

ORDINANCE NO. 2926

AN ORDINANCE to amend Title 11 of The Code of the City of Alexandria, Virginia, 1981, as amended, by adding a new chapter numbered 11; which Title 11 relates to HEALTH, ENVIRONMENTAL AND SANITARY REGULATIONS and which new Chapter 11 relates to SWIMMING POOLS AND HEALTH SPAS.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Title 11 of The Code of the City of Alexandria, Virginia, 1981, as amended, be and the same hereby is amended by adding a new chapter numbered 11 to read as follows:

CHAPTER 11

Swimming Pools and Health Spas.

ARTICLE A

General Provisions.

Sec. 11-11-1. Title.

This chapter shall be known and be cited as the Alexandria Swimming Pool and Health Spa Code.

Sec. 11-11-2. Definitions.

The following definitions shall apply in the interpretation and the enforcement of this chapter.

(a) Aboveground pool. Any pool having all parts above ground level.

(b) Deck. The concrete or impervious covering or walkway around the pool and within the pool area where bathers are accustomed to walking without shoes.

(c) Director. The term shall mean the Director of Public Health of the City of Alexandria, Virginia, or his or her authorized agent.

(d) Elevated pool. Any pool constructed above ground level within or upon an architectural structure.

(e) Fence. A closed-type vertical barrier, completely closing the pool area and capable of securing said area against entry to include, but not be limited to, a woven steel wire, chain link, picket or solid board-type fence or a fence of similar construction. The opening between vertical pickets shall not exceed 10 cm. (four (4) inches).

(f) Health spa. Any exercise center, figure salon, fitness center, gymnasium, health club, health spa or other establishment by any other name which provides exercise equipment and one or more of the following: steam cabinet, steam room, sauna, vapor room, vapor cabinet, lavatories, lockers, showers, dressing rooms and toilet facilities intended for patron use, excluding facilities used by or under the direct supervision and control of licensed medical personnel located in a medical facility, facilities located in athletic departments of schools, colleges, universities and facilities of professional athletic teams.

(g) Hydrostatic relief valve. A valve which, when properly installed, will relieve underground water pressure caused by high water table under the pool shell.

(h) Indoor pool. Any pool constructed within an architectural structure.

(i) In-ground pool. Any pool constructed with any part below ground level.

(j) Maximum facility usage (health spa). The maximum facility usage of a health spa shall mean the total number of patrons permitted within the facility to be determined by dividing the floor area of the health spa in square meters (or square feet) by 1.35 meters or 15 square feet.

(k) Maximum load. The number of bathers permitted in the pool area to be determined by dividing the total water surface area in square meters (or square feet) of the swimming and wading pool water space by 2.5 meters or by 27 square feet.

(l) Operator or manager. The person holding a valid permit appointed or engaged to conduct the operation and management of the swimming facility.

(m) Operator's permit. The permit issued by the director to the operator or manager of a swimming facility.

(n) Owner. The person in whose name the license or use permit is issued.

(o) Pool area. The pool(s) and all equipment and structures appurtenant thereto, including all areas located within the perimeter security fence or barriers.

(p) Pool management company. Any person, firm, corporation or association contracting to manage or operate one (1) or more swimming facilities.

(q) Private pool. Any constructed pool which is used or intended to be used as a swimming pool in connection with

single-family dwelling units. Private pools shall comply only with the fencing requirements of this chapter.

(r) Public pool. Any pool, other than a residential pool serving an individual dwelling, which is intended to be used collectively by numbers of persons for swimming, bathing or therapeutic purposes. Public pools shall include, but not be limited to, apartment, condominium, motel and municipal pools.

(s) Swimming facility. All bodies of water sufficiently deep for complete or partial immersion of the body and used collectively by numbers of persons for swimming or recreational bathing, together with the shores, buildings, equipment and appurtenances pertaining to such facilities.

(t) Swimming pool. Any man-made structure constructed from material other than natural earth or soil designed or used to hold water to a depth of more than one-half meter (19.69 inches) for the purpose of providing a swimming, bathing or therapeutic facility including, but not limited to, the following:

(1) Combination swimming and diving pool. A pool designed and used for swimming and diving.

(2) Diving pool. A swimming pool designed and used for diving only.

(3) Spa pool. A swimming pool or other therapeutic pool used in conjunction with a health club or health spa.

(4) Therapeutic pool. A pool designed for whole or partial immersion of the human body for recreational or therapeutic use by one (1) or more persons at a time and in which the water is not recirculated and filtered for each user including, but not limited to, hydrojet circulation, hot water, cold water, mineral water, oil, air induction bubbles, whirlpools, hot tubs, baths and cold water plunges, or any combination thereof. Facilities used by or under the direct supervision and control of licensed medical personnel located in a medical facility, facilities located in the athletic departments of schools, colleges and universities and facilities of professional athletic teams are excluded from this definition.

(5) Training pool. A swimming pool designed and used for teaching and training water activities.

(u) Turnover rate. The time required to recirculate the total volume of the water of a pool through the filtering system and back to the pool.

(v) Wading pool. A pool designed for wading or partial immersion of the human body which is capable of impounding water

to a depth not greater than one-half meter (19.69 inches) and which is separate from any other pool with a swimming facility or health spa.

