

CR 90-245

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 Relation, and custodian of the official records of said department, do hereby certify the
the annexed rule(s) relating to plumbing were duly
(Subject)
approved and adopted by this department on June 19, 1991.
(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.

RECEIVED

JUN 19 1991
4:00 pm
Revisor of Statutes
Bureau

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 19th
day of June A.D. 1991.

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):

chs. ILHR 82 & 84

(Number)

Plumbing

(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.

RECEIVED

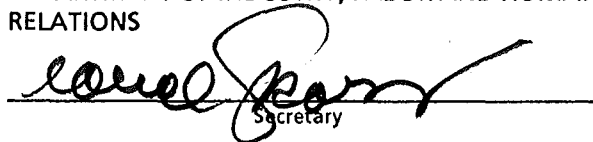
JUN 19 1991

Revisor of Statutes
Bureau

Adopted at Madison, Wisconsin this

date: June 19, 1991

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN
RELATIONS


Secretary



RULES in FINAL DRAFT FORM

Rule: _____ Chapters ILHR 82 and 84

Relating to: _____ Plumbing

The Wisconsin Department of Industry, Labor and Human Relations proposes an order to repeal Table 82.20-1 line 7, ILHR 82.30 (11) (intro.) and 82.36 (3) (c) 3 and (13) (intro.);

to renumber ILHR 82.30 (11) (a) to (f), 82.36 (13) (a) and (b), 84.30 (2) (e) to (g) and A-82.35 (3) (b);

to renumber and amend ILHR 82.40 (8) (c) 2 to 6;

to amend ILHR 82.10 (2), 82.11 (11), Table 82.20-2 line 9, 82.20 (4) (c) 3 a, Table 82.30-3, Table 82.30-7, 82.31 (5) (c) 2 c, 82.31 (10) (intro.) and (b) 1, 82.31 (11) (b), 82.31 (17) (a) 1 e, 82.31 (17) (b), 82.33 (9) (c) 1 a, (d) 2 and (g) 4, 82.34 (4) (a) 2 b, 82.34 (5) (b) 2 (intro.) and c and (c) 4 b, 82.35 (3) (1) Note, 82.35 (5) (a) 2 a, 82.36 (13) (b) 1, 82.40 (5) (d) 5 a, Table 84.30-4, and Ind 69.23 (5) (b);

to repeal and recreate ILHR 21.17 (4) (c) 3, 82.30 (4) (d), 82.31 (5) (c) 1 c, 82.31 (17) (c) 4, 82.33 (3), 82.40 (7) (h), 82.40 (8) (c), Table 82.51, Table 84.30-5, and Table 84.60-9;

and to create ILHR 82.11 (35m), 82.30 (11) (a) and (12) (f), 82.31 (4) (b) 4, 82.31 (17) (a) 1 f, 82.36 (3) (b) 3 and (13) a, 82.40 (5) (a) Note and 84.20 (5) (j) 4 Note, 84.30 (2) (e), Table 84.60-5 line 84m, A-82.35 (8) (b) and A-82.40 (5) (a), relating to plumbing.

ANALYSIS OF RULES

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

The main objective of the proposed rules is to address several issues in the state plumbing code which have been the subject of petitions for variance. The proposed rules are intended to provide more alternatives without necessitating the submittal of petitions for variance by property owners or designers. The proposed rules will also clarify several rules and correct typographical and cross-referencing errors.

The proposed rules will revise standards:

- Allowing agent municipalities to perform plan review functions for private interceptor main sewers;

- Eliminating the submittal of plans to the department when water treatment devices are to be installed, however, water treatment devices still will be required to obtain a product approval under chapter ILHR 84.
- Reducing the minimum diameters for private interceptor main sewers;
- Expanding the types of plumbing fixtures which may be circuit vented;
- Recognizing combination drain and vent systems for building subdrains;
- Changing the criteria for the minimum size of garage catch basins;
- Recognizing that the wastes from a commercial dishwasher may discharge into the drain system by means of either an air-gap or an air break;
- Reducing the minimum size capacity for exterior grease interceptors to 750 gallons;
- Expanding the types of clear water wastes which may be discharged to the sanitary drain system; and
- Recognizing a 10 foot maximum length for a fixture supply connector from an individual water heater or treatment device to a single faucet outlet; and
- Creating a table delineating acceptable materials which may be used for pressurized drain pipe and tubing;

SECTION 1. ILHR 21.17 (4) (c) 3 is repealed and recreated to read:

ILHR 21.17 (4) (c) 3. a. The clear water wastes from a drinking fountain, water heater relief valve, storage tank relief valve or water softener shall be discharged to either a sanitary drain system or a storm drain system.

b. The clear water wastes from equipment other than those listed in subpar. a. may be discharged to a sanitary drain system if not more than 20 gallons of clear water wastes per day per building are discharged.

