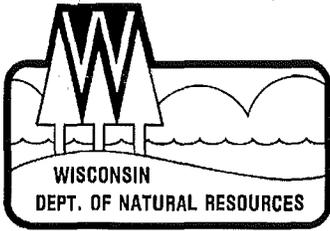


CR 93-208



George E. Meyer
Secretary

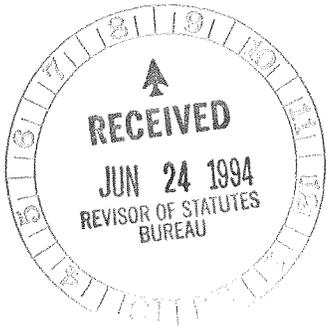
State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

101 South Webster Street
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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-47-93 was duly approved and adopted by this Department on April 28, 1994. 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 16th day of June, 1994.

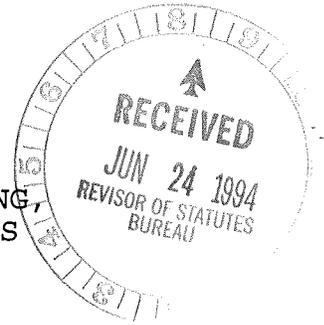
George E Meyer
George E. Meyer, Secretary

(SEAL)

9-1-94



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



.....
IN THE MATTER of renumbering s. NR 423.02(10),
renumbering and amending s. NR 423.02(9) and
423.03(7), amending s. NR 423.03(1),
(2) (a) (intro.), (3) (intro.) and (g) 4.,
(4) (intro.), (c) 2., (i) and (m), (5) (intro.),
(c) 1. and (g), (6) (a) (intro.) and 7., and
425.03(12) (a) 7., **repeal and recreate**
s. NR 423.03(2) (c), (d), (e) and (f),
and **creating** s. NR 423.02(9) and (12),
423.03(2) (intro.), (g) and (h), (3) (h), (i) and
(j), (4) (n), (o), (p) and (q), (5) (h), (i)
and (j), (6) (a) 8. and 9., (7), (8) and (10) of
the Wisconsin Administrative Code pertaining
to the control of organic compound emissions
from solvent cleaning operations.
.....

AM-47-93

Statutory authority: ss. 144.31(1) (a) and 227.11(2) (a), Stats.
Statutes interpreted: s. 144.31(1) (f), Stats. The State Implementation Plan
developed under that provision is revised.

This proposed rule revision is part of the 15% Volatile Organic Compound (VOC)
Reduction Plan, the second of three major State Implementation Plan (SIP)
revisions required for the control of ozone in nonattainment areas of
Wisconsin. The 15% VOC Reduction Plan was required to be submitted to U.S.
EPA by November 15, 1993.

The proposed rule revision requires the control of previously exempt small
sources, additional control of larger degreasing units, and the control of
wipe cleaning processes, a previously unregulated area.

At its February 1994 meeting the Natural Resources Board adopted a resolution
recommending that the Governor determine that this rule package and others in
the 15% plan are necessary to meet the percentage reduction requirements of
the Clean Air Act.

SECTION 1. NR 423.02(9) and (10) are renumbered 423.02(10) and (11), and
423.02(10) as renumbered is amended to read:

NR 423.02(10) "Solvent metal cleaning" means the process of cleaning
soils from metal surfaces by cold cleaning ~~ex~~ open top vapor degreasing ~~ex~~
conveyorized degreasing or wipe cleaning.

SECTION 2. NR 423.02(9) and (12) are created to read:

NR 423.02(9) "Refrigerated freeboard chiller" means an emission control

device which is mounted above the water jacket or primary condenser coils of a vapor degreaser and which consists of secondary coils carrying a refrigerant to provide a chilled air blanket above the solvent vapor.

(12) "Wipe cleaning" means the cleaning and removing of soils from the metal surfaces of a product or product component by manually wiping the surfaces with solvent using a porous applicator while maintaining the solvent below its boiling point.

SECTION 3. NR 423.03(1) is amended to read:

NR 423.03(1) APPLICABILITY. ~~This~~ Except as provided in sub. (8), this section applies, with a final compliance deadline of May 1, 1980, or as provided by a compliance schedule issued or approved pursuant to s. NR 425.03(5), to cold cleaning, open top vapor degreasing and conveyORIZED vapor degreasing operations. This section also applies, with a compliance schedule provided pursuant to ~~s. NR 423.03(6) sub. (6),~~ except as provided in sub. (8), to conveyORIZED non-vapor degreasing operations and wipe cleaning operations.

