

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 mound systems (Subject)

were duly approved and adopted by this department on March 28, 1996 (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 4:00pm in the city of Madison, this 28th day of March A.D. 1996

Carol Skornicka
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):

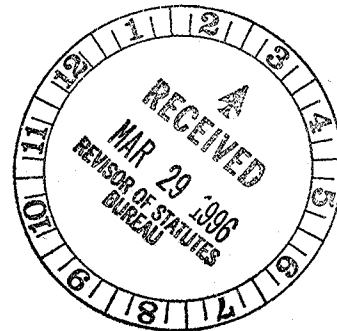
ILHR 83

(Number)

Private Sewage Systems

(Title)

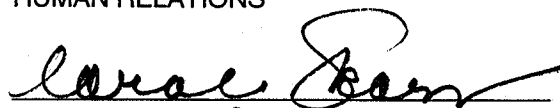
The attached rules shall take effect on the first day of the month following publication in the
Wisconsin Administrative Register pursuant to section 227.22, Stats.



Adopted at Madison, Wisconsin this

date: March 28, 1996

DEPARTMENT OF INDUSTRY, LABOR AND
HUMAN RELATIONS


Secretary



RULES in FINAL DRAFT FORM



Rule No.: ILHR 83.23

Relating to: Mound Systems

Clearinghouse Rule No.: 93-33

The Wisconsin Department of Industry, Labor and Human Relations proposes an order to amend ILHR 83.23 (1) (b) 1, Table 14, (2) (a) 2, (c) 1 a to c and 2, and (d) 1 a; and to repeal and recreate ILHR 83.23 (1) (c) to (e) and (2) (c) 1 d, Table 15, relating to mound type private sewage systems.

ANALYSIS OF RULES

Statutory authority: ss. 101.02 (1) and 145.02 (2), Stats.
Statutes interpreted: s. 145.02 (1) and 145.13, Stats.

Under s. 145.02, Stats., the Department of Industry, Labor and Human Relations has the responsibility of safeguarding public health and the waters of the state relative to the construction, installation and maintenance of plumbing. One mechanism of the Department to fulfill this responsibility has been the promulgation of the state plumbing code, chapters ILHR 81-87.

Under the current rules of ch. ILHR 83, different criteria has been established for the design and installation of a mound system to replace an existing private sewage system and a mound system, as a "new installation", to serve a newly constructed structure. The proposed rules are intended to establish uniform parameters for the design and installation of mound type private sewage systems for both scenarios. The proposed rules will recognize the use of additional sand fill under certain siting scenarios to serve as a treatment medium in lieu of natural in-situ soils for mound systems.

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

ILHR 83.23 (1) (b) 1. 'Slowly permeable soils'. Mound sizing shall be based on soil evaluation or percolation test results. Where sizing is based on soil evaluation, the most limiting condition from Table 0 that occurs within the top 12 inches of the natural soil shall be used to determine the soil loading factor. Where sizing is based on percolation test results, percolation tests shall be conducted in the most restrictive soil horizon within 24 inches measured vertically from the top of existing grade. A mound system is suitable for the site if the percolation rate is greater than 60 minutes per inch and less than or equal to 120 minutes per inch. A site with a percolation rate of greater than 60 minutes per inch and less than or equal to 120 minutes per inch or a maximum wastewater infiltration rate of 0.3 or less shall be designated as a site with slowly permeable soils.

SECTION 2. ILHR 83.23 (1) (c) and (d) are repealed and recreated to read:

ILHR 83.23 (1) (c) Depth to pervious rock. A mound system shall be allowed where at least 24 inches of natural soil exists above creviced or porous bedrock.

(d) Depth to groundwater. A mound system shall be allowed where at least 8 inches of unsaturated natural soil exists above estimated high groundwater as indicated by soil morphological conditions and provided:

1. The soils are not mottled or gleyed in the "E" or "B" horizon which is within 4 inches of the bottom of the "A" horizon; and
2. The cumulative depth of sand, as specified in sub. (2) (d) 1. a., and depth of unsaturated natural soil provides at least 3 feet of vertical separation to high groundwater.

