



CR 82-191

State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny  
Secretary

BOX 7921  
MADISON, WISCONSIN 53707

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STATE OF WISCONSIN )  
DEPARTMENT OF NATURAL RESOURCES ) ss

MAY 11 1983  
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TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Carroll D. Besadny, 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. A-36-82 was duly approved and adopted by this Department on February 23, 1983. 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 General Executive Facility #2 in the City of Madison, this 10<sup>th</sup> day of May, 1983.

*Carroll D. Besadny*  
Carroll D. Besadny, Secretary

(SEAL)

8-1-83

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

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A-36-82

IN THE MATTER OF amending sections  
NR 154.13(2)(c)1., (3)(e)2.(title), (4)(a)5.,  
(b)3., (g)4.f., (l)2.a., and (m)1.f., (6)(a)1.,  
and (b)1.b., and (13)(b)1.c. and creating sections  
NR 154.01 (68m), 154.13(3)(d)1.b. (4)(c)3.,  
(1)3.(title), and (m)4.(title), (6)(b)2.(title),  
(8)(b), and (11)(a)3.(title) of the Wisconsin  
Administrative Code pertaining to the control of  
organic compound emissions.

Analysis Prepared by the Department of Natural Resources

The rules amended and created by this order are all in the nature of "housecleaning" changes with no substantive impact except for SECTIONS 1, 6, 7, 11 and 14.

SECTION 1 adds a definition of "energy intensive control device." This term is being defined in order to satisfy a condition set by the United States Environmental Protection Agency (U.S. EPA) for the approval of a set of earlier revisions to Wisconsin's rules and air pollution State Implementation Plan (SIP). Presently, section NR 154.13(13)(d), Wis. Adm. Code authorizes the department to allow sources of volatile organic compounds (VOCs) to discontinue operation of energy intensive pollution control devices during the winter months when ozone pollution is not a problem. U.S. EPA allows states to let sources turn off natural gas-fired fume incinerators during the winter, but it was concerned that Wisconsin's rule might be too broad, so it called for adoption of a definition to clarify the rule.

SECTION 6 clarifies the department's intent. In evaluating the efficiency of a fume capture system to determine if it is adequate to meet VOC emission limits, one must employ an equation which ensures equivalency with other types of control methods.

SECTION 7 allows the department to extend the date by which certain can coating operations must meet VOC emission limits. The time extension is for up to three years, but sources must still meet a less stringent interim limit. The Can Manufacturers Institute requested adoption of the extension and interim emission limits to eliminate the need to install afterburners. U.S. EPA authorized states to make such rule changes. The time extension represents a finding that low solvent content coating application technology has not advanced as expected.

SECTION 11 adds language to clarify an exception from VOC emission limits which would otherwise apply to metal parts and products coaters when coating products under government contract specifications.

SECTION 14 restores the original intent of NR 154.13(6)(b)1.b. by narrowing the exemptions available to certain dry cleaning facilities which have inadequate space or steam capacity. The present rule was incorrectly drafted to exempt owners and operators of such facilities from having to prevent and immediately repair leaks of solvent.

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Pursuant to the authority vested in the State of Wisconsin Natural Resources Board by ss. 144.31, 144.38 and 227.014(2), Stats., the State of Wisconsin Natural Resources Board hereby amends and creates rules interpreting s. 144.31(1)(f), Stats., and revising the State Implementation Plan (SIP) developed under that provision, as follows:

SECTION 1 - NR 154.01(68m) is created to read:

(68m) "Energy intensive control device" means an air pollution control device or system which consumes energy at a rate in excess of what would be required to heat the exhaust gas stream from 70°F to 800°F, taking into account energy recovered in the form of heat or organic compounds.

SECTION 2 - NR 154.13(2)(c)1. is amended to read:

1. Applicability. a. Subd. 2. applies to all storage tanks for organic compounds having capacities greater than 151,412 liters (40,000 gallons) in the Southeastern Wisconsin Intrastate AQCR, and to all such storage tanks throughout the state on which construction or modification commenced after April 1, 1972, with the following exceptions:

1) Tanks storing organic compounds that are not photochemically reactive on which construction or modification commenced before August 1, 1979.

2) Tanks used exclusively for storing organic compounds exempted under sub. (13)(a).

{b} b. Where a provision of par. (a) also applies, the more stringent requirement shall be met.

SECTION 3 - NR 154.13(3)(d)1.b. is created to read:

b. Reserved.

SECTION 4 - NR 154.13(3)(e)2.(title) is amended to read:

2. ~~Emission~~ Emission reduction requirements.

SECTION 5 - NR 154.13(4)(a)5. is amended to read:

5. Surface coating process sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance where:

1) a. The operation of the source is not an integral part of the production process; and

2) b. The emissions from the source do not exceed 363 kilograms (800 pounds) in any calendar month; and

3) c. The exemption is approved in writing by the department.

SECTION 6 - NR 154.13(4)(b)3. is amended to read:

3. Capture systems. The design, operation, and efficiency of any capture system used in conjunction with subd. 1.b., c. or d. shall be certified in writing by the owner or operator. ~~The certification shall demonstrate that the applicable emission limitation will be achieved.~~ The efficiency of the capture system shall be great enough to insure that the emission rate from the controlled line is less than or equal to an emission rate determined using the equation in sub. (13)(b)1.c. The capture system is subject to approval by the department.

