

# MAINE STATE LEGISLATURE

The following document is provided by the  
**LAW AND LEGISLATIVE DIGITAL LIBRARY**  
at the Maine State Law and Legislative Reference Library  
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied  
(searchable text may contain some errors and/or omissions)

---

---

ONE HUNDRED AND SIXTH LEGISLATURE

---

---

Legislative Document

No. 1271

H. P. 994

House of Representatives, March 6, 1973

Referred to Committee on Legal Affairs. Sent up for concurrence and ordered printed.

E. LOUISE LINCOLN, Clerk

Presented by Mr. McKernan of Bangor.

---

---

STATE OF MAINE

IN THE YEAR OF OUR LORD NINETEEN HUNDRED  
SEVENTY-THREE

---

**AN ACT Creating the Swimming Pool Licensing and Safety Act.**

---

Be it enacted by the People of the State of Maine, as follows:

R. S., T. 22, Part 8, additional. Title 22 of the Revised Statutes is amended by adding a new Part 8, to read as follows:

**PART 8**

**SWIMMING POOLS**

**CHAPTER 715**

**SWIMMING POOL LICENSING AND SAFETY ACT**

§ 3071. Title

This chapter shall be known as the "Swimming Pool Licensing and Safety Act of 1973."

1. Scope. This Act shall apply to all swimming pools: public, commercial or private. This Act shall be to provide for:

- A. Licensing of swimming pool dealers and builders;
- B. Designing and construction of swimming pools;
- C. Operation and maintenance of swimming pools;
- D. Enforcement of laws regulating swimming pools and their builders;  
and
- E. Penalties for violation of laws regulating swimming pools and their builders.

2. Purpose. The purpose of this Act shall be to:

A. Minimize health and safety hazards;

B. To insure that those who sell or build swimming pools shall be qualified and adhere to a code of fair competition and principles; and

C. Provide for adequate enforcement and just penalties.

§ 3072. Definitions

As used in this Act, unless the context otherwise indicates, the following words shall have the following meanings.

1. Artificial pool. "Artificial pool" means a structure made of any material that will provide a tight tank, with smooth and easily cleaned surfaces, intended for bathing or swimming purposes, located either indoors or outdoors and provided with controlled water supply.

2. Commercial swimming pool. "Commercial swimming pool" means a pool open only to those who pay a fee or buy or rent as a prerequisite for use of the pool and owned by a person, group of persons, corporation, motel, hotel or other commercial establishment.

3. Department. "Department" means the State Department of Health and Welfare.

4. Partly artificial pool. "Partly artificial pool" means a pool formed artificially from a natural body of water.

5. Person. "Person" means any person, firm, partnership, association, corporation, company, governmental agency, club or organization of any kind.

6. Pool. "Pool" means any swimming pool together with buildings and appurtenances used in connection therewith, and shall be construed as including "artificial," "partly artificial" and "wading" pools.

7. Private swimming pool. "Private swimming pool" means any pool located on private property under the control of a homeowner or group of homeowners, the use of which is limited to swimming or bathing by members of his family and invited guests.

8. Public swimming pool. "Public swimming pool" means a pool open to the general public and owned by a club or municipality.

9. Wading pool. "Wading pool" means a pool with a maximum depth of 36 inches.

§ 3073. Plans and specifications

1. Approval. No person shall begin construction of a public or commercial pool or shall substantially alter or reconstruct any public or commercial pool without first having submitted plans and specifications to the department for review and approval. All plans and specifications shall be submitted in duplicate. The receiving officer shall receipt the plans. The de-

partment shall arrange for the review and approval of the plans and specifications by the other appropriate departments concerned with such matters as zoning, electrical, structural and plumbing requirements. No permit to construct, alter or renovate shall be issued by the department until approval is granted by the other departments involved. Other departments shall have 12 working days to provide their approval. If not submitted in that period, approval shall automatically be assumed.

2. Information. The application for a permit to construct or remodel a public or commercial pool shall provide the following information: A blueprint drawn to scale with all dimensions, intended piping, wiring, filtration system, decking, buildings, fencing, lighting, hydraulics, catalog of pump, chlorinators, feeder, filters, strainers, interceptors and other pertinent facts. The application shall be signed by a pool builder licensed by the State of Maine to do such work.

3. Plans. The pool and facilities shall be built in accordance with the approved plans, unless approval of changes has been given by the appropriate officer of the department.

4. Inspection. The pool builder shall allow the State to inspect the pool at any time during construction. Upon request of the department, the builder shall show approximate times that certain stages shall be completed so that they may be inspected. The pool shall not be placed in operation until a final inspection and approval has been made by the department. If the department does not make the final inspection and approval upon completion, the builder may make a written request for approval. The department shall then have 5 work days to make the appropriate decision.

5. Limitation. The only criteria to be followed by the department in the review and approval of plans shall be those provided in this Act.