SECTION 3. ILHR 83.23 (1) 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
Bedrock	
creviced	24 ^c
poorly cemented sandstone	12
Strata having 50% or more rock fragments by volume	12

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

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

^cMinimum depth may be reduced to 18 inches on slopes 10% or greater.

SECTION 4. ILHR 83.23 (1) (e) is repealed and recreated to read:

ILHR 83.23 (1) (e) Slopes. 1. A mound system may not be installed on a site where the slope is greater than 20%.

2. A mound system shall be installed such that the longest dimension of the mound does not exceed one percent across the slope of the site.

SECTION 5. ILHR 83.23 (2) (a) 2 and (c) 1 a to c are amended to read:

ILHR 83.23 (2) (a) 2. A mound system ~~to replace an existing private sewage system, and to be installed on a site with less than 24 inches above estimated high groundwater, bedrock or slowly permeable soils shall be designed using the specifications of pars. (b) to (h) with the depth of sand fill (D) increased according to the formula in accordance with par. (e) (d).~~

(2) (c) 1. a. For slowly permeable soils with or without high groundwater, the effluent shall be distributed in the mound through a trench system. ~~Trench length should be selected by determining the longest dimension that is perpendicular to any slope on the site. Trench width and trench spacing is dependent on specific site conditions.~~

b. Trenches shall be ~~2~~ one to ~~4 5~~ 4 5 feet in width.

c. The lineal feet of trench required shall be calculated by dividing the required absorption area by the trench width (a). Trench length (B) shall not be more than 100 feet. ~~Where more than one trench is required, the trenches should be of equal length. A mound should not have more than 3 trenches.~~

SECTION 6. ILHR 83.23 (2) (c) 1 d is repealed and recreated to read:

ILHR 83.23 (2) (c) 1. d. Trench excavations for mound systems shall be placed at least 6 feet apart.

SECTION 7. ILHR 83.23 (2) (c) 2 and (d) 1 a are amended to read: .

ILHR 83.23 (2) (c) 2. 'Beds'. ~~A long, narrow bed desing should be used for permeable soils with high water tables. The bed can be square or rectangular for shallow permeable soils over bedrock. The bed length (B) should be set after determining the longest dimension that is available and that is perpendicular to any slope on the site. The bed width (A) shall be determined by dividing the absorpction area required by (B).~~

(2) (d) 1. a. For sites having at least 24 inches above estimated high groundwater, bedrock, or slowly permeable soils, the minimum sand fill depth (D) shall be 12 inches, unless otherwise specified in Table 14. For mounds ~~replacing existing private sewage systems~~ on sites having less than 24 inches above estimated high groundwater, ~~bedrock~~, or slowly permeable soils, the sand fill depth (D) shall be based on the following calculation:

Where $D = 12 \text{ inches} + (24 \text{ inches} - \text{depth in inches to soil or site factor})$

SECTION 8. ILHR 83.23 (2) (d) Table 15 is repealed and recreated to read:

Table 15
DOWNSLOPE AND UPSLOPE WIDTH CORRECTIONS FOR MOUNDS
ON SLOPING SITES

Slope %	Downslope Correction Factor	Upslope Correction Factor
0	1.00	1.00
1	1.03	0.97
2	1.06	0.94
3	1.10	0.915
4	1.14	0.89
5	1.18	0.875
6	1.22	0.85
7	1.27	0.83
8	1.32	0.80
9	1.38	0.785
10	1.44	0.77
11	1.51	0.75
12	1.57	0.73
13	1.64	0.72
14	1.72	0.705
15	1.82	0.69
16	1.92	0.675
17	2.04	0.66
18	2.17	0.65
19	2.33	0.64
20	2.50	0.625

(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.

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

March 28, 1996

Gary Poulson
Assistant Revisor of Statutes
Suite 800
131 West Wilson Street
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.: 93-33

RULE NO.: ILHR 83.23

RELATING TO: Mound Systems

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,

A handwritten signature in cursive script, appearing to read "Carol Skornicka".

Carol Skornicka
Secretary