SECTION 2. ILHR 82.10 (2) is amended to read:

ILHR 82.10 (2) Every building intended for human occupancy shall be provided with an adequate, safe and potable water supply. *A/potable/water supply/shall/not/be/connected/to/an/unsafe/water/supply/or/drain/pipe/not/shall/be/subject/to/the/hazard/of/backflow/or/back/siphonage/* A building located adjacent to a street in which there is a public water supply, shall be connected to the public water supply *by/means/of/individual connections/or/private mains.*

SECTION 3. ILHR 82.11 (35m) is created to read:

ILHR 82.11 (35m) "Building subdrain branch" means a fixture drain which is individually connected to a building subdrain and is vented by means of a combination drain and vent system.

SECTION 4. ILHR 82.11 (111) is amended to read:

ILHR 82.11 (111) "Plumbing" means piping, fixtures, appliances, appurtenances, devices and systems as defined in s. ~~145.01(1)~~ 145.01 (10), Stats.

SECTION 5. ILHR 82.20 Table 82.20-1, line 7 is repealed.

SECTION 6. ILHR 82.20 Table 82.20-2, line 9 is amended to read:

(Partial)
Table 82.20-2
SUBMITTAL TO DEPARTMENT OR AGENT MUNICIPALITY

9. Private interceptor main sewers.^c

SECTION 7. ILHR 82.20 (4) (c) 3 a is amended to read:

ILHR 82.20 (4) (c) 3. a. Be accompanied by a letter from either the appropriate designated management agency or sanitary district indicating conformance with an approved areawide water quality management plan; and

SECTION 8. ILHR 82.30 (4) (d) is repealed and recreated to read:

ILHR 82.30 (4) (d) Minimum size of private interceptor main sewers. 1. Except as provided in subd. 3., the minimum size of a gravity flow private interceptor main sewer shall be 4 inches in diameter.

2. Except as provided in subd. 3., the minimum size of pressurized private interceptor main sewer shall be such so as to maintain a minimum flow velocity of 2 feet per second.

3. A municipality or a sanitary district may by ordinance, require the minimum size of a private interceptor main sewer to be larger than 4 inches in diameter.

4. Private interceptor main sewers 6 inches or less in diameter may not exceed the drainage fixture limits in Table 82.30-3.

5. Private interceptor main sewers 8 inches or larger in diameter shall conform with the design flow criteria specified in ch. NR 110.

(NOTE TO REVISOR: ILHR 82.30 (4) (d) 2 Note is repealed, and the information on pages 177 and 178 in the Appendix is to be deleted.)

SECTION 9. ILHR 82.30 Table 82.30-3 is amended to read:

(Partial)
Table 82.30-3
BUILDING DRAINS, BUILDING SUBDRAINS, BUILDING SEWERS AND
PRIVATE INTERCEPTOR MAIN SEWERS^a

column (title)

Maximum Number of Drainage Fixture Units Which May Drain Through
Any Portion of a Building Drain, Building Subdrain, Building
Sewer or Private Interceptor Main Sewer

Pipe Diameter (in inches)	Pitch (inch per foot) "1/16"
12	<u>2,000 3,900</u>

Note a: Private interceptor main ~~sewers~~ sewers 6 inches or less in diameter, see s. NR 110.13 for private interceptor main sewers 8 inches or larger in diameter.

SECTION 10. ILHR 82.30 (11) (intro.) is repealed.

SECTION 11. ILHR 82.30 (11) (a) to (f) is renumbered 82.30 (11) (b) to (g).

