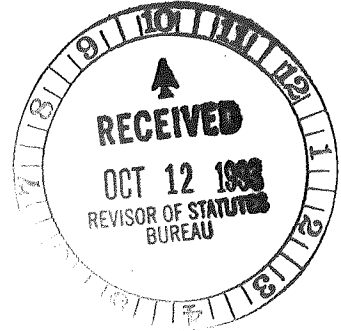


RULES CERTIFICATE

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



TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Carol Skornicka, 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 private sewage systems and holding tank plan review

(Subject)

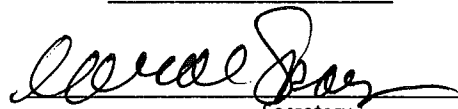
were duly approved and adopted by this department on October 12, 1993.

(Date)

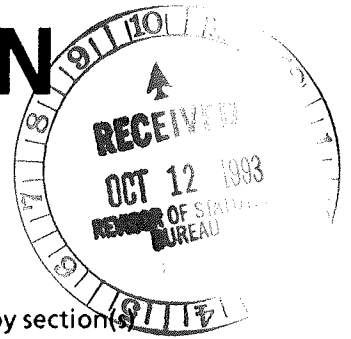
I further certify that said copy has been compared by me with the original on file in the department
and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set
my hand and affixed the official seal of the
department at 8:00 a.m.

in the city of Madison, this 12th
day of October A.D. 1993.


Secretary

ORDER OF ADOPTION



Pursuant to authority vested in the Department of Industry, Labor and Human Relations by section(s)

101.02 (1) and 145.02 (2)

Stats., the Department of Industry, Labor and Human Relations creates; amends;

repeals and recreates; repeals and adopts rules of Wisconsin Administrative Code chapter(s):

ILHR 81-87

(Number)

Plumbing Code

(Title)

The attached rules shall take effect on the first day of the month following publication
in the Wisconsin Administrative Register pursuant to section 227.22, Stats.

Adopted at Madison, Wisconsin this

date: October 12, 1993

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN
RELATIONS

Secretary



RULES in FINAL DRAFT FORM

Rule No.: ILHR 83.02, 83.08, 83.13, 83.18, 83.22 and Table 14

Relating to: Private Sewage Systems & Holding Tank Plan Review

Clearinghouse Rule No.: 92-177

The Wisconsin Department of Industry, Labor and Human Relations proposes an order to repeal ILHR 83.02 (2) and (10), 83.10 (6) (b), 83.11, 83.12 (1) (c), 83.14 (4) (c), 83.22 and 83.23 Tables 17 to 28; to renumber ILHR 84.20 (5) (o) and (p); to amend ILHR 83.13 (6) (b), 83.14 (1), 83.18 (1) (intro.), 83.23 (1) (a), 83.23 Table 14 and 83.23 (3) (b) 2; to repeal and recreate ILHR 83.08 (1), 83.08 (2) (d), 83.19, 83.23 (2) (a) and (b) and 83.23 (3) (b) 1; and to create ILHR 82.40 (3) (e), 83.18 (10), 84.20 (5) (o), 84.60 Table 84.60-5 line 19 and 84.60 Table 84.60-7 lines 7 to 14, relating to private sewage systems and the department's review of plans for holding tanks.

* * * * *

ANALYSIS OF RULES

Statutory authority: ss. 101.02 and 145.02 (2), Stats.

Statutes interpreted: s. 145.02 (3), 145.13 and 145.20 (3) (a) 1, Stats.

The Department of Industry, Labor and Human Relations is responsible for safeguarding public health relative to the design, construction, installation and maintenance of plumbing. One mechanism used by the department to fulfill this responsibility has been to require the submission of plans and the attainment of the department's approval before a plumbing installation may commence.

Presently, under the plumbing code plans for some types of private sewage systems serving one-family dwellings and 2-family dwellings are not required to be submitted to the department for review. In such cases plan review is performed by the local governmental unit administering chapter ILHR 83 of the plumbing code. However, all plans for holding tanks to be used as private sewage systems are required to be reviewed and approved by the department no matter what type of occupancies are to be served. Over the past 5 years the department has processed from 2,300 to 2,750 plans annually involving holding tanks. The present code also allows the department to designate counties as agents to review soil absorption type private sewage system plans.