#### § 3074. Permits to operate

1. Permit. No person shall operate or maintain a public swimming pool unless he has obtained a permit to operate such pool from the department. Such permits shall be valid for one year unless otherwise revoked for cause. Only persons who comply with this Act shall be entitled to receive and retain such a permit. Such permits are not transferable.

2. Regulations. The department is not authorized to promulgate regulations that conflict with this Act. It may establish fees to cover inspections and other services in connection with the operation and maintenance of public and commercial swimming pools for the protection and promotion of public health and safety. The department may perform inspections at any time the pool is open for use to insure compliance.

#### § 3075. Revocation of permits

1. Revocation. The department must revoke any permit for failure to comply with the duly promulgated regulations referred to in this Act or in cases where the permit has been obtained through nondisclosure, misrepresentation or misstatement of a material fact.

2. Notice. Before a permit is revoked, the person to whom the permit has been issued shall have written notice showing instances of failure to comply with the regulations. He shall be given an opportunity for appeal to the department.

3. Reissuance. The permit shall be reissued upon proper application and upon presentation of evidence that the deficiencies causing revocation have been corrected.

#### § 3076. Health and safety

1. Infectious disease. No person having a communicable disease shall be employed or work at a public or commercial swimming pool. All patrons or swimmers suspected of having an infectious disease shall be excluded.

2. Safety for bathers. Appropriate facilities shall be provided for the safety of bathers as may be required by the department. This shall include lifesaving equipment, safety devices, life rings, life hooks, first-aid kits, telephone, with adequate staff during swimming periods who are competent in lifesaving and artificial resuscitation. Competent lifeguards shall be on duty during all swimming periods.

3. Supervision. Every swimming pool shall be under the supervision of a capable individual who shall assume the responsibility for compliance with all parts of this Act relating to pool operation and maintenance, and safety of bathers. His name shall be listed on the permit to operate.

4. Fences. When the pool is not open for use, access to the pool shall be prevented by a locked fence or other similar obstruction.

5. Instructions. Instruction regarding emergency calls shall be prominently posted.

6. Number. Not more than the maximum design bather load shall be permitted in the pool at any one time.

7. — enclosed area. Not more than 4 times the maximum bather load will be permitted in the enclosed pool area at any one time.

#### § 3077. Operation

1. Record. The registered operator of each pool shall be responsible for keeping a daily record of information regarding disinfectant residuals, PH, maintenance procedures, recirculation, together with other data as may be required on forms furnished by the department. This data shall be kept for a period of 6 months and shall be subject to inspection and review by the department at any time. The operator of the pool shall sign the daily record as to its accuracy and also any other persons involved in obtaining the data recorded.

2. Continuous operation. The pumps, filters, disinfectants, chemical feeders and related appurtenances shall be kept in continuous operation during seasons of regular use.

#### § 3078. Fees

The fee for a permit to operate a public swimming pool shall be \$25. The fee for a permit to operate a commercial swimming pool shall be \$50.

### § 3079. Penalties

Whoever violates any provisions of sections 3071 to 3078 shall be punished for each offense as provided by section 47.

### § 3080. Water supply

1. Approval. The water supply serving the swimming pool and all plumbing fixtures including drinking fountains, lavatories and showers, shall meet the requirements of the department for potable water.

2. Protection. All portions of the water distribution system serving the swimming pool and auxiliary facilities shall be protected against backflow. Water introduced into the pool, either directly or to the recirculation system, shall be supplied through an air gap, American Standards Association A40.4-1942. When such connections are not possible, the supply shall be protected by a suitable backflow preventer, American Standards Association A40.6-1943, installed on the discharge side of the last control valve to the fixture, device or appurtenance.

### § 3081. Sewer system

1. Adequate. The sewer system shall be adequate to serve the facility, including bathhouse, locker room and related accommodations.

2. Connection. There shall be no direct physical connection between the sewer system and any drain from the swimming pool or recirculation system. Any swimming pool or gutter drain or overflow from the recirculation system when discharged to the sewer system, storm drain or other approved natural drainage course shall connect through a suitable air gap so as to preclude possibility of backup of sewage or waste into the swimming pool piping system.

3. Discharge. The sanitary sewer serving the swimming pool and auxiliary facilities shall discharge to the public sewer system wherever possible. Where no such sewer is available, the connection shall be made to a suitable disposal plant designed, constructed, and operated in accordance with the requirements of the department.

### § 3082. Swimming pool construction materials

1. Materials. Swimming pools and all appurtenances thereto shall be constructed of materials which are inert, nontoxic to man, impervious, permanent and enduring; which can withstand the design stresses; which will provide a tight tank with a smooth and easily cleaned surface, or to which a smooth, easily cleaned surface finish can be applied, and which must be finished in white.

2. Corners. All corners formed by intersection of walls and floors shall be rounded.

3. Bottoms. Sand or earth bottoms are not permitted in swimming pool construction.

### § 3083. Design, detail and structural stability

1. Loadings. All swimming pools shall be designed and constructed to withstand all anticipated loadings for both full and empty conditions. A hydrostatic relief valve shall be provided in areas having a high water table.

