H 62,63

Jan. 24 - 1957 -3 P.M.

STATE OF WISCONSIN) SS BOARD OF HEALTH

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Carl N. Neupert, M. D., Executive Secretary of the Wisconsin State Board of Health and custodian of the official records of said Board, do hereby certify as follows:

1. That Sections H 62.02 (8), (42) (b) and (c), (46) and (49); H 62.04 (10) (b); H 62.05 (1), (2) and (3); H 62.06 (2); H 62.07 (7) (b); H 62.10 (1), (4) and (5); and H 62.20 (2) (a), (b) and (c)2 of the Wisconsin Adminis-trative Code relating to Design, Construction, Installation, Supervision and Transaction of Plumbian work duly Supervision, and Inspection of Plumbing were duly amended by this Board on January 18, 1957, as annexed, pursuant to authority vested in said Board by Sec. 140.05 (3) and 145.02 (2), Wis. Stats.;

That Section H 62.23 of the Wisconsin Adminis-2. trative Code relating to Industrial Commission Regulations was renumbered H 62.24 and that the annexed rule and regulation, Section: H 62.23 of the Wisconsin Administrative Code relating to Approval on Experimental Basis, was duly approved and adopted by this Board on January 18, 1957, pursuant to authority vested in said Board by Sec. 140.05 (3) and 145.02 (2), Wis. Stats.;

3. That the annexed rules and regulations (Section H 63.05 of the Wisconsin Administrative Code) relating to Plastic Pipe were duly approved and adopted by this Board on January 18, 1957, pursuant to authority vested in said Board by Sec. 140.05 (3) and 145.02 (2), Wis. Stats.

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.

The attached rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register, as provided in Sec. 227.026 (1), Wis. Stats.

> IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the department at the State Office Building in the City of Madison, this 24th day of January, 1957.

Seal

Call h. heypert, m &: Executive Secretary

H 62.02 (8), (μ 2) (b) and (c), (μ 6) and (μ 9); H 62.04 (10) (b); H 62.05 (1), (2) and (3); H 62.06 (2); H 62.07 (7) (b); H 62.10 (1) (μ) and (5); and H 62.20 (2) (a) (b) and (c)? are amended to read as follows:

H 62.02 Definition of terms.

(8) BRANCH. The branch of any system of piping is that part of the system, which extends laterally at a slight grade, with or without other lateral or vertical extensions, from the stack, building drain or building sub-drain to receive fixture outlets.

(42) SEWERS. (b) <u>Building or house drain</u>. The lowest main horizontal piping of a drainage system which receives the discharge of all soil, waste and other drainage pipes inside any building and conveys the same to the building sewer, 3 to 5 feet outside the foundation wall of such building. The minimum building drain extends from the building sewer to the furthermost soil stack. <u>Building or house sub-drain</u>. The horizontal portion of a drainage system within a building which cannot flow by gravity to the building or house drain.

(c) <u>Building or house sewer</u>. That part of the horizontal piping beginning 3 to 5 feet from the foundation wall to its connection with the main sewer, septic tank, or other disposal terminal.

(46) SOIL STACK. Any pipe extending upward which conveys the discharge of water closets with or without other fixtures to the building drain, building sub-drain or underground branch.

(49) STACK. The pipe extending upward from the building drain, building sub-drain or underground branch with or without change of direction through the roof or to a connection with another stack.

H 62.04 Building or house sewers.

(10) LIMITATIONS ON USE. (b) Storm and clear water connections prohibited. Roof leaders, surface drains, ground water drains, foundation footing drains or other clear water drains shall be connected wherever possible with a storm sewer, but they shall not be connected to a building sewer which discharges into a sanitary sewer or private sewage treatment plant.

H 62.05 Building or house drains.

(1) ELEVATION. All building drains wherever possible shall be brought into the building underground, below the level of the basement floor.

(2) MATERIALS. All building drains shall be constructed of vitrified clay, type M hard temper copper or cast iron pipe. The use of vitrified clay or copper pipe is permitted where there is a soil covering of 18 inches or more. Where the ground is surmounted by a substantial cement floor a 12 inch covering is permitted. Where a building drain leaves the building at a point above the basement floor, it shall be constructed of cast iron or type M hard temper copper pipe to a point 5 feet from the inside of the building foundation wall or to such additional distance as necessary to reach undisturbed stable ground. See H 62.22 (3).