SECTION 12. ILHR 82.30 (11) (a) is created to read:

ILHR 82.30 (11) (a) Limitations. No building sewer may pass through or under a building to serve another building, unless:

1. The building sewer serves farm buildings or farm houses, or both, which are all located on one property; or

2. A petition for variance is granted under s. ILHR 82.20 (11). The approval or nonapproval of a petition for variance request relative to this paragraph shall be determined on an individual basis. The request shall be evaluated on site specific factors including, at least, whether:

a. The building sewer serves buildings which are located on one property;

b. The functions or operations of the buildings to be served by the building sewer are related; or

c. A document, which indicates the piping and distribution arrangement for the property and buildings, will be recorded with the register of deeds.

SECTION 13. ILHR 82.30 Table 82.30-7 is amended to read:

(Partial)
Table 82.30-7
MINIMUM WIDTH OF EXTRUDED POLYSTYRENE FOAM INSULATION

Predicted Depth of of Frost (in feet)	Depth of Sewer (in feet)					
	2.0	2.5	3.0	3.5	4.0	4.5

SECTION 14. ILHR 82.30 (12) (f) is created to read:

ILHR 82.30 (12) (f) No private interceptor main sewer may pass through or under a building to serve another building, unless:

1. The private interceptor main sewer serves farm buildings or farm houses or both which are all located on one property; or

2. A petition for variance is granted under s. ILHR 82.20 (11). The approval or nonapproval of a petition for variance request relative to this paragraph shall be determined on an individual basis and shall be evaluated on site specific conditions including, at least, whether:

a. The private interceptor main sewer serves only buildings which are all located on one property;

b. The functions or operations of the buildings to be served by the interceptor main sewer are related; or

c. A document, which indicates the piping and distribution arrangement for the property and buildings, will be recorded with the register of deeds.

SECTION 15. ILHR 82.31 (4) (b) 4 is created to read:

ILHR 82.31 (4) (b) 4. The connection of a vent stack with another vent may not be less than 38 inches above the next higher floor level where the plumbing fixtures are vented, but in no case lower than 2 inches above the elevation of the highest flood level rim of any fixture served by the vent.

SECTION 16. ILHR 82.31 (5) (c) 1 c is repealed and recreated to read:

ILHR 82.31 (5) (c) 1. c. The connection of a relief vent with another vent may not be less than 38 inches above the next higher floor level where the plumbing fixtures are vented, but in no case lower than 2 inches above the elevation of the highest flood level rim of any fixture served by the vent.

SECTION 17. ILHR 82.31 (5) (c) 2 c is amended to read:

ILHR 82.31 (5) (c) 2. c. The connection of the yoke vent to another vent ~~shall~~ may not be less than ~~42~~ 38 inches above the next higher floor level where plumbing fixtures are installed that discharge into the drain stack.

Note: See appendix for further explanatory material.

SECTION 18. ILHR 82.31 (10) (intro.) and (b) 1 are amended to read:

ILHR 82.31 (10) CIRCUIT VENTING. In lieu of providing individual vents, a horizontal drain to which at least 2 but not more than 8 ~~similar~~ floor outlet fixtures, other than blowout type ~~water/closets~~ fixtures, are connected in battery, may be vented by a circuit vent in accordance with pars. (a) to (e). ~~For the purposes of this subsection, flush/attic/type/outlet fixtures of a/dry/more/drainage/fixture/units shall be considered as one group of similar/fixtures, all other types of floor/outlet/fixtures shall be considered as another group of similar/fixtures.~~

(b) 1. A circuit vented horizontal drain into which 4 or more floor outlet fixtures discharge shall be provided with a relief vent, ~~unless the horizontal/drain/connections to a/drain/stack with no other/drain/connections located above the/circuit/vented/horizontal/drain.~~ The relief vent shall connect to the circuit vented horizontal drain downstream of the most downstream fixture drain which is vented by the circuit vent and upstream of any other drain connections.

SECTION 19. ILHR 82.31 (11) (b) is amended to read:

ILHR 82.31 (11) (b) Horizontal branches. The fixture drains from 2 wall-outlet fixtures, each with a drainage fixture unit ~~value~~ value of one or less, or the fixture drains from 2 traps serving a kitchen sink with or without a dishwasher may connect to a horizontal branch without individual vents provided a ~~common~~ common vent connects to the branch drain downstream of both fixture drains. Both fixture drains shall be of the same diameter. The developed length of the drain from the vent to the farthest trap shall conform to sub. (9).