SECTION 4. NR 423.03(2)(intro.) is created to read:

NR 423.03(2) EXEMPTIONS. (intro.) The owner or operator of any facility located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and which claims to be exempt under this subsection from any requirement of subs. (3) to (7) shall comply with the recordkeeping requirements of sub. (10).

SECTION 5. NR 423.03(2)(a)(intro.) is amended to read:

NR 423.03(2)(a)(intro.) This section does not apply to individual cold cleaners to which not more than 5.7 liters (1.5 gallons) of solvent is added per day, or to individual open top vapor, conveyORIZED vapor or conveyORIZED non-vapor degreasers whose emissions of ~~VOC's~~ VOCs are not more than 6.8 kilograms (15 pounds) in any one day, ~~nor more than 1.4 kilograms (3.1 pounds) in any one hour,~~ provided:

SECTION 6. NR 423.03(2)(c), (d), (e) and (f) are repealed and recreated to read:

NR 423.03(2)(c) An individual cold cleaner which is:

1. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties and which has an open area smaller than 0.10 square meter (1.1 square feet) is exempt from the requirements of sub. (3)(b) to (g).

2. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties is exempt from the requirements of sub. (3)(h), (i) and (j).

3. Located inside Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and which has an open area smaller than 0.10 square meter (1.1 square feet), and to which not more than 5.7 liters (1.5 gallons) of solvent is added per day, is exempt from the requirements of sub. (3)(b) to (j).

(d) An individual open top vapor degreaser which is:

1. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties and which has an open area smaller than 1.0 square meter (10.8 square feet) is exempt from the requirements of sub. (4)(c).

2. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties is exempt from the requirements of sub. (4)(n) to (q).

3. Located inside Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and which has an open area smaller than 1.0 square meter (10.8 square feet), and whose emissions of VOCs are not more than 6.8 kilograms (15 pounds) in any one day, is exempt from the requirements of sub. (4)(c), (n), (o) and (p).

(e) An individual conveyORIZED vapor degreaser which is:

1. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties and which has an open area smaller than 2.0 square meters (21.6 square feet) is exempt from the

requirements of sub. (5)(c).

2. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties is exempt from the requirements of sub. (5)(h), (i) and (j).

3. Located inside Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and which has an open area smaller than 2.0 square meters (21.6 square feet), and whose emissions of VOCs are not more than 6.8 kilograms (15 pounds) in any one day, is exempt from the requirements of sub. (5)(c).

(f) An individual conveyerized non-vapor degreaser which is:

1. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties and which has a total horizontal solvent-air interface smaller than 2.0 square meters (21.6 square feet), where such an interface exists, is exempt from the requirements of sub. (6)(a)2.

2. Located outside of Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago counties is exempt from sub. (6)(a)2.

3. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties is exempt from the requirements of sub. (6)(a)8 and 9.

4. Located inside Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and which has an open area smaller than 2.0 square meters (21.6 square feet), and whose emissions of VOCs are not more than 6.8 kilograms (15 pounds) in any one day, is exempt from the requirements of sub. (6)(a)2.

SECTION 7. NR 423.03(2)(g) and (h) are created to read:

NR 423.03(2)(g) An individual wipe cleaning operation which is:

1. Located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties is exempt from the

requirements of this section.

2. Located inside Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county and whose emission of VOCs from wipe cleaning operations are not more than 6.8 kilograms (15 pounds) in any one day is exempt from the requirements of sub. (7) (d).

(h) This section does not apply to solvent metal cleaning operations using only cleaning solvents that have a VOC content of 2.0% or less by volume.

SECTION 8. NR 423.03(3) (intro.) and (g)4. are amended to read:

NR 423.03(3) COLD CLEANERS. Except as provided under sub. (2) (a), (b) ~~and~~, (c) and (h), the owner or operator of a cold cleaning facility shall:

(g)4. Repair solvent leaks immediately, or shut down the degreaser until the leaks are repaired; and

SECTION 9. NR 423.03(3) (h), (i) and (j) are created to read:

NR 423.03(3) (h) Design the cover so that it is either a roll-top cover, a canvas curtain cover, a guillotine (biparting) cover, or any other type of cover that slides off the degreaser in a horizontal motion and is designed such that it can be opened or closed without disturbing the vapor layer or the solvent surface if:

1. The solvent volatility is greater than 2 kPa (0.3 psia) measured at 38°C (100°F); or

2. The solvent is agitated; or

3. The solvent is heated; and

(i) If freeboard is chosen as a control device under par. (d), design or modify the freeboard to give a freeboard ratio greater than or equal to 1.0; and

(j) If a system of equivalent control is chosen under par. (d) 3, the level of control shall be equivalent to that achieved under a freeboard ratio of 1.0.