2. Length and width. No limits are specified for length and width of swimming pools, except those for competition or diving board, or both. Consideration shall be given to shape, from the standpoint of safety and the need to facilitate supervision of bathers using the pool.

3. Circulation. Provisions shall be made for complete, continuous circulation of water through all parts of the swimming pool. All swimming pools shall have a recirculation system with necessary treatment and filtration equipment as required in these standards.

4. Depth. The minimum depth of water in the swimming pool shall be 3 feet, except for wading pools. Wading facilities for children shall be physically separated from the swimming pool. Such facilities may be served by the swimming pool recirculation system with turnover rates of once every two hours.

5. — additional. The maximum depth at the shallow end of the swimming pool shall not exceed 3 feet six inches, except for competition.

### § 3084. Depth markings and lines

1. Markings. Depth of water shall be plainly marked at or above the water surface on the vertical wall of the swimming pool and on the edge of the deck or walk next to the swimming pool, at maximum and minimum points and at the points of break between the deep and shallow portions and at intermediate one-foot increments of depth, spaced at not more than 25-foot intervals measured peripherally. The depth in the diving areas will be appropriately marked.

2. — numerals. Depth markers shall be in numerals of 3 inches minimum height and a color contrasting with background. Where depth markers cannot be placed on the vertical walls above the water level, other means shall be used, said markings to be plainly visible to persons in the swimming pool.

### § 3085. Inlets and outlets

1. Outlet. All swimming pools shall be provided with an outlet at the deepest point to permit the pool to be completely and easily emptied. Openings must be covered by a proper grating which is not readily removable by bathers. Outlet openings of the grating in the floor of the pool shall be at least 4 times the area of discharge pipe or provide sufficient area so the maximum velocity of the water passing the grate will not exceed  $1\frac{1}{2}$  feet per second.

2. — multiple. In swimming pools with deep water at or near one end, multiple outlets shall be provided where the width of the pool is more than 30 feet. In such cases, outlets shall be spaced not more than 30 feet apart, nor more than 15 feet from side walls.

3. — connections. No direct connections to sewers shall be permitted and all drains from the swimming pool to sewers shall be broken at a point where any sewage which may back up from the sewer will overflow to waste instead of reaching the pool.

4. — valves or pumps. Valves or pumps, or both, used for draining swimming pools shall be sized to prevent the surcharging of the sanitary sewer.

5. Inlets. Inlets for fresh or repurified water, or both, shall be located to produce uniform circulation of water and to facilitate the maintenance of a uniform disinfectant residual throughout the entire swimming pool, without existence of dead spots. Inlets from the circulation system shall be flush with the pool wall and submerged at least 12 inches below the water level. Where water from the public water system is added to the pool, cross-connections between the public water system and the pool water shall be eliminated by pumping make-up water from a pump suction well or admitting water to the pool by means of an air gap connection.

6. — adequate. In any case, an adequate number of inlets shall be provided, properly spaced and located to accomplish complete and uniform recirculation of water and maintenance of uniform disinfectant residual at all times.

7. — orifice. Each inlet shall be designed as an orifice subject to adjustment or must be provided with an individual gate or similar valve to permit adjustment of water volume to obtain the best circulation.

#### § 3086. Slope of bottom

The slope of the bottom of any portion of the swimming pool having a water depth of less than 5 feet shall not be more than one foot in 12 feet and said slope shall be uniform. In portions with a depth greater than 5 feet, the slope shall not exceed one foot in 3 feet.

#### § 3087. Side walls

1. Walls. Walls of a swimming pool shall be either vertical for water depths of at least 6 feet; or vertical for a distance of 3 feet below the water level below which the wall may be curved to the bottom with a radius not greater than the difference between the depth at that point and 3 feet, provided that vertical is interpreted to permit slopes not greater than one foot horizontally for each 5 feet of depth of sidewall,  $11^{\circ}$  from vertical.

2. Safety ledges. Safety ledges when provided on vertical walls in the deep portion of the swimming pool shall be not over 4 inches wide, at least 4 feet below the water surface.

#### § 3088. Overflow gutters

Overflow gutters shall extend completely around the swimming pool, except at steps or recessed ladders or where skimmers are used. The overflow gutter shall also serve as a handhold. This gutter shall be capable of con-



tinuously removing 50% or more of the recirculated water and return it to the filter. All overflow gutters shall be connected to the recirculation system through a properly designed surge tank. The gutter, drains and return piping to the surge tank shall be designed to rapidly remove overflow water caused by recirculation displacement, wave action or other causes produced from the maximum pool bathing load. Where large gutters are used, they shall be designed to prevent entrance or entrapment of bathers' arms or legs. The overflow edge or lip shall be rounded and not thicker than  $2\frac{1}{2}$  inches, for the top 2 inches. The overflow outlets shall be provided with outlet pipes which shall in any case be at least 2 inches in diameter. The outlet fittings shall have a clear opening in the grating at least equal to  $1\frac{1}{2}$  times the cross-sectional area of the outlet pipe.