The proposed rule revisions would allow counties on a voluntary basis to be recognized by the department as an agent responsible for reviewing holding tanks and/or conventional soil absorption systems to serve one-family dwellings, 2-family dwellings or public buildings. Depending upon the amount of participation, the department anticipates that the reduced workload would result in the department not having to add temporary staff, make staff reassignment or schedule overtime in order to handle seasonal plan review workload peaks. The review of holding tank plans involves checking soil and site characteristics as reported, setback limitations, whether department-approved products have been specified, the tank's capacity and the management plan for the tank. The department believes that many counties are competent to perform the plan review function for holding tanks.

The proposed rules will also repeal and recreate the rules which were based upon sections 145.022 and 145.023 of the statutes. These statutes expired as of July 1, 1985 and July 1, 1987, respectively. The statutes and the rules had established an administrative oversight program for the installation of alternative type private sewage systems.

In addition, the proposed rules will revise existing rules concerning the distribution of effluent in gravity flow systems, the minimum amount of sand fill needed for mound systems, and the type and quality of sand fill to be used in mound systems.

SECTION 1. ILHR 82.40 (3) (e) is created to read:

ILHR 82.40 (3) (e) Metering. When a water meter is provided pursuant to s. ILHR 83.18 (10) the water meter shall:

1. Be installed in the water supply system so as to exclude the supply to those water outlets, such as exterior hose bibbs and wall hydrants, which do not discharge to the sanitary drain system; and
2. Include an accessible remote reader device located on the exterior of the building or structure.

Note: Section ILHR 83.18 (10) requires metering when a new building or a new structure is to be served by a holding tank for sanitary wastewater disposal.

SECTION 2. ILHR 83.02 (2) and (10) are repealed.

SECTION 3. ILHR 83.08 (1) is repealed and recreated to read:

ILHR 83.08 (1) PLAN EXAMINATION REQUIRED. (a) Except as provided in sub. (2) (d), plans and specifications for the following types of private sewage systems shall be submitted to the department for review:

1. Pressure distribution system;
2. Mound system;
3. Holding tank;
4. Experimental system; and
5. A conventional soil absorption system to serve a public building.

(b) When plans and specifications for a type of private sewage system specified in par. (a) are submitted to the department for review, written approval for the plans shall be obtained from the department prior to a sanitary permit being issued for the system or installation of the system commences.

SECTION 4. ILHR 83.08 (2) (d) is repealed and recreated to read:

ILHR 83.08 (2) (d) Agent municipalities. 1. Upon request from a county, the department may delegate to a county the review of plans for one or more of the following types of private sewage systems which are to be or are located within the jurisdiction of that county:

- a. Holding tank; and
- b. Conventional soil absorption system serving a public building.

2. A request by a county to review the types of plans specified in subd. 1. shall be made in writing. The request shall include information delineating how the systems are to be processed and reviewed and how plan review decisions are to be recorded and maintained.

3. The delegation of plan review by the department shall be contingent upon a county's request demonstrating sufficient and adequate capabilities and methods, including the involvement of one or more individuals certified to conduct soil morphological evaluations, to provide assistance in the plan review process.

Note: The requirements of this subdivision do not require the employment of 2 individuals in order to perform plan review. The individual who is to perform the plan review may also be a soil tester certified to conduct soil morphological evaluations.

4. a. The delegation or the denial of delegation relative to a request concerning plan review under this paragraph shall be made in writing by the department.

b. The delegation for plan review shall be such that the submission and review of plans for the types of plans specified in subd. 1. may, at the discretion of the submitter, be made to the department or the delegated county.

5. The department shall include as part of the audits conducted in accordance with s. ILHR 83.06 (5) an evaluation of the plan review functions which may have been delegated to a county under this paragraph.

6. A county which wishes to discontinue the delegated plan review function under this paragraph shall notify the department in writing at least 30 days prior to the discontinuance.

SECTION 5. ILHR 83.10 (6) (b) is repealed.

SECTION 6. ILHR 83.11 is repealed.

SECTION 7. ILHR 83.12 (1) (c) is repealed.

SECTION 8. ILHR 83.13 (6) (b) is amended to read:

ILHR 83.13 (6) (b) Distribution of effluent. ~~Effluent shall be distributed equally throughout the distribution network.~~ Distribution of effluent to seepage trenches on sloping sites may be accomplished by utilizing a drop box design. Where dosing is required, the siphon or pump shall discharge a dose of minimum capacity equal to 75% of the combined volume of the distribution piping in the absorption system. When dosing is required, the dosing frequency shall be a maximum 4 times daily.