SECTION 20. ILHR 82.31 (17) (a) 1 e is amended to read:

ILHR 82.31 (17) (a) 1. e. The drain stack and its attendant stack vent shall be sized in accordance with Table 82.31-5 ~~and shall extend~~
~~undiminished in diameter from the connection to the building drain to the vent terminal in accordance with sub. (16).~~

SECTION 21. ILHR 82.31 (17) (a) 1 f is created to read:

ILHR 82.31 (17) (a) 1. f. For the purpose of this subdivision a vent stack shall not be required to serve this type of combination drain and vent arrangement.

SECTION 22. ILHR 82.31 (17) (b) is amended to read:

ILHR 82.31 (17) (b) Building drains. A building drain or a building subdrain may serve as a combination drain and vent system for floor drains and floor outlet fixtures in accordance with subds. 1 to 6.

1. A vent stack or a drain stack at least 2 inches in diameter shall be connected upstream of any building drain branch or building subdrain branch.

2. No more than 2 water closets may connect to the ~~building~~ building drain or building subdrain by means of building drain branches or building subdrain branches.

3. a. That portion of the building drain or building subdrain between the connection of the building drain branch or building subdrain branch and the vent stack or drain stack required in subd. 1 shall be at least one pipe size larger than the minimum size permitted in Table 82.30-3 based on the total drainage fixture unit load.

b. The vent stack or drain stack required in subd. 1 shall be at least one half the diameter of that portion of the building drain or building subdrain which is vented by the stack, but may not be less than 2 inches in diameter.

c. A stack vent serving a drain stack required in subd. 1 shall be at least one half the diameter of that portion of the building drain or building subdrain which is vented by the stack, but may not be less than 2 inches in diameter.

4. The trap of a floor drain or a floor outlet fixture, except a water closet, connected to a building drain branch or building subdrain branch shall be at least 3 inches in diameter.

5. A building drain branch ~~shall~~ or building subdrain branch may not connect to a building drain or building subdrain downstream from the base fitting of a drain stack 2 inches or larger in diameter with the distance equal to 20 pipe diameters of the building drain or building subdrain.

6. The pitch and the developed length of the building drain branch ~~shall~~ or building subdrain branch may not exceed the limits specified in Table 82.31-1.

SECTION 23. ILHR 82.31 (17) (c) 4 is repealed and recreated to read:

ILHR 82.31 (17) (c) 4. Fixture drains to be vented by the horizontal drain shall connect individually to the horizontal drain.

SECTION 24. ILHR 82.33 (3) is repealed and recreated to read:

ILHR 82.33 (3) SIZE. Except as provided in pars. (a) and (b), indirect waste piping more than 30 inches in length and all local waste piping shall be sized in accordance with s. ILHR 82.30.

(a) Indirect or local waste piping not exceeding 20 feet in length for refrigerated food display cases may not be less than one inch in diameter.

(b) Indirect waste piping, attached to an appliance, appurtenance or equipment through which pressurized waste is discharged, shall be sized in accordance with specifications of the manufacturer of the appliance, appurtenance or equipment.

SECTION 25. ILHR 82.33 (9) (c) 1 a, (d) 2 and (g) 4 are amended to read:

ILHR 82.33 (9) (c) 1. a. A standpipe receptor ~~shall~~ may not extend more than 36 inches nor less than 18 inches above the top of the trap ~~inlet~~ weir.

(d) 2. 'Commercial'. Commercial dishwashing machines shall discharge into a sanitary drain system by means of ~~a fixed~~ an air-gap or air-break into a trapped and vented receptor. The indirect waste piping ~~shall~~ may not be more than 30 inches in length.

(g) 4. 'Refrigerated food storage rooms, compartments and display cases'. Drains serving refrigerated food storage rooms, compartments or ~~display~~ display cases shall discharge to the sanitary drain system through indirect waste piping. The indirect waste piping shall drain by gravity to a receptor by means of an air-gap or air-break. Where an air-break is installed, the flood level rim of the receptor shall be at least 2 inches below the top of the fixture strainer or drain opening in the refrigerated room, compartment or display case.

