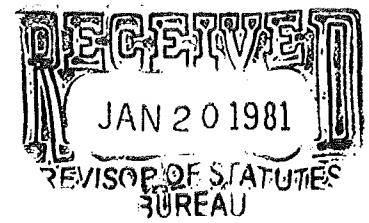


7nd 14

# RULES CERTIFICATE



STATE OF WISCONSIN )  
 ) SS  
DEPT. OF INDUSTRY, )  
LABOR & HUMAN RELATIONS)

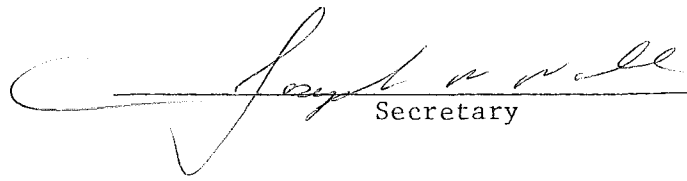
TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Joseph N. Noll, Secretary of the Department of Industry, Labor and Human Relations, and custodian of the official records of said department, do hereby certify that the annexed rule(s) relating to Wis. Adm. Code Chapter Ind 14 - Mobile Homes were duly approved and adopted by this department on January 16, 1981.

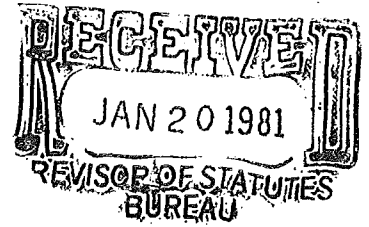
*(Subject)*  
*(Date)*

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 201 E. Washington Av. in the city of Madison, this 16th day of January A.D. 1981.

  
Secretary

10-1-81



# ORDER OF ADOPTION

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by section(s) 101.92(1) & 101.94(2), Stats., the Department of Industry, Labor and Human Relations hereby  creates;  amends;  repeals and recreates; and  repeals and adopts rules of Wisconsin Admin-

istrative Code chapter(s):

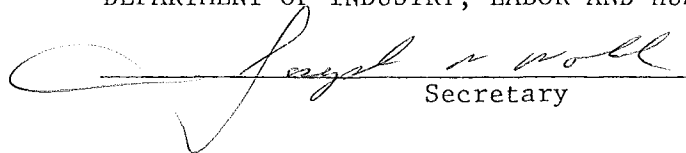
14.02 (1)(b),  
Ind. 14.02 (2)(b) & 14.03  
*(Number)*

adoption of standards and indoor ambient air quality  
standards for W.A.C. Ind 14 - Mobile Homes  
*(Title)*

The attached rules shall take effect on the first day of the month following  
publication, pursuant to section  
227.026, Stats.

Adopted at Madison, Wisconsin, this 16th  
day of January, A.D., 1981.

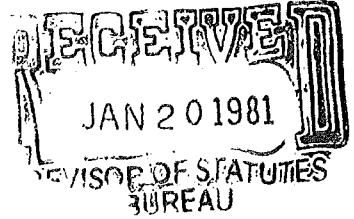
DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS

  
Secretary

Pursuant to the provisions of sections 101.92 (1) and 101.94 (2), Stats., the Department of Industry, Labor and Human Relations proposes to renumber and to create the following rules in the Wisconsin Administrative Code chapter Ind 14 - Mobile Homes.

\* \* \* \* \*

SECTION 14.01 - ADOPTION OF STANDARDS BY REFERENCE  
SECTION IND 14.03--INDOOR AIR QUALITY  
WIS. ADM. CODE CHAPTER IND 14--MOBILE HOMES



Ind 14.01 (1) (b) is renumbered (c).

Ind 14.01 (1) (b) is created to read:

- (b) National Institute of Occupational Safety and Health, 4676 Columbia Parkway, Cincinnati, Ohio 45226, NIOSH Manual of Analytic Methods, NIOSH 77-157-A, 1977.

Ind 14.01 (2) (b) is created to read:

- (b) Copies of NIOSH 77-157-A, 1977, "Manual of Analytic Methods", volume 1, may be obtained from the Superintendent of Documents, United States Government Printing Office, Washington, D.C. 20402 (Order DHEW (NIOSH) publication number 77-157-A).

Section Ind 14.03 is created to read:

Ind 14.03 INDOOR AMBIENT AIR QUALITY STANDARDS. (1) Chemical Levels. All new mobile homes offered for retail sale in Wisconsin on or after the effective date of this rule shall not exceed the chemical concentrations in ambient indoor air established in Table 14.03.

TABLE 14.03

<u>Effective Date</u>	<u>Chemical</u>	<u>Ambient Indoor Air Maximum Concentration</u>
Six Months Following Publication	Formaldehyde	.4 ppm Time Weighted Average (TWA) for duration of test

(2) Indoor Test. Tests shall be performed in the mobile home to determine the presence and concentration of formaldehyde (HCHO).

- (3) Test Methods. All tests for formaldehyde in the ambient air shall be conducted in accordance with the National Institute of Occupational Safety and Health Manual of Analytical Methods, NIOSH 77-157-A, 1977, or other test methods approved by the department.
- (4) Test Conditions and Procedures. The following applicable conditions and procedures shall be adhered to during the testing specified in Table 14.03:
- (a) Temperature and Relative Humidity. Testing shall be carried out at an indoor temperature within the range from 70° F. to 85° F. and at ambient relative humidity conditions. The resulting formaldehyde test levels shall be corrected to a 78° F. condition using the following formula:

$$C = C_0 \times e^{-R(1/t - 1/t_0)}$$

Where,

- C = Test Formaldehyde Concentration Level  
C<sub>0</sub> = Corrected Formaldehyde Concentration Level  
e = Natural Log Base  
R = Coefficient of Temperature = 9799  
t = Actual Test Condition Temperature in °K  
t<sub>0</sub> = Corrected Temperature in °K

Note: See appendix for additional data, coefficient and temperature correction curves to be used with this equation.