#### § 3089. Skimmers

1. Skimming device. At least one skimming device shall be provided for each 500 square feet of water surface area or fraction thereof unless overflow gutters are used. Where 2 or more skimmers are required, they shall be so located as to minimize interference with each other and to insure proper skimming of the entire pool surface. Handholds shall consist of bull-nosed coping not over  $2\frac{1}{2}$  inches thick for the outer 2 inches or an equivalent approved handhold. The handholds must be no more than 9 inches above the normal water line. Skimming devices shall be built into the pool wall, shall develop sufficiently velocity on the pool water surface to induce floating oils and wastes into the skimmer from the water surface of the entire pool area, and shall meet the following general specifications:

- A. The piping and other pertinent components of all the skimmers shall be designed for a total capacity of at least 20% of the required filter flow of the recirculation system;
- B. An easily removable and cleanable basket or screen through which all overflow water must pass shall be provided to trap large solids;
- C. The skimmer shall be provided with a device to prevent airlock in the suction line. If an equalizer pipe is used, it shall provide an adequate amount of water for pump suction should the water of the swimming pool drop, provided that if any other device, surge tank or arrangement is used, a sufficient amount of water for pump suction shall be assured;
- D. Where the equalizer pipe is used, it shall be sized to meet the capacity requirements of the filter and pump;
- E. The skimmer shall be of sturdy, corrosion-resistant materials.

#### § 3090. Recirculation systems

1. System. A recirculation system, consisting of pumps, piping, filters, water conditioning, and disinfection equipment and other accessory equipment, shall be provided which will clarify and disinfect the swimming pool volume of water in 8 hours or less, thus providing a minimum turnover of at least 3 times in 24 hours, except that the recirculation rate shall be increased to provide a 6-hour turnover for swimming pools subjected to extremely heavy bather loads.

2. Piping. All piping shall be designed to reduce friction losses to a minimum and to carry the required quantity of water at a maximum velocity not to exceed 6 feet per second. Piping shall be of nontoxic material, resistant to corrosion and able to withstand operating pressures. Pipes shall be identified by a color code or tags.

3. Strainer. The recirculation system shall include a strainer to prevent hair, lint, etc., from reaching the pump and filters. Strainers shall be corrosion-resistant with openings not more than  $\frac{1}{8}$  inch in size providing a free flow area at least 4 times the area of pump suction line and shall be readily accessible for frequent cleaning.

4. Vacuum cleaning. A vacuum-cleaning system shall be provided. When an integral part of the recirculation system, sufficient connections shall be located in the walls of the swimming pool, at least 8 inches below the water line, except for automatic vacuums.

5. Rate of flow. A rate-of-flow indicator, reading in gallons per minute, shall be installed and located, preferably on the swimming pool return line, so that the rate of recirculation and backwash rate will be indicated. The indicator shall be capable of flows measuring at least  $1\frac{1}{2}$  times the design flow rate, shall be accurate with 10% of true flow and shall be easy to read.

6. Pumps. Pumps shall be of adequate capacity to provide the required number of turnovers of swimming pool water as specified in subsection 1, and whenever possible shall be so located as to eliminate need for priming. If the pump or suction piping is located above the overflow level of the pool, the pump shall be self-priming. The pump or pumps shall be capable of providing flow adequate for the backwashing of filters. Under normal conditions, the pump or pumps shall supply the recirculation rate of flow at a dynamic head of at least 50 feet for pressure sand-type filters or at least 80 feet for pressure diatomaceous earth-type filters.

7. Heaters. Swimming pools equipped with heaters shall have a fixed thermometer in the recirculation line at the heater outlet and another near the outlet to the pool.

#### § 3091. User loading

1. Computing. For the purposes of computing user loading, those portions of the swimming pool 5 feet or less in depth shall be designated as "nonswimmer" areas. Portions of the pool over 5 feet in depth shall be designated as the "swimming" area.

2. Determination. In order to compute swimmer and bather capacity, swimming pool areas shall be determined as follows:

A. Fifteen feet of pool water surface area shall be provided for each bather in portions of the pool 4 feet 6 inches deep or less;

B. Twenty-five square feet shall be provided for each bather expected at time of maximum load in portions of the pool over 4 feet 6 inches;

C. Three hundred square feet of pool water surface area shall be reserved around each diving board or diving platform and this area shall not be included in computing the area of the swimming section.

§ 3092. Sand type filters

1. Filters. The following requirements are equally applicable to either gravity or pressure sand type filters.

2. Pressure. Pressure sand type filters shall be designed for a filter rate of 3 gallons per minute per square foot of bed area at time of maximum head loss with sufficient area to meet the design rate of flow required by the prescribed turnover.

