
NR 447.14(2)(a)2.	ch. NR 484	s. NR 484.03
NR 447.15(1)(a)1.	ch. NR 484	s. NR 484.10
NR 447.17(2)(a)2.	ch. NR 484	s. NR 484.03
NR 448.04(4)(a)1.	ch. NR 484	s. NR 484.04
NR 448.04(4)(a)2.	ch. NR 484	s. NR 484.04
NR 449.07(2)(h)3.a.	ch. NR 484	s. NR 484.04
NR 449.07(2)(h)3.b.	ch. NR 484	s. NR 484.04
NR 449.07(3)	ch. NR 484	s. NR 484.04
NR 449.09(6)(intro.)	ch. NR 484	s. NR 484.04
NR 449.09(6)(a)(intro.)	ch. NR 484	s. NR 484.04
NR 449.09(6)(b)	ch. NR 484	s. NR 484.04
NR 449.09(6)(c)(intro.)	ch. NR 484	s. NR 484.04
NR 449.09(6)(d)1.	ch. NR 484	s. NR 484.04
NR 449.10(3)(a)	ch. NR 484	s. NR 484.04

NR 449.10(3)(b)
NR 449.12(3)(intro.)
NR 449.12(3)(b)(intro.)

ch. NR 484
ch. NR 484
ch. NR 484

s. NR 484.04
s. NR 484.04
s. NR 484.04

SECTION 190. TERMINOLOGY CHANGES.

Wherever the term "appendix A of subpart F" appears in the following sections of the code, the term "Appendix A to Subpart F" is substituted: NR 447.02(1)(a) and (b), (16), (27) and (36) and 447.09(1)(a) and (b).

Wherever the term "BTU" or "btu" appears in the following sections of the code, the term "Btu" is substituted: NR 408.02(21)(e)7. and 8., 417.07(2)(a) to (d), (g)1. and 2., (3)(a) and (b), (e)1. and 2., (5)(c) and (g), 418.03(1)(a), (b)(intro.), 1., 2.a. to c., 418.05(1)(c)1. and 2., (d)1. to 3., (e)1. and 2., (f)1., (g)1., (4)(a) and (b), 418.06(1)(a) and (b), 418.07(1)(a)1. and 2., 418.08(1)(a)1. and 2., 438.04(3)(e)7. and 440.686(6)(e).

Wherever the term "CFC Program" appears in the following sections of the code, the term "NR 488 Program" is substituted: NR 488.05(1)(b) Note, 488.07(2) Note, 488.09(2) Note and (3) Note and 488.10(1) Note.

Wherever the term "record keeping" appears in the following sections of the code, the term "recordkeeping" is substituted: NR 447.01(2), 447.03(2)(b)2., 447.05(2)(c)2., 447.08(8) and 447.10(2)(c)2.

Wherever the term "start-up" appears in the following sections of the code, the term "startup" is substituted: NR 447.16(1)(intro.) and 447.18(2)(intro.), (3)(a) and (b), (4)(a)(intro.), (6)(a) and (8).

Wherever the term "Test Method" appears in the following sections of the code, the term "Method" is substituted: NR 449.07(2)(h)3.a. and b. and (3), 449.09(6)(intro.), (a)(intro.), (b), (c)(intro.) and (d)1., 449.10(3)(a) and (b), 449.12(3)(intro.) and (b)(intro.).

Wherever the term "ug/" appears in the following sections of the code, the term "µg/" is substituted: NR 493.03(2) Table 1.

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on June 29, 1995.

The rule shall take effect the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By George E. Meyer
George E. Meyer, Secretary



(SEAL)