- (b) Ventilation. The mobile home shall be aired out at a ventilation rate of at least 1 outdoor air change per hour, with all interior doors, cabinets, closets and drawers open for maximum air exchange, for 2 hours prior to the close-up period. The windows and exterior doors of the mobile home shall be closed for 2 hours prior to commencement of the test with all nonvented gas appliances turned off and no smoking permitted while the home is closed prior to testing and during the test.
1. Exception. Mobile homes equipped to provide tempered outside air may be tested with the ventilation system operating at a maximum rate of 1 air change per hour.
- (c) Furniture and Contents. Tests shall be conducted with carpeting, furniture, draperies and other furnishings in place.

- (d) Location of Samples. Samples shall be taken in the habitable portion of each of the following habitable rooms:
1. Bedroom
  2. Kitchen, on or in vicinity of kitchen cabinets
  3. Living room
- (e) Length of Sampling. The test sampling for both indoor and outdoor ambient air shall be performed for at least one hour, unless otherwise approved by the department.
- (5) Test Results and Test Report. (a) Validity. No tests shall be considered valid for the determination of formaldehyde concentration in the air unless made after a minimum of 60 days from the date of the manufacture of the mobile home tested.
- (b) Test Results. The ambient indoor formaldehyde concentration of a mobile home shall be the arithmetic average of the 3 samples specified in sub. (4) (d).
- (c) Test Report. A test report shall be made on each mobile home tested pursuant to this rule, and shall contain the following information: name of manufacturer; serial number; model name; indoor temperature; indoor barometric pressure and relative humidity; location of test samples; indoor air formaldehyde concentration; outdoor temperature; and outdoor relative humidity and barometric pressure. The manufacturer shall keep copies of the test reports at the manufacturing plant. The test reports shall be available for inspection by authorized representatives of the department during normal working hours.
- (6) Random Testing. The department may conduct random testing of mobile homes to determine compliance with the indoor air quality standard specified in this section.
- (7) Complaint Testing. (a) Complaint Test. Upon complaint notification from an owner of a mobile home, the department or its authorized representative shall test the mobile home to determine compliance with the indoor air quality standards specified in Table 14.03. The department will not respond to complaints filed for mobile homes which are more than 24 months old, including mobile homes where the manufacturer has extended the warranty beyond the 24 month period.
- (b) Retesting. The department or its authorized representative will limit mobile home retesting to mobile homes in which nonconformance with the indoor air quality standard specified in Table 14.03 have been found and in which modifications have been made by the manufacturer.

- (8) Cost of Tests. (a) Cost to Manufacturer. The manufacturer shall bear the cost of complaint investigation tests conducted by the department where the maximum formaldehyde concentration exceeds that specified in Table 14.03, and any testing conducted by the manufacturer. Where random tests are performed, and the formaldehyde concentration exceeds that specified in table 14.03, the manufacturer shall bear the costs of such tests.
- (b) Cost to Owner. The owner shall bear the cost of complaint investigation tests conducted by the department when the maximum concentration is equal to or less than that specified in Table 14.03.
- (9) Corrective Action. (a) In Excess of Code Allowable Concentrations. If the department determines after investigation that the formaldehyde emissions from mobile home building products as sold by the manufacturer exceed the concentration specified in Table 14.03, the manufacturer shall, within 30 days of departmental notification, lower the concentration to a level equal to or less than the maximum concentration specified in Table 14.03, notwithstanding the provisions of s. Ind 14.50. Mobile homes with formaldehyde concentrations in excess of those specified in Table 14.03 shall be tagged as specified in s. Ind 14.46. Dilution of indoor air by mechanical means up to 1 air change per hour may be used to lower the concentration to the standard specified in Table 14.03.
- (b) Equal to or Less than Code Allowable Concentrations. If the formaldehyde emissions from the mobile home building products as sold by the manufacturer is equal to or less than the maximum concentration specified in Table 14.03, no corrective action is necessary on the part of the manufacturer.
- (10) Product Safety Information. (a) Pre-Sale Warning. Prior to retail sale, the purchaser shall be notified in writing that building materials and other products in mobile homes may emit formaldehyde and that some persons have experienced unpleasant odors and adverse physical effects from such vapors including eye, nose and throat irritation. The wording of the warning shall be approved by the department and shall state that the mobile home meets the allowable level of formaldehyde concentrations specified in Table 14.03 sixty (60) days after the date of manufacture of the mobile home. The warning shall indicate that formaldehyde concentrations are regulated by the Wisconsin Department of Industry, Labor and Human Relations.
- (b) Mobile Home Label. All mobile homes offered for retail sale in this state on or after the effective date of this rule shall have affixed to the front door a pre-sale warning label which shall be obtained from the department and which shall read as follows:

WARNING

Formaldehyde concentrations in this mobile home are regulated by the Wisconsin Department of Industry, Labor and Human Relations. Product safety information, approved by the department about the effects of formaldehyde and the department's regulation of formaldehyde shall be provided to the purchaser prior to the sale of this home. This label shall not be removed by the mobile home manufacturer or any person offering this mobile home for retail sale in Wisconsin.

- (c) Removal of Label. Any mobile home manufacturer or person offering the mobile home for retail sale in Wisconsin who removes the label specified in par. (b) prior to the sale of the mobile home shall be subject to the penalties and remedies of the laws and regulations of this code.
  
- (11) Severability. Should any subsection or portion of this section be declared invalid or unconstitutional for any reason, the remainder of the section shall not be affected thereby.