3. Filters. Filtering material shall consist of at least 20 inches of screened, sharp filter sand with an effective size between 0.4 and 0.55 mm., and a uniformity coefficient not exceeding 1.75, supported by at least 10 inches of graded filter gravel. Anthracite having an effective size between 0.6 and 0.8 mm., with a uniformity coefficient of not greater than 1.8 may be used in lieu of the sand. The gravel shall effectively distribute water uniformly during filtration and backwashing. A reduction in this depth or an elimination of gravel may be permitted where equivalent performance and service are demonstrated.

4. Underdrain. The underdrain system shall be of corrosion resistant and enduring material, so designed and of such material that the orifices or other openings will maintain approximately constant area. It shall be designed to provide even collection or distribution of the flow during filtration and backwashing.

5. Freeboard. At least 12 inches of freeboard shall be provided between the upper surface of the filter media and the lowest portion of the pipes or drains which serve as overflows during backwashing.

6. Pressure gauges. The filter system shall be provided with influent and effluent pressure gauges, backwash sight glass on the waste discharge line and air-relief valves at or near the high point of the filter.

7. Valve and piping. The filter system shall be designed with necessary valves and piping to permit:

A. Filtering to swimming pool;

B. Individual backwashing of filters to waste at a rate of not less than 15 gallons per minute per square foot of filter area;

C. Isolation of individual filters for repairs while other units are in service;

D. Complete drainage of all parts of the system;

E. Necessary maintenance, operation and inspection in a convenient manner.

8. Access opening. Each pressure type filter tank shall be provided with an access opening of not less than a standard 11-inch by 15-inch manhole and cover.

9. Coagulants. Devices with reasonably accurate dosage control features shall be provided for adding coagulants ahead of the filters.

10. Tank. On pressure type filters, the tank and its integral parts shall be constructed of substantial material capable of withstanding continuous anticipated usage and shall be designed for a pressure safety factor of 4, based on the maximum shutoff head of the pump. This shutoff head for design purposes shall in no case be considered less than 50 pounds per square inch.

#### § 3093. Diatomaceous earth type filters

1. Filtering. Sufficient filtering area shall be provided to meet the design pump capacity as required by section 3090, subsection 1.

2. Rate. Rate of filtration: The design rate of filtration shall not be greater than 2.0 gpm/sq. ft. of effective filtering surface without continuous body feed and not greater than 2.5 gpm/sq. ft. with continuous body feed.

3. Accuracy. Where body feed is provided, the device shall be accurate, 10% and dependable, and shall be capable of continually feeding within a calibrated range, adjustable from 2 to 6 ppm., at the design capacity of the recirculation pump.

4. Fabric. Filtering area, where fabric is used, shall be determined on the basis of effective filtering surfaces as created by the septum supports with no allowances for areas of impaired filtration, such as broad supports, folds or portions which may bridge.

5. Materials. The filter and all component parts shall be of such materials, design and construction to withstand normal continuous use without significant deformation, deterioration, corrosion or wear which could adversely affect filter operation.

6. Precoating. The filter shall be so designed and constructed, or provision made, to preclude the introduction of appreciable quantities of filter-aid into the pool during precoating operations.

7. Steel, plastic. The tank containing the filter elements shall be constructed of steel, plastic or other suitable material, which will satisfactorily provide resistance to corrosion, with or without coating. Pressure type filters shall be designed for a minimum working pressure of 50 lbs. per square inch with a 4 to one safety factor. Vacuum type filters shall be designed to withstand the pressure developed by the weight of the water contained therein and closed vacuum type filters shall, in addition, be designed to withstand the crushing pressure developed under a vacuum of 25 inches of mercury with a safety factor of 1.5 in both instances. The septa or elements which support the filter-aid shall be of corrosion-resistant material.

8. Septa. The septa shall be constructed to be resistant to rupture under conditions of the maximum differential pressure between influent and effluent which can be developed by the circulating pump and of adequate strength to resist any additional stresses developed by the cleaning operation.

9. Corrosion. Where dissimilar metals, which may set up galvanic electric currents, are used in the filters, provision shall be made to resist electrolytic corrosion. The filters shall be designed in such a manner that they may be easily disassembled with allowances made for adequate working space above and around the filter to allow the removal and replacement of any part and for proper maintenance.

10. Gauges. The filter plant shall be provided with such pressure, vacuum or compound gauges as are required to indicate the condition of the filter. In vacuum type filter installations where the circulating pump is 2 horsepower or higher, an adjustable high vacuum automatic shut-off shall be provided to prevent damage to the pump by cavitation.

11. Cleaning. All filters shall be equipped for cleaning by one or more of the following methods: Backwashing, air-bump-assist backwashing, spray wash, mechanical or manual, or agitation.

12. Draining. Provision shall be made for completely and rapidly draining the filter.

#### § 3094. Other filters

Other filters may be used when they meet all the standards set forth in this Act and have been approved for commercial use by the National Sanitary Foundation.

#### § 3095. Ladders, recessed treads and stairs

1. Ladders. Steps or ladders shall be provided at the shallow end of the swimming pool, if the vertical distance from the bottom of the pool to the deck or walk is over 2 feet. Recessed steps or ladders shall be provided at the deep portion of the swimming pool on each side.