(3) SIZE. The size of building drains and building sub-drains shall be determined by the number of fixture units tributary thereto. The minimum size of a building drain shall be 4 inches. The minimum size of a building sub-drain shall be 2 inches. See H 62.04 (4) and 62.10 (1).

H 62.06 Stacks and branches.

(2) SIZE. The size of the stacks and branches shall be determined by the number of fixture units connected thereto. If pitch or grade of a soil or waste branch is 45 degrees or more, the same unit capacities as for vertical stacks will be permissible. Any underground branch shall be at least 2 inches in diameter. A water closet may connect to a 3 inch stack through a 4×3 inch bend. Not more than two water closets shall be connected to a 3 inch soil stack. Not more than one water closet shall be connected to a 3 inch branch. Two water closets located back to back shall be connected to a 3 inch soil stack with a 3 x 3 inch double wye and one-eighth bends or similar fittings or fitting. A sanitary cross will not be permitted. All waste openings provided for future use shall be properly vented and sealed. See H 62.03 (1), (3).

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H 62.07 Vents.

(7) (b) <u>Basement fixtures</u>. Water closets, not to exceed two in number, floor drains, subsoil traps, elevator catch basins or similar receptacles located in a basement need not be back vented when branched into underground horizontal drains or branches. Where a soil or waste pipe stack 3 inches or larger in diameter is involved, the branch connection shall be located 8 feet or more in the direction of flow from the base of such stack. The developed distance of the horizontal waste branch shall not exceed 48 times the inside diameter of the pipe. See H 62.22 (6), (7).

H 62.10 Floor drains. (1) FLOOR DRAINS, TRAPS AND BACKWATER VALVES. All floor drains connecting directly to an underground building drain, building subdrain or branch shall connect into a cast iron deep seal trap not less than 3 inches in diameter, so constructed and installed that it can be readily cleaned. The drain inlet shall be so located that it is at all times in full view. When subject to back flow such drains shall be equipped with an adequate back water valve. Refrigerator drains, bubbler and similar wastes may be connected with a floor drain only in the manner set forth in H 62.14 (3) (5) and H 62.22 (34) (35).

(4) SUBSOIL, TRAP RECEIVER. The discharge of drain tile from footings of buildings shall be collected in a subsoil receiver or trap when direct discharge to the ground surface is impractical. A trap receiver shall have a cleanout brought to the surface of the floor. A combination floor and subsoil drainage receiver may be used. All subsoil drainage outlets where connected to a sump, building drain or sewer shall be equipped with an effective back water valve. Foundation drains shall not be connected to sanitary sewers. See H 62.22 (26).

(5) AREA AND COURT DRAINS. When permitted to connect to the building or house drainage system the various drains from small yards, areas and courts may be connected together and their contents discharged into a yard catch basin, an adequate basement floor drain or a deep seal trap, so located that it is readily accessible for cleaning and is protected from frost. The surface opening of the

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drain to catch basin must be provided with an adequate strainer, and where necessary with a backflow valve. See H 62.04 (10) (b).

H 62.20 Sewage treatment and disposal systems.

(2) EFFLUENT DISPOSAL. (a) <u>Location and method</u>. The effluent from septic tanks shall be disposed of by soil absorption in a seepage pit, drainage field or by some other manner approved by the board provided such disposal does not create a nuisance or hazard to health. All soil absorption disposal units should be located at a point lower than the grade of any nearby water well and unless permission is obtained from the board shall be located not less than 25 feet from any dwelling or distern and not less than 50 feet from any water well constructed in accordance with the specifications of the Wisconsin Well Construction and Pump Installation Code. Where water wells do not conform greater distances shall be maintained. No part of a seepage pit or drainage field shall be located within 5 feet of any lot line or within 25 feet of any lake, stream or other water course unless permission is obtained from the board. The type of soil absorption system to be used for effluent disposal shall be determined through percolation tests made in accordance with Section H 65.06 (4), Wisconsin Administrative Code.