SECTION 26. ILHR 82.34 (4) (a) 2 b is amended to read:

ILHR 82.34 (4) (a) 2. b. The catch basin shall have a minimum inside diameter or horizontal dimension of 36 inches and a minimum inside depth of 48 inches. ~~The catch basin shall have a minimum liquid capacity of one cubic foot for each 300 square feet of surface area to be drained into the catch basin.~~

SECTION 27. ILHR 82.34 (5) (b) 2 (intro.) and c and (c) 4 b are amended to read:

ILHR 82.34 (5) (b) 2. 'Capacity and sizing'. The minimum liquid capacity of a grease interceptor shall be determined in accordance with the provisions of this subdivision, except no grease interceptor may have a capacity of less than 1000 gallons if the interceptor is to discharge to a private sewage system or less than 750 gallons if the interceptor is to discharge to a municipal sewer system and treatment facility.

c. The minimum capacity of a grease interceptor as determined in subpar. a. or b. may be halved for establishments with all paper service, but ~~shall~~ may not be less than 1000 gallons if the interceptor is to discharge to a private sewage system or less than 750 gallons if the interceptor is to discharge to a municipal sewer system and treatment facility.

(c) 4. b. Flow controls shall be installed in the drain branch leading to each fixture and shall be so rated that the combined flow ~~from~~ from all combinations of discharge will not develop either sufficient static or velocity head so the established flow rate of the interceptor can be exceeded.

Note: See Appendix for further explanatory material.

SECTION 28. ILHR 82.35 (3) (1) Note is amended to read:

ILHR 82.35 (3) (1) Note: The installation of sampling manholes may be needed for the monitoring of industrial wastes under chs. NR 200 to 299. See Appendix for further explanatory material.

SECTION 29. ILHR 82.35 (5) (a) 2 a is amended to read:

ILHR 82.35 (5) (a) 2. a. The frost sleeve shall be of a material approved for building sewers in accordance with s. ~~ILHR/84/30/(11)/(c)~~ ILHR 84.30 (2) (c).

SECTION 30. ILHR 82.36 (3) (b) 3 is created to read:

ILHR 82.36 (3) (b) 3. a. The clear water wastes from a drinking fountain, water heater relief valve, storage tank relief valve or water softener shall be discharged to either a sanitary drain system or a storm drain system.

b. The clear water wastes from equipment other than those listed in subpar. a. may be discharged to a sanitary drain system if not more than 20 gallons of clear water wastes per day per building are discharged.

SECTION 31. ILHR 82.36 (3) (c) 3 is repealed.

SECTION 32. ILHR 82.36 (13) (intro.) is repealed.

SECTION 33. ILHR 82.36 (13) (a) and (b) is renumbered 82.36 (13) (b) and (c).

SECTION 34. ILHR 82.36 (13) (a) is created to read:

ILHR 82.36 (13) (a) Limitations. No storm building sewer or private interceptor main storm sewer may pass through or under a building to serve another building, unless:

1. The storm building sewer or private interceptor main storm sewer serves farm buildings or farm houses or both which are all located on one property; or

2. A petition for variance is granted under s. ILHR 82.20 (11). The approval or nonapproval of a petition for variance request relative to this paragraph shall be determined on an individual basis and shall be evaluated on site specific conditions including, at least, whether:

a. The storm building sewer or private interceptor main storm sewer serves only buildings which are all located on one property;

b. The functions or operations of the buildings to be served by the building sewer or interceptor main sewer are related; or

c. A document, which indicates the piping and distribution arrangement for the property and buildings, will be recorded with the register of deeds.

SECTION 35. ILHR 82.36 (13) (b) 1 is amended to read:

ILHR 82.36 (13) (b) 1. The connection of a storm water leader discharging to a ~~storm/building/drain/~~ storm building sewer shall be made above the finished grade. That portion of the piping from the leader to at least one foot below grade shall be of cast iron.

SECTION 36. ILHR 82.40 (5) (a) Note is created to read:

ILHR 82.40 (5) (a) Note: See Appendix for further explanatory materials regarding insulation requirements for storage tanks and recirculation piping.

SECTION 37. ILHR 82.40 (5) (d) 5 a is amended to read:

ILHR 82.40 (5) (d) 5. a. The discharge pipe and fittings shall be made of a material acceptable for water distribution piping in accordance with s. ~~ILHR/84/30/(4)/(b)/1~~ ILHR 84.30 (4) (e) 1.

SECTION 38. ILHR 82.40 (7) (h) 1 is repealed and recreated to read:

ILHR 82.40 (7) (h) 1. a. A fixture supply connector may not exceed more than 24 inches in developed length from a plumbing fixture or the body of a faucet, except as provided in subpar. b.

b. A fixture supply connector may not exceed more than 10 feet in developed length from a single faucet or outlet to a water cooler device, water heater, or water treatment device which is to individually serve the faucet or outlet.