2. Steps. Steps leading into the swimming pool shall be of nonslip design, have a minimum tread of 12 inches and a maximum rise or height of 10 inches. There shall be no abrupt drop off or submerged projections into the pool, unless guarded by handrails.

3. Designed. Swimming pool ladders shall be corrosion-resistant and shall be equipped with nonslip treads. All ladders shall be so designed as to provide a handhold and shall be rigidly installed. There shall be a clearance of not more than 5 inches nor less than 3 inches between any ladder and the pool wall. If steps are inserted in the walls or if stepholes are provided, they shall be of such design that they may be cleaned readily and shall be arranged to drain into the pool to prevent the accumulation of dirt thereon. Stepholes shall have a minimum tread of 5 inches and a minimum width of 14 inches.

4. Handrail. Where steps, stepholes or ladders are provided within the swimming pool, there shall be a handrail at the top of both sides thereof, extending over the coping or edge of the deck.

5. Diving boards. Supports, platforms and steps for diving boards shall be of substantial construction and of sufficient structural strength to safely carry the maximum anticipated loads. Steps shall be of corrosion-resistant

material, easily cleanable and of nonslip design. Handrails shall be provided at all steps and ladders leading to diving boards more than one meter above the water, except those set at 15° or more from the vertical. Platforms and diving boards which are over one meter high shall be protected with guard railings.

§ 3096. Decks and walkways

A continuous deck at least 5 feet and preferably 8 or more feet wide shall extend completely around the swimming pool. The deck shall be sloped away from the pool to drain at a grade of ¼ inch to ⅜ inch per lineal foot and shall have a nonslip surface. Deck drains connected to the recirculation system or gutters shall not be allowed. Any pool shall have at least as much deck in area as there is area of surface water.

§ 3097. Diving areas

1. Swimming pool. The dimensions of the swimming pool in the diving area shall conform to the following:

Height of board in meters	Minimum water depth under board	Minimum pool width
0 - 1	9 feet	20 feet
1.1 - 2	10 feet	30 feet
2.1 - 3	12 feet	30 feet
3.1 - 5	13 feet	30 feet
5.1 or more	15 feet	30 feet

2. Diving well. Any pool equipped with a diving well solely for the purpose of diving shall be at least 13 feet deep, uniformly.

3. Head room. At least 15 feet free and unobstructed head room shall be provided above diving boards.

4. Separation. Horizontal separation of 10 feet shall be provided between diving boards and side walls.

§ 3098. Disinfectant and chemical feeders

1. Disinfectant. The swimming pool shall be equipped with a chlorinator, hypochlorinator or other disinfectant feeder or feeders which meet the following requirements:

A. Shall be of sturdy construction and materials which will withstand wear, corrosion, or attack by disinfectant solutions or vapors and which are not adversely affected by repeated regular adjustments or other conditions anticipated in the use of the device. The feeder shall be capable of being easily disassembled for cleaning and maintenance. The design and construction shall be such as to preclude stoppage from chemicals intended to be used or foreign materials that may be contained therein. The feeder shall incorporate failure-proof features so that the disinfectant cannot feed directly into the swimming pool, the pool piping system, water supply sys-

tem, or the swimming pool enclosure under any type of failure of the equipment or its maintenance;

B. Shall be capable of supplying at least the equivalent of one pound of chlorine per 8 hours for each 10,000 gallons of swimming pool capacity under conditions of operation to be anticipated at the proposed installation;

C. Shall have a graduated and clearly marked dosage adjustment to provide flows from full capacity to 25% of such capacity. The device shall be capable of continuous delivery within 10% of the dosage at any setting;

D. When compressed chlorine gas is used, the following additional features shall be provided:

(1) The chlorine and chlorinating equipment shall be in a separate well-ventilated room. Such rooms shall not be below ground level and shall be provided with vents near the floor which terminate out-of-doors. The door of the room shall not open to the swimming pool, but shall open to the outside.

(2) The chlorinator equipment shall be of rugged design, capable of withstanding wear without developing leaks.

(3) Chlorine cylinders shall be anchored to prevent their falling over. A valve stem wrench shall be maintained on the chlorine cylinder so the supply can be shut off quickly in the case of an emergency. Valve protection hood shall be kept in place, except when the cylinder is connected.

(4) The chlorine feeding device shall be designed so that during accidents or interruptions of the water supply, leaking chlorine gas will be conducted to the out-of-doors.

(5) The chlorinator shall be a solution feed type, capable of delivering chlorine at its maximum rate without releasing chlorine gas to the atmosphere.

(6) The chlorinators shall be designed to prevent the backflow of water into the chlorine solution container.

(7) A gas mask designed for use in a chlorine atmosphere and of a type approved by the U. S. Bureau of Mines shall be provided. In addition, replacement canisters shall be provided and a record shall be kept of gas mask usage to insure that the mask will be serviceable when needed.