SECTION 7 - NR 154.13(4)(c)3. is created to read:

3. Compliance extensions. a. Notwithstanding the emission limitations of subd. 2 and the provisions of sub. (12), the department may extend until December 31, 1985 the deadline for compliance with the emission limitations of subd. 2, provided that:

1) The can coating operation is a sheet basecoat (exterior or interior) or overvarnish operation and by itself or by the internal offset provisions of sub. (13)(b) meets an interim VOC emission limitation after December 31, 1982 of 0.48 kilograms per liter of coating (4.0 pounds per gallon), excluding water, delivered to each coating applicator, or

2) The can coating operation is an end sealing compound operation and, by itself or by the internal offset provisions of sub. (13)(b), meets an interim VOC emission limitation after December 31, 1982 of 0.52 kilograms per liter of coating (4.3 pounds per gallon), excluding water delivered to each coating applicator, and

3) The owner or operator of the can coating facility submits a written request for a compliance extension under this subdivision and shows, to the department's satisfaction, that a compliance extension is necessary in order to comply with the emission limitations of subd. 2 through the use of low solvent content coating application technology.

b. If, during the term of an extension granted under this subdivision, the department determines that the can coating operation is not meeting its interim emission limitation, that advances in low solvent content coating application technology eliminate the need for the extension, or that the emission limitations of subd. 2 can be met without the use of energy intensive control devices, it may terminate the extension. Upon termination, the emission limitations of subd. 2 shall apply.

SECTION 8 - NR 154.13(4)(g)4.f. is amended to read:

f. After December ~~30~~ 31, 1987, 0.34 kilograms per liter of coating (2.8 pounds per gallon), excluding water, from a topcoat coating line.

SECTION 9 - NR 154.13(4)(1)2.a. is amended to read:

a. The volatile fraction of ink, as it is applied to the substrate, contains 25% by volume or less ~~or~~ of organic solvent and 75% by volume or more of water;

SECTION 10 - NR 154.13(4)(1)3.(title) is created to read:

3. Capture system.

SECTION 11 - NR 154.13(4)(m)1.f. is amended to read:

f. Specialized coatings required by state or federal agencies on products made for their use;

SECTION 12 - NR 154.13(4)(m)4.(title) is created to read:

4. Change in technology.

SECTION 13 - NR 154.13(6)(a)1. is amended to read:

1. Applicability. a. Effective August 1, 1979, this paragraph applies, with a final compliance deadline of May 1, 1980, or as provided by a compliance schedule issued or approved pursuant to sub. (12)(e), to cold cleaning, open top vapor degreasing and conveyORIZED degreasing operations.

SECTION 14 - NR 154.13(6)(b)1.b. is amended to read:

b. The requirements of subd. 2.a. and ~~b.~~ do not apply to perchloroethylene dry cleaning facilities which provide satisfactory documentation to the department showing that an adsorber cannot be accommodated because of inadequate space or because insufficient steam capacity is available to desorb adsorbers.

SECTION 15 - NR 154.13(6)(b)2.(title) is created to read:

2. Requirements.

SECTION 16 - NR 154.13(8)(b) is created to read:

(b) Reserved.

SECTION 17 - NR 154.13(11)(a)3.(title) is created to read:

3. Election.

SECTION 18 - NR 154.13(13)(b)1.c. is amended to read:

c. The combined emission rate from all coating or printing lines involved in the internal offset is less than or equal to an emission rate determined by the following equation:



$$E = \frac{A_1 B_1 C_1}{D_1} + \frac{A_2 B_2 C_2}{D_2} + \dots + \frac{A_n B_n C_n}{D_n}$$

where E = the total allowable emission rate from all of the coating or printing lines involved in the internal offset in kilograms per hour (pounds per hour),  $A_{1,2\dots n}$  = the allowable emission rate for each coating or printing line pursuant to sub. (4) in kilograms per liter (pounds per gallon) of coating or ink, excluding water, delivered to the applicator,  $B_{1,2\dots n}$  = the amount of coating material or ink in liters per hour (gallons per hour), excluding water, delivered to the applicator,  $C_{1,2\dots n}$  = volume fraction of solids in the coating or ink, excluding water, delivered to the applicator, and  $D_{1,2\dots n}$  = theoretical volume fraction of solids, in the coating or ink necessary to meet the allowable emission rate for each coating or printing line pursuant to sub. (4) calculated from:

$$D_{1,2\dots n} = 1 - \left( \frac{A_{1,2\dots n}}{\text{density of solvent used in coating or ink delivered to applicator in kilograms per liter (pounds per gallon)}} \right)$$

$$D_{1,2\dots n} = 1 - \left( \frac{A_{1,2\dots n}}{P_{1,2\dots n}} \right)$$

where  $P_{1,2\dots n}$  = the density of solvent used in the coating or ink delivered to applicator in kilograms per liter (pounds per gallon), and

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on February 23, 1983.

The rules contained herein shall take effect as provided in s. 227.026(1)(intro), Stats.

Dated at Madison, Wisconsin May 10, 1983

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By Carroll D. Besadny  
Carroll D. Besadny, Secretary

(SEAL)