SECTION 39. ILHR 82.40 (8) (c) 2 to 6 is renumbered 82.40 (8) (b) 4 to 8 and 82.40 (8) (b) 4 c as renumbered is amended to read:

ILHR 82.40 (8) (b) 4. c. Within a waterproof sleeve made of materials as specified for sanitary building sewers in s. ~~ILHR/84/30/(1)~~ ILHR 84.30 (2).

SECTION 40. ILHR 82.40 (8) (c) is repealed and recreated to read:

ILHR 82.40 (8) (c) Limitations. No private water main or water service may pass through or under a building to serve another building, unless:

1. The private water main or water service serves farm buildings or farm houses or both which are all located on one property; or

2. A petition for variance is granted under s. ILHR 82.20 (11). The approval or nonapproval of a petition for variance request relative to this paragraph shall be determined on an individual basis and shall be evaluated on site specific conditions including, at least, whether:

- a. The private water main or water service serves only buildings which are all located on one property;
- b. The functions or operations of the buildings to be served by the water main or water service are related; or
- c. A document, which indicates the piping and distribution arrangement for the property and buildings, will be recorded with the register of deeds.

SECTION 41. ILHR 82.51 Table 82.51 is repealed and recreated to read:

Table 82.51
MAXIMUM NUMBER OF MOBILE HOMES SERVED BY A PRIVATE
INTERCEPTOR MAIN SEWER

Diameter of Private Interceptor Main Sewer (in inches)	Pitch (inch per foot)		
	1/16	1/8	1/4
4	None	7	10
5	12	18	24
6	26	34	49
8	Load May Not Exceed Capacity of Pipe ^a		

Note a: See s. ILHR 82.30 (4) (d).

SECTION 42. ILHR 84.20 (5) (j) 4 Note is created to read:

ILHR 84.20 (5) (j) 4. Note: Section ILHR 52.60 (5) (a) specifies slip-resistant requirements for shower rooms and compartments in public buildings and places of employment.

SECTION 43. ILHR 84.30 (2) (e) to (g) is renumbered 84.30 (2) (f) to (h).

SECTION 44. ILHR 84.30 (2) (e) is created to read:

ILHR 84.30 (2) (e) Pressurized drain pipe. Except as provided in par. (f) 3, pressurized drain pipe shall conform to one of the standards listed in Table 84.30-5 and shall be rated for the working pressure and temperature to which it will be subjected for a specific installation.

SECTION 45. ILHR 84.30 Table 84.30-4 is amended to read:

(Partial) Table 84.30-4 PERFORATED EFFLUENT DISTRIBUTION PIPING FOR NONPRESSURIZED SOIL ABSORPTION SYSTEMS	
Material	Standard
Polyethylene (PE) ^a	ASTM F405; ASTM F810

Note a: Polyethylene (PE) pipe shall have 2 rows, and only 2 rows, of perforations parallel to the axis of the pipe and $120^\circ \pm 5^\circ$ apart. The perforations shall be at the nominal 4 and 8 o'clock positions when the pipe is installed.

SECTION 46. ILHR 84.30 Table 84.30-5 is repealed and recreated to read:

TABLE 84.30-5
PRESSURIZED DRAIN PIPE AND TUBING

Material	> > >	Standard
Acrylonitrile butadiene styrene (ABS) ^a		ASTM D1527; ASTM D2282; ASTM D2661; ASTM F628
Acrylonitrile butadiene styrene (ABS) composite		ASTM D2680
Brass		ASTM B43
Cast iron		ASTM A74; ASTM A377; AWWA C115/A21.15; CISPI 301
Chlorinated polyvinyl chloride (CPVC) ^a		ASTM D2846; ASTM F441; ASTM F442; ASTM F443
Concrete		ASTM C14; ASTM C76
Copper ^b		ASTM B42; ASTM B88; ASTM B306
Ductile iron		ASTM A377; AWWA C115/A21.15; AWWA C151/A21.51
Polyvinyl chloride (PVC) ^a		ASTM D1785; ASTM D2241; ASTM D2665; ASTM D2672; ASTM D2740; AWWA C900
Stainless Steel		ANSI B36.19M; ASTM A270; ASTM A450

Note a: Thermoplastic sewer pipe shall be installed in accordance with ASTM D2321.