(8) Installation of chlorinator equipment, and operation thereof, shall be carried on by and under the supervision of personnel experienced with installation and operation of such equipment.

E. When a hypochlorite solution is used to be fed through hypochlorinator equipment, such equipment shall also provide the following additional features:

(1) Feed shall be positive under all conditions of pressure in the circulating system, and without artificial constriction of the pump suction line whether this line is under vacuum or pressure head;

(2) Regulation shall be provided to insure constant feed with varying supply or back pressure;

(3) Positive features to prevent back-flow from recirculation system to the solution container, and provision for reducing to a minimum the entry into swimming pool of free calcium released from calcium hypochlorite;

(4) Provision to prevent siphoning of hypochlorite solution when the recirculation pump and hypochlorinator are both turned off. This applies to above swimming pool level installations only.

F. Equipment and piping used to supply chemicals to the water shall be of such size, design, and material that they may be cleaned and will be free from clogging, preferably of the positive displacement type. All material used for such equipment and piping shall be resistant to action of chemicals to be used therein.

#### § 3099. Lighting, ventilation and electrical requirements

1. Underwater lighting. Where underwater lighting is used, not less than 0.5 watts shall be employed per square foot of swimming pool water surface area. Such lights shall be spaced to provide illumination so that all portions of the pool, including the bottom, may be readily seen without glare.

2. Area lighting. Area lighting shall provide at least 0.6 watts per square foot of deck area.

3. Wiring. All electrical wiring shall conform with the National Electrical Code of the National Underwriters Laboratory and any state or local codes.

4. Grounded. Each underwater light shall be individually grounded by means of a screwed or bolted connection to the metal junction box from which the branch circuit to the individual light proceeds. Such junction boxes shall not be located in the swimming pool deck.

5. Overhead. No overhead electrical wiring shall pass within 20 feet of the swimming pool enclosure.

6. Ventilation. All indoor swimming pools, bathhouses, dressing rooms, shower rooms and toilet spaces shall be adequately ventilated either by natural or mechanical means.

#### § 3100. Dressing rooms

1. Divided. Bathhouses to be used simultaneously by both sexes shall be divided into 2 parts separated by a tight partition, each designated for men or women. The entrances and exits shall be screened to break line of sight.

2. Floors. Floors of bathhouse shall be of smooth finished material with non-slip surface, impervious to moisture, and sloped to a drain. Junctions between walls and floors shall be coved.



3. Walls. Walls and partitions shall be of smooth, impervious material, free from cracks or open joints. Partitions between dressing rooms shall terminate at least 10 inches above the floor or shall be placed on continuous raised masonry or concrete bases at least 4 inches high. Lockers shall be set either on solid masonry bases 4 inches high or on legs with bottom of locker at least 10 inches above the floor. Lockers shall be properly vented.

4. Waiver. The requirement relating to bathhouse, dressing rooms, toilet facilities and showers may be waived when such facilities are conveniently available to swimming pool patrons.

#### § 3101. Toilets and showers

1. Facilities. Toilet and shower facilities shall be provided on the basis of the following fixture schedule computed on the basis of 4 times the maximum bather load:

	Males	Females
Water closets	1/75	1/50
Urinals	1/75	—
Lavatories	1/100	1/100
Showers	1/50	1/50

2. Drinking fountain. Drinking fountain—minimum of one to be located in swimming pool area.

3. Showers. Showers shall be supplied with water at a temperature of at least 90° F. at a rate of at least 3 gallons per minute. Thermostatic, tempering, or mixing valves shall be installed if necessary to prevent scalding of the bathers.

#### § 3102. Visitor and spectator areas

There shall be absolute separation between the spaces used by visitors and spectators from spaces used by bathers.

No glass or metal containers shall be allowed in the pool area.

#### § 3103. Safety requirements—lifesaving equipment

1. Chair. Pools over 1,200 sq. ft. or for public use shall have an elevated lifeguard chair for each 1,000 square feet, or fraction thereof, and be located to give a clear view of the pool and deck area.

2. Equipment. One unit of lifesaving equipment shall consist of the following: A ring buoy not more than 15 inches in diameter to which shall be attached a 60 foot length of  $\frac{3}{4}$  inch polypropylene rope; a life pole or shepherd's crook type of pole having blunted ends with minimum length of 12 feet; a separate throwing line of  $\frac{1}{4}$  inch rope with length not less than  $1\frac{1}{2}$  times the maximum width of pool. Not less than one unit of equipment, as above, shall be provided at every swimming pool. One unit shall be presumed to be adequate for 2,000 square feet of water surface area, and one additional unit shall be provided for each additional 2,000 square feet, or major fraction thereof, of water surface area.

3. First aid kit. Every swimming pool shall be equipped with a standard 25-unit first aid kit which shall be kept filled and ready for use.