SECTION 9. ILHR 83.14 (1) is amended to read:

ILHR 83.14 (1) GENERAL. A pressure distribution system may be used on any site meeting the ~~conventional private sewage system~~ criteria listed in s. ILHR 83.10. ~~A pressure distribution system may be approved as an alternative private sewage system under s. ILHR 83.22.~~ There shall be a minimum depth to the top of the distribution piping of 6 inches from original grade ~~for any pressure distribution system approved as an alternative private sewage system.~~ The minimum required suitable soil depths from original grade for an ~~alternative private sewage system using a pressure distribution network~~ are as follows:

- 1 inch distribution pipe--49 inches suitable soil
- 2 inch distribution pipe--50 inches suitable soil
- 3 inch distribution pipe--52 inches suitable soil
- 4 inch distribution pipe--53 inches suitable soil

~~Department approval is required for use of a pressure distribution system.~~

SECTION 10. ILHR 83.14 (4) (c) is repealed.

SECTION 11. ILHR 83.18 (1) (intro.) is amended to read:

ILHR 83.18 (1) APPROVAL. Plans shall be submitted ~~to the department for review,~~ in accordance with ss. ILHR 83.07 and 83.08, for each application to install a holding tank. ~~The installation and use of a holding tank shall be considered by the department on an individual basis.~~ An application for a holding tank shall not be approved ~~by the department,~~ if:

SECTION 12. ILHR 83.18 (10) is created to read:

ILHR 83.18 (10) METERING. (a) New buildings and new structures to be served by holding tanks shall include the installation of water meters to measure the flows of the water supplies to allow comparisons to the data of holding tank pumping reports.

(b) A water meter required under par. (a) shall be installed in accordance with s. ILHR 82.40 (3) (e).

SECTION 13. ILHR 83.19 is repealed and recreated to read:

ILHR 83.19 INSPECTIONS. (1) Pursuant to s. 145.20 (2) (d), Stats., no part of a private sewage system may be covered by backfill until the county or the department has had an opportunity to inspect the system in accordance with this section.

(a) The plumber responsible for the installation of a private sewage system shall notify the county when the system is ready for inspection. The notification shall be in person, in writing, or by telephone or electronic communication.

(b) The plumber shall be responsible for maintaining records of the inspection notifications. The records shall include information relative to the date and time of notification and the person contacted.

(c) If an inspection is not made by the end of the next workday, excluding Saturdays, Sundays and holidays, after notifying the county, the plumber may proceed with the installation of the system, including backfilling.

(2) Pursuant to s. 145.20 (2) (g), Stats., a county by ordinance may require other inspections in addition to that specified in sub. (1).

(3) (a) A county shall maintain a written record of each inspection conducted for a private sewage system. The record shall include information relative to:

1. The location of the system;
2. The date and time of the inspection;
3. The nature and findings of the inspection.

(4) A county shall make available to the department upon request inspection records for private sewage systems.

SECTION 14. ILHR 83.22 is repealed.

SECTION 15. ILHR 83.23 (1) (a) is amended to read:

ILHR 83.23 (1) (a) General. The installation of a mound in a floodplain or filled area is prohibited. Removal of fill material may not make a site suitable. A mound shall not be installed in a compacted area. A mound shall not be installed over a failing ~~conventional~~ private sewage system.

SECTION 16. ILHR 83.23 Table 14 is amended to read:

TABLE 14
MINIMUM SAND FILL DEPTH (D) FOR MOUNDS
ON SITES HAVING AT LEAST 24 INCHES ABOVE A SOIL OR SITE FACTOR

Soil or Site Factor ^a	Minimum Sand Fill Depth (D) (Inches)
Slowly Permeable Soils ^b	12
Estimated High Groundwater	12
Observed Bedrock creviced	24 ^c
poorly cemented sandstone	18 <u>12</u>
Strata having 50% or more rock fragments by volume	12

^a Soil type as identified in s. ILHR 83.23 (1).

^b Refer to s. ILHR 83.23 (1) (b) 1. or soils having loading rates 0.3 or less.

^c Minimum depth may be reduced to 18 inches on slopes ~~greater than~~ 10% or greater.

SECTION 17. ILHR 83.23 (2) (a) and (b) are repealed and recreated to read:

ILHR 83.23 (2) (a) Design criteria. 1. A mound system to be installed on a site where there is at least 24 inches of unsaturated natural soil above estimated high groundwater, bedrock or slowly permeable soils shall be designed using the specifications of pars. (b) to (h).