Note b: Copper tubing, type M, may not be installed underground.

SECTION 47. ILHR 84.60 Table 84.60-5 line 84m is created to read:

<u>Standard Reference Number</u>	<u>Title</u>
84m. F810-85	Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields, Specification for

SECTION 48. ILHR 84.60 Table 84.60-9 is repealed and recreated to read:

Table 84.60-9

FS	Federal Specifications* National Bureau of Standards Office of Engineering Standards U.S. Department of Commerce Washington, D.C. 20234
	*Standards are available from the Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402

<u>Standard Reference Number</u>	<u>Title</u>
WW-P-325B	Pipe, Bends, Traps, Caps and Plugs; Lead (For Industrial Pressure, and Soil and Waste Applications), June 9, 1976
WW-P-405a	Corrugated Pipe (Iron or Steel, Zinc Coated), September 1968, with Amendment 1, September 1970

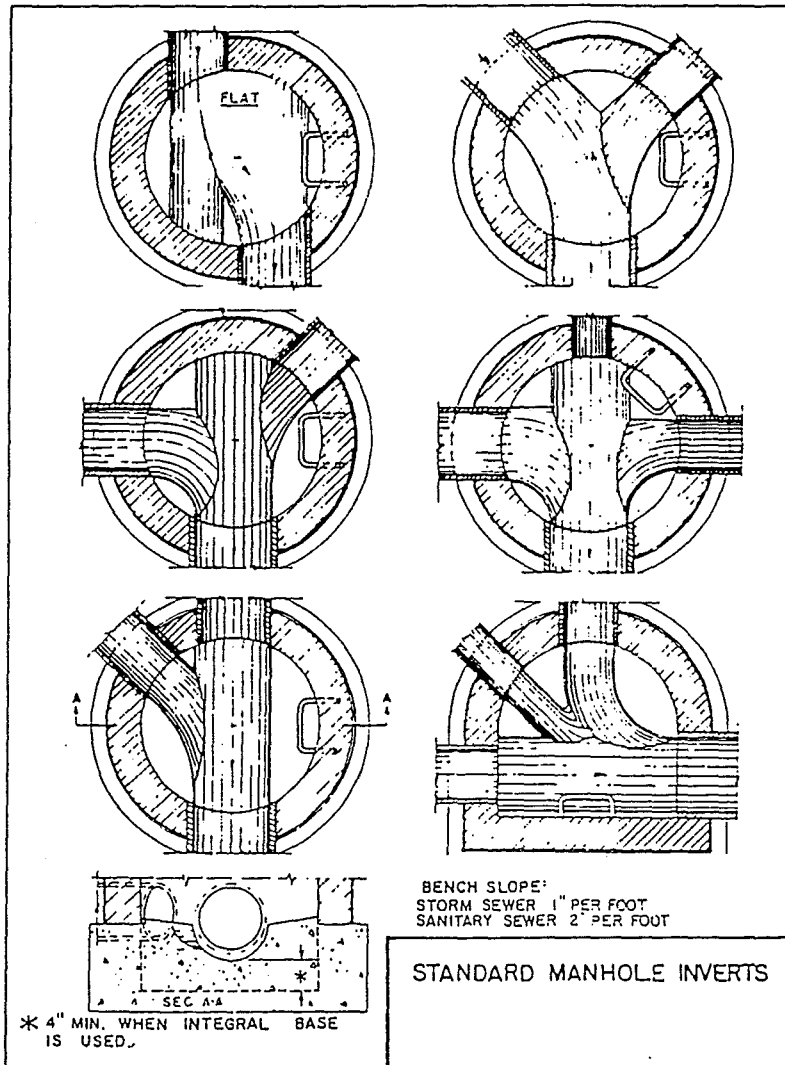
-13-

SECTION 49. Appendix A-82.35 (8) is renumbered A-82.35 (3) (1).