4. Lifesaving equipment. Lifesaving equipment shall be mounted in conspicuous places, distributed around swimming pool deck, at lifeguard chairs or elsewhere, readily accessible, its function plainly marked, and kept in repair and ready condition. Bathers or others shall not be permitted to tamper with, use for any purpose other than its intended use, or remove such equipment from its established location.

5. Emergency. Every swimming pool shall have a readily accessible room or area designated and equipped for emergency care.

§ 3104. Disinfection and quality of water

1. Disinfection. Swimming pools when in use shall be continuously disinfected by a chemical which imparts an easily measured, free available residual effect. When chlorine is used, a free chlorine residual of at least 0.5 ppm and not more than 1.3 shall be maintained throughout the pool. When chlorine is used in conjunction with cyanate acid, the residual shall be at least 1.3 ppm and not more than 2.2 ppm. If other halogens are used, residuals of equivalent disinfecting strength shall be maintained. A test kit for measuring the concentration of the disinfectant, accurate within 0.1 ppm, shall be provided at each swimming pool.

2. —others. The health officer may accept other disinfecting materials or methods when they have been adequately demonstrated to provide a satisfactory residual effect which is easily measured and to otherwise be equally as effective under conditions of use as the chlorine concentration required herein, and not be dangerous to public health, create objectionable physiological effects, or impart toxic properties to the water.

3. Alkaline condition. The swimming pool water shall be maintained in an alkaline condition as indicated by a PH of not less than 7.2 and not over 7.6. A PH testing kit accurate to the nearest 0.2 PH unit shall be provided at each swimming pool. The alkalinity of the water shall be at least 50 ppm as measured by the methylorange test.

4. Clarity. The water shall have sufficient clarity at all times so that a black disc, six inches in diameter, is readily visible when placed on a white field at the deepest point of the swimming pool. Failure to meet this requirement shall constitute grounds for immediate closing of the pool.

5. Samples. None of the samples covering any considerable period of time shall either contain more than 200 bacteria per milliliter, as determined by the standard, 35° C. agar plate count, or show positive test, confirmed test, for coliform organisms in any of the five 10-milliliter portions of a sample or more than 1.0 coliform organisms per 50 ml. when the membrane filter test is used. All samples shall be collected, dechlorinated, and examined in accordance with the procedures outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, APHA. The department shall arrange for the collection and examination of samples on a routine basis when the swimming pool is in active use.

6. Chemicals. Chemicals used in controlling the quality of water shall be demonstrated as imparting no toxic properties to the water. Such chemicals as may be used for algae control shall be approved for use by the department.

§ 3105. Cleaning swimming pools

Visible dirt or algae on the bottom of the swimming pool shall be removed every 24 hours or more frequently as required.

§ 3106. Supervision of swimming pools and bathers

1. Operator. Every swimming pool shall be operated under the close supervision of a trained operator. The operator shall have obtained a certificate of competency obtained through attendance and successful completion of a swimming pool operator's training course as evidence of compliance with this section.

2. Lifeguard. One lifeguard shall be provided for each 25 persons of the computed maximum bather load or fraction thereof. The lifeguard shall have a certificate of competency obtained through attendance and successful completion of a lifeguard training course as evidence of compliance with this section.

3. Records. Proper operating records, which may include the following as required by the health officer, shall be kept daily showing:

- A. Bather loads—total;
- B. Peak bather load;
- C. Volume fresh water added;
- D. Operating periods of recirculation pumps and filters and corresponding rate of flow meter readings;
- E. Amounts of chemicals used;
- F. Disinfectant residuals;
- G. PH readings;
- H. Maintenance, and malfunctioning, of equipment.

The following personnel regulations shall be enforced:

A. Any person having an infectious or communicable disease shall be excluded from a public swimming pool. Persons having any considerable area of exposed subepidermal tissue, open blisters, cuts, etc., shall be warned that these are likely to become infected and advised not to use the pool.

B. Spitting, spouting of water, blowing the nose, etc., in the swimming pool shall be strictly prohibited.

C. No running, boisterous or rough play, except supervised water sports, shall be permitted in the pool, on the runways, diving boards, floats, platforms or in dressing rooms, shower rooms, etc.

D. Suitable placards embodying the above personnel regulations and instructions and those relating to suits and towels shall be conspicuously

posted in the swimming pool room or enclosure and in the dressing rooms and offices at all swimming pools.

§ 3107. Licensing of pool builders

1. No person shall be responsible for building a commercial, public or private swimming pool without having first obtained a license from the department.

The license shall be granted to anyone who wishes one.

The license shall be renewed every year.

Any pool builder who violates any provisions of this Act shall immediately, upon proof of violation, have his license revoked.

One violation shall constitute the revocation of the builder's license for a period of not less than one year.

Any person who violates the provisions of this Act twice shall not be allowed to build any pool in the State of Maine.

All plans for public or commercial pools must, before construction, submit the name of a licensed pool builder as the responsible party for violations of this Act.

#### STATEMENT OF FACT

The purpose of this bill is to regulate the design, construction, operation and maintenance of swimming pools and those who sell, supply and build such pools.