2. A mound system to replace an existing private sewage system, and to be installed on a site where there is less than 24 inches of unsaturated natural soil above estimated high groundwater, bedrock or slowly permeable soils shall be designed using the specifications of pars. (b) to (h) with depth of sand fill (D) increased according to the formula in par. (e).

Note: The dimensions and corresponding letter designations referenced in this section are shown in Figures 1 through 5.

(b) Design of the absorption area. The minimum size of the absorption area for a mound system shall be determined by dividing the total daily wastewater flow by the infiltrative capacity of the sand fill.

1. The infiltration rate for the sand fill may not exceed 1.2 gal./day/ft.²

2. The daily wastewater flow shall be determined in accordance with s. ILHR 83.12.

SECTION 18. ILHR 83.23 Tables 17 to 28 are repealed.

SECTION 19. ILHR 83.23 (3) (b) 1 is repealed and recreated to read:

ILHR 83.23 (3) (b) 1. 'Sand fill quality'. The sand fill to be used in the construction of a mound type private sewage system shall conform with fine aggregate specifications delineated in ASTM C33.

SECTION 20. ILHR 83.23 (3) (b) 2 is amended to read:

ILHR 83.23 (3) (b) 2. 'Placement of sand fill'. The medium sand fill shall be moved into place from the upslope and side edges of the plowed area. Vehicular traffic is prohibited in the area extending to 25 feet beyond the downslope edge of the mound. The sand fill shall be moved into place with a track-type tractor. A minimum of 6 inches of sand shall be kept beneath the tracks at all times.

SECTION 21. ILHR 84.20 (5) (o) and (p) are renumbered 84.20 (5) (p) and (q).

SECTION 22. ILHR 84.20 (5) (o) is created to read:

ILHR 84.20 (5) (o) Water meters. A water meter which is used pursuant to s. ILHR 83.18 (10) shall conform to AWWA C700; AWWA C701, AWWA C702, AWWA C704, AWWA C706, AWWA C707, AWWA C708, or AWWA C710.

SECTION 23. ILHR 84.60 Table 84.60-5 line 19m is created to read:

Table 84.60-5
(partial table)

ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, Pennsylvania 19103
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Standard Reference Number	Title
19m. C33-90	Concrete Aggregates, Specification for

SECTION 24. ILHR 84.60 Table 84.60-7 lines 7 to 14 are created to read:

Table 84.60-7
(partial table)

AWWA	American Water Works Association Data Processing Department 6666 West Quincy Avenue Denver, Colorado 80235
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Standard Reference Number	Title
7. C700-90	Cold Water Meters - Displacement Type
8. C701-88	Cold Water Meters - Turbine Type for Customer Service
9. C702-92	Cold Water Meters - Compound Type
10. C704-92	Cold Water Meters - Propeller Type for Main Line Applications
11. C706-91	Cold Water Meters, Direct-Reading Remote Registration Systems for
12. C707-82(R92)	Cold Water Meters, Encoder - Type, Remote-Registration Systems for Cold
13. C708-91	Cold Water Meters - Multi-Jet Type
14. C710-90	Cold Water Meters, Displacement Type - Plastic Main Case

(END)

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register.

BWS3ID12

Tommy G. Thompson
Governor
Carol Skornicka
Secretary



Mailing Address:
201 E. Washington Avenue
Post Office Box 7946
Madison, WI 53707-7946
Telephone (608) 266-7552

State of Wisconsin Department of Industry, Labor and Human Relations

October 12, 1993

Gary Poulson
Assistant Revisor of Statutes
Suite 800
131 W. Wilson St.
Madison, Wisconsin 53703-3233

Douglas LaFollette
Secretary of State
10th Floor
30 West Mifflin Street
Madison, Wisconsin 53703

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO. 92-177
RULE NO. Sections ILHR 83.02, 83.08, 83.13, 83.22, Table 14
RELATING TO: Private Sewage Systems and Holding Tank Plan Review

Pursuant to section 227.20, Stats., agencies are required to file a certified copy of every rule adopted by the agency with the offices of the Secretary of State and the Revisor of Statutes.

At this time, the following material is being submitted to you:

1. Order of Adoption.
2. Rules Certificate Form.
3. Rules in Final Draft Form.

Pursuant to section 227.114, Stats., a summary of the final regulatory flexibility analysis is included for permanent rules. A fiscal estimate and fiscal estimate worksheet is included with an emergency rule.

Respectfully submitted,


Carol Skornicka
Secretary