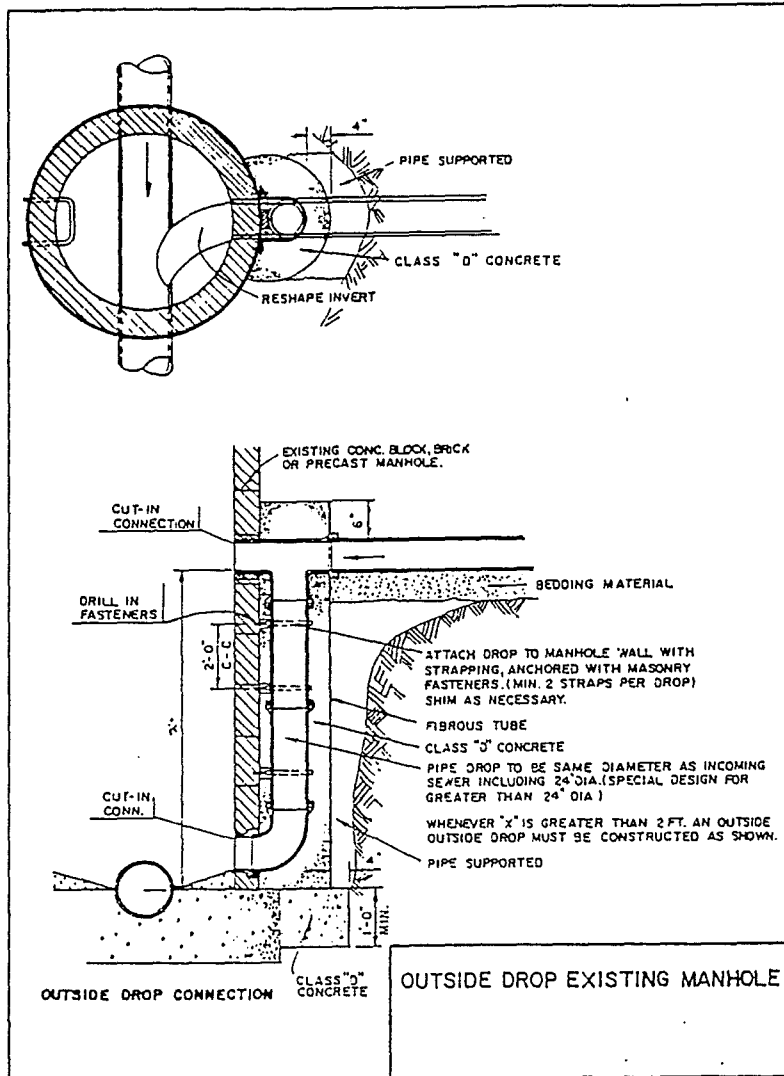
SECTION 50. Appendix A-82.35 (8) (b) is created to read:

(insert drawings)

A-82.35(8)(b) Manhole Flow Channel



A-82.35(8)(b) Outside drop manhole



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SECTION 51. Appendix A-82.40 (5) (a) is created to read:

A-82.40 (5) (a) Storage tank and piping insulation. The following is a reprint of section ILHR 63.33.

ILHR 63.33 INSULATION. (1) STORAGE TANKS. Heat loss from unfired hot water storage tanks shall be limited to 15 Btu per hour per square foot of external tank surface area. The design ambient temperature shall be no higher than 65° F.

(2) PIPING. (a) Except as provided in par. (b), piping heat loss for recirculation systems shall be limited to a maximum of 25 Btu per hour per square foot of external pipe insulation surface for aboveground piping and a maximum of 35 Btu per hour per square foot of external pipe insulation for underground piping. Maximum heat loss shall be determined at a ΔT equal to the maximum water temperature minus a design ambient temperature no higher than 65° F.

(b) Conformance to the minimum pipe insulation requirements specified in Table 63.22 shall be deemed as complying with the requirements of this subsection.

SECTION 52. Ind 69.23 (5) (b) is amended to read:

Ind 69.23 (5) (b) The fee for the request of the review of a research report by the department for either a cross-connection control device or a water-conserving fixture under the administrative procedures described in s. ILHR 84.10 (2) (a) 1 or 2 shall be ~~\$15/00/per/product~~ determined in accordance with revision or renewal provisions of Table 69.23-4.

(END)

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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.

* * * * *

01711

Tommy G. Thompson
Governor
Carol Skornicka
Secretary



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State of Wisconsin Department of Industry, Labor and Human Relations

June 19, 1991

RECEIVED

JUN 19 1991

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Madison, Wisconsin 53703

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Secretary of State
10th Floor
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Revisor of Statutes
Bureau

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO. 90-245
RULE NO. Chapters ILHR 82 and 84
RELATING TO: Plumbing

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