SECTION 10. NR 423.03(4) (intro.), (c)2., (i) and (m) are amended to read:

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

(c)2. Refrigerated freeboard chiller; or

(i) Move parts in and out of the degreaser at less than 1.5 meters per minute (4.9 feet per minute) if the workload occupies more than 50% of the degreaser's open top area; and

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

SECTION 11. NR 423.03(4) (n) to (q) are created to read:

NR 423.03(4) (n) Equip the vapor degreaser with an enclosed design, such that the cover or door opens only when the dry part is actually entering or exiting the degreaser, that is either a roll-top cover, a canvas curtain cover, a guillotine (biparting) cover, or any other type of cover that slides off the degreaser in a horizontal motion and is designed such that it can be opened or closed without disturbing the vapor layer or the solvent surface, and if the degreaser opening is greater than 2.0 square meters (21.6 square feet), then design the cover to be an automated, powered or mechanically assisted sliding cover; and

(o) Under par. (c), if subd. 1 is chosen, design or modify the freeboard to give a freeboard ratio equal to or greater than 1.0; and

(p) If a system of equivalent control is chosen under par. (c) 5, the level of control shall be equivalent to that achieved under a freeboard ratio of 1.0; and

(q) At startup, turn on the refrigerated condenser and the refrigerated freeboard chiller either simultaneously with or before turning on the sump heater. At shutdown, turn off the sump heater, either simultaneously with or before turning off the refrigerated condenser and refrigerated freeboard chiller.

SECTION 12. NR 423.03(5)(intro.), (c)1. and (g) are amended to read:

NR 423.03(5)(intro.) CONVEYORIZED VAPOR DEGREASERS. Except as provided under sub. (2)(a), (b)~~and~~, (e) and (h), the owner or operator of a conveyORIZED vapor degreaser shall:

(c) 1. Refrigerated freeboard chiller; or

(g) Follow the requirements of subs. (3)(g)3. and 4. and (4)(d) and (k)~~;~~
and

SECTION 13. NR 423.03(5)(h), (i) and (j) are created to read:

NR 423.03(5)(h) Minimize entrance and exit openings during operation so that no opening dimension exceeds the smallest physically possible by more than 10 centimeters (4 inches) or by more than 10% of the opening dimension, whichever is smaller; and

(i) At startup, turn on the refrigerated condenser and the refrigerated freeboard chiller either simultaneously with or before turning on the sump heater. At shutdown, turn off the sump heater, either simultaneously with or before turning off the refrigerated condenser and refrigerated freeboard chiller; and

(j) Provide a permanent, conspicuous label summarizing the operating procedures of pars. (e) to (i), and provide supervision or instruction adequate to ensure that the procedures are followed.

SECTION 14. NR 423.03(6)(a)(intro.) and 7. are amended to read:

NR 423.03(6)(intro.) CONVEYORIZED NON-VAPOR DEGREASERS. (a) 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:

7. Repair solvent leaks immediately, or shut down the degreaser and drain it of all solvent until the leaks are repaired~~;~~ and

SECTION 15. NR 423.03(6)(a)8. and 9. are created to read:

NR 423.03(6)(a)8. Minimize entrance and exit openings during operation so that no opening dimension exceeds the smallest physically possible by more

than 10 centimeters (4 inches) or by more than 10% of the opening dimension, whichever is smaller; and

9. Provide a permanent, conspicuous label, summarizing the operating procedures of subds. 4 to 7, and provide supervision or instruction adequate to ensure that the procedures are followed.

SECTION 16. NR 423.03(7) is renumbered 423.03(9), and as renumbered, 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-~~ex~~, (6)(a)2~~b~~ 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 17. NR 423.03(7), (8) and (10) are created to read:

NR 423.03(7) WIPE CLEANING. Except as provided under sub. (2)(b), (g) and (h), the owner or operator of a wipe cleaning operation shall:

(a) Immediately after use, place all rags, or any other porous materials used to apply solvent, in a covered container that is labeled as waste solvent, and handled in accordance with local, state and federal regulations; and

(b) Store waste solvent only in covered containers labeled as waste solvent and handled in accordance with local, state and federal regulations; and

(c) Not allow solvent to drip from the applicator during solvent application; and

(d) Install and operate one of the following emission control systems:

1. A vapor collection system that includes a carbon adsorption system demonstrated to have at least a 90% capture efficiency, and a 90% control efficiency as measured across the carbon adsorption equipment and averaged over a complete adsorption cycle; or

2. Use of a solvent with a volatility of less than 2 kPa (0.3 psia) measured at 38°C (100°F); or

3. A system demonstrated to have a control efficiency equivalent to or greater than that described in subd. 1 or 2 and approved by the department; and

(e) Provide a permanent, conspicuous label, summarizing the operating procedures of pars. (a) to (c), and provide supervision or instruction adequate to ensure that the procedures of pars. (a) to (c) are followed.