(b) <u>Seepage pits</u>. 1. Seepage pits preferably should be used when deeper soil formations are more porous than the upper soil. The seepage pit shall consist of a chamber walled up with material which allows water to percolate through it, such as dry rubble, brick or concrete blocks. The bottom shall be left open to the soil. The seepage pit shall not be less than 5 feet in diameter and should have a depth, where practicable, of 6 feet or more below the inlet pipe, depending on the character of the soil. Seepage pits shall not extend into creviced rock formations. Each seepage pit shall be provided with a manhole and a fresh air inlet. The manhole shall be at least 20 inches square or 20 inches in diameter extending to within at least 12 inches of the surface of the ground and be provided with a substantial concrete, stone or cast iron cover. See H 62.22 (h1).

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2. The absorption area in a seepage pit per bedroom shall be at least 75 per cent of the area designated in subsection (c) (2). Effective area shall be construed as the bottom area plus the area at the outside wall of the curbing of the pit. The actual thickness of absorptive material below the inlet subjected to the percolation test, but not more than 5 feet, shall be used in calculating wall area. Seepage pits shall be located 10 feet or more apart and as far from wells as the premises will permit. See H 62.20 (2) (a).

(c) Drainage tile and siphon.

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2. The absorption area required for a tile field serving residential property shall be determined from the following table using soil percolation test data:

Percolation Rate	Minimum Absorption Area in Square Feet Per Bedroom			
Minutes Required				With Both Grinder
For Water To Fall	Normal	With Garbage	With Automatic	and
One Inch	Plumbing Fixtures	Grinder	Washer	Automatic Washer
2	50	65	75	85
3	60	75	85	100.
24	70	85	9 5	115
5	75	90	105	125
10	100	120	135	165
15	115	140	160	190
30	150	180	205	250
45	180	215	245	300
60	200	240	275	330
90	240	290	325	400

In the case of schools or other part-time-use establishments, one-sixth of the area requirements per bedroom for normal plumbing fixtures shall be provided for each person. In the case of commercial or industrial establishments onefiftieth of the area requirements for normal plumbing fixtures shall be provided for each gallon per day of sewage or wastes contributed to the disposal system.

Where the percolation rate is so slow that more than 60 minutes are required for the water to fall one inch, studies should be made of the possibility of using seepage pits alone or in conjunction with a tile absorption field.

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H 62.23 is renumbered H 62.24. H 62.23 is created to read as follows:

H 62.23 Approval on Experimental Basis. The Board may approve materials, fixtures and layouts different than those set forth in this chapter for specific installations for experimental or trial purposes.

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(c) The pipe trench shall have a smooth compacted bottom. Where rock or stone is encountered, the trench shall be backfilled with sand or stone-free soil for a depth of 2 to 3 inches.

(d) With thermo-plastic pipe an extra one inch of length shall be provided for every 8 feet of measured length of installation. Before backfilling, water at well temperature shall be discharged through the pipe until it reaches the approximate temperature of the water.

(e) The first 6 inches of backfill material shall be free of rocks or clods and shall be carefully placed by hand.

(f) Pipe size and other installation requirements shall be in accord with provisions of Chapter H 62.

(4) REPORTS. Any failures in plastic pipe installations shall be reported to the board by the owner or person making the repairs to the system. If the failure occurs in a section of pipe or in a fitting, the part failing should be submitted to the board for examination. External causes contributing to a failure should be thoroughly explained.

February 1, 1957

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The State of Misconsin

BOARD OF HEALTH

IN REBLY BLEASE REFER TOT

MADISON 2

January 24, 1957

Mr. James J. Burke Revisor of Statutes 321 Northeast, State Capitol Madison 2, Wisconsin

Dear Mr. Burke:

As provided in Section 227.023, Wisconsin Statutes, I hereby submit a certified copy of additions and amendments to certain sections of Chapter H 62, Design, Construction, Installation, Supervision, and Inspection of Plumbing, and additions to Chapter H 63, Restricted and Tentative Approvals, of the Wisconsin Administrative Code as adopted by the Wisconsin State Board of Health on January 18, 1957, for publication in the Wisconsin Administrative Register. It is hoped that the rules can be published in the February issue of the Register so the effective date may be March 1, 1957.

Copies of these rules are also being submitted to the Governor as required by Section 14.225 and to the Secretary of State as required by Section 227.023, Wisconsin Statutes.

Respectfully submitted,

Carl h. neupert

Carl N. Neupert, M. D. Executive Secretary

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Enclosures 2