(8) COMPLIANCE SCHEDULE. This subsection applies only to facilities located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties.

(a) Previously regulated operations. 1. This paragraph applies only to a facility which is in existence on the effective date of this rule ... [revisor insert date] and which:

a. Prior to the effective date of this rule ... [revisor insert date] was subject to all requirements of sub. (3), (4), (5) or (6); and

b. Is subject to sub. (3)(h), (i) or (j), (4)(n) to (q), (5)(h), (i) or (j), or (6)(a)8 or 9 as of the effective date of this rule ... [revisor insert date].

2. The owner or operator of any source identified under subd. 1 shall:

a. Remain in compliance with all requirements of sub. (3), (4), (5) or (6) to which the owner or operator was subject prior to the effective date of this rule ... [revisor insert date].

b. Achieve final compliance with the requirements of sub. (3)(h), (i) or (j), (4)(n) to (q), (5)(h), (i) or (j), or (6)(a)8 or 9 as soon as practicable, but no later than May 15, 1995.

(b) Previously exempt operations. 1. This paragraph applies only to a facility which is in existence on the effective date of this rule ... [revisor insert date] and which is subject to requirements under sub. (3)(b) to (g), (4)(c), (5)(c) or (6)(a)2 as of the effective date of this rule ... [revisor insert date] and which:

a. Prior to the effective date of this rule ... [revisor insert date] was

exempt from the requirements of sub. (3)(b) to (g) under sub. (2)(c), or

b. Prior to the effective date of this rule ... [revisor insert date] was exempt from the requirements of sub. (4)(c) under sub. (2)(d), or

c. Prior to the effective date of this rule ... [revisor insert date] was exempt from the requirements of sub. (5)(c) under sub. (2)(e), or

d. Prior to the effective date of this rule ... [revisor insert date] was exempt from the requirements of sub. (6)(a)2 under sub. (2)(f).

2. The owner or operator of any source identified under subd. 1 shall achieve final compliance with the applicable requirements as soon as practicable, but no later than September 15, 1995.

(c) Wipe cleaning operations. 1. This paragraph applies only to a facility which is in existence on the effective date of this rule ... [revisor insert date] and which is subject to the requirements of sub. (7) as of the effective date of this rule ... [revisor insert date].

2. The owner or operator of any source identified under subd. 1 shall achieve final compliance with the requirements of sub. (7) as soon as practicable, but no later than May 15, 1996.

(10) RECORDKEEPING. This subsection applies only to facilities located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county. As of the effective date of this rule ... [revisor insert date], each owner or operator of a degreasing operation that is exempt from the requirements of subs. (3) to (7), under sub. (2)(c) to (g), shall collect and record the information specified in this paragraph, as appropriate to support the exemption. The following information shall be maintained on the facility premises for a minimum of 3 years and shall be made available upon request to an authorized department representative at any time during normal working hours:

(a) A unique name or identification number for each degreaser or wipe cleaning operation.

(b) The volume of solvent used or added per day for each individual degreaser or wipe cleaning operation, in units of gallons.

(c) The VOC emissions, in units of pounds or kilograms per day, from each

individual degreaser or wipe cleaning operation.

(d) The density of the solvent used, in units of pounds per gallon.

(e) The VOC content of the solvent, expressed as percent by volume.

SECTION 18. NR 425.03(12)(a)7. is amended to read:

NR 423.03(12)(a)7. Prior to January 1, 1994 was exempt from the requirements of s. NR 423.03(3) or (6) ~~under s. NR 423.03(2)(a)1 or (f)~~ for one of the following reasons:

a. The facility was located outside the counties of Brown, Calumet, Dane, Dodge, Fond du Lac, Jefferson, Kenosha, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago.

b. Conveyorized non-vapor degreasers at the facility had a total horizontal solvent-air interface smaller than 2.0 square meters (21.6 square feet).

The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on _____.

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 _____

6-16-94

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By George E. Meyer
George E. Meyer, Secretary

(SEAL)