Sec. 11-11-3. Permits for construction.

(a) Building and other applicable permits shall be obtained from the building department before any swimming facility or health spa may be constructed, altered or remodeled. Plans and specifications shall have been approved by the director prior to the issuance of such permit. Plans and specifications shall be submitted in triplicate, unless additional sets are required, to the director.

(b) In addition to the requirements of these regulations, all applicable ordinances, including but not limited to, plumbing, building, electrical and zoning shall also apply in the construction, maintenance and operation of all swimming facilities and health spas.

Sec. 11-11-4. License required--fees.

No person shall operate a swimming facility or health spa unless an annual license has been secured from the director. This license shall be issued to the owner only after the approval by the director which shall include approval of the electrical official and other building officials and payment of an annual fee of \$50.00 to the department of finance. The reapplication fee upon revocation shall be \$50.00.

Sec. 11-11-5. Inspections.

(a) Upon presentation of appropriate credentials and upon consent of the owner or agent, the director or his or her designee shall have the right to enter at any reasonable time onto the premises of any swimming facility to inspect, investigate, evaluate, conduct tests, or take samples for testing as he reasonably deems necessary in order to determine whether any provisions of this chapter, or any condition in a license issued by the director is being violated.

(b) In addition to the inspections required by the building officials, all piping and appurtenances included in the recirculation and filter system shall be inspected prior to covering. All piping shall be tested at the time of inspection and shall hold at 25 psi pressure or more.

Sec. 11-11-6. Operator's permit--suspension.

(a) When in use, each public pool shall have a person in charge and on the premises who holds a valid operator's permit as issued by the director upon payment of an annual \$5.00 fee to the department of finance and demonstration of basic knowledge of the water treatment process in swimming facilities and of performing tests necessary in operating swimming facilities. Presentation of a certificate to the director from a swimming pool operator's training course shall constitute demonstration of such knowledge. The operator shall be capable of operating all equipment relative to the pool which he is assigned. Where gas chlorination is used for disinfection of the pool water, the operator shall demonstrate knowledge of the safe operation of the equipment and such proficiency shall be noted on the permit.

(b) The director shall suspend or revoke an operator's permit if he finds that there is a substantial hazard to the public's health due to the continued operation of the swimming facility and/or continued and flagrant violations of this chapter. Suspension or revocation shall be effective upon service of notice. Whenever a permit is suspended or revoked, the holder of the permit shall be notified in writing and upon service of notice be given an opportunity for a hearing within three (3) working days. The request for a hearing shall be in writing and be filed in the office of the director. If written request for a hearing is not filed within 10 days, the suspension or revocation is sustained. The director may reinstate a permit upon reapplication and payment of a \$5.00 fee.

(c) Any person aggrieved by the refusal to grant, or by the revocation or suspension of an operator's permit, shall have the right to appeal therefrom to the circuit court of the city after first appealing to the director.

Sec. 11-11-7. Swimming facility--suspension and revocation.

(a) Whenever the director finds that a substantial hazard to the lives, health or safety exists to those who utilize a swimming facility, he may order the immediate suspension of the facility's operation until such time as he finds that the hazard no longer exists. No person shall operate any swimming facility when subject to an order of suspension. Continued and flagrant violations of this chapter may be grounds for revocation of a swimming facility's license. Suspension or revocation shall be effective upon service of notice. Whenever a permit is suspended or revoked, the holder of the permit shall be notified in writing and upon service of notice be given an opportunity for a hearing within three (3) working days. The request for a hearing shall be in writing and be filed in the office of the director. If a written request for a hearing is not filed within 10 days, the suspension or revocation is sustained.

(b) Any person aggrieved by the refusal to grant, or by the revocation or suspension of the operation of a swimming facility, shall have the right to appeal therefrom to the circuit court of the city after first appealing to the director.

Sec. 11-11-8. Pool management companies; duties.

All pool management companies, prior to commencing operation of a swimming facility, shall provide the director with the names and locations of all facilities they operate in the City of Alexandria. Such companies shall be responsible for having an agent present, holding an operator's permit, at all times during which the swimming facility is in operation. They shall further be responsible for assuring compliance with article C.

Sec. 11-11-9. Animals.

Animals shall not be permitted within the swimming facility. This section shall not apply to working dogs, such as seeing-eye dogs.

ARTICLE B

Design and Construction.

Sec. 11-11-10. Location.

The location of a swimming pool shall in no way hinder the operations for which it is designed, nor adversely affect patron safety or water quality. Pools shall not be located in areas subject to flooding and inundation by groundwater drainage.

Sec. 11-11-11. Access.

Direct and unobstructed access to the pool area and to within 20 meters (65.6 feet) shall be provided for the admission of emergency and service vehicles, equipment and personnel. Where the pool area is enclosed by a fence, a gated opening of at least 2.44 meters (8 feet) shall be provided. Access to indoor or elevated pools shall be provided adjacent to the entrance nearest the pool or elevator/stairway leading to the pool. Permanent and conspicuous signs shall be posted indicating the most direct route to the pool.

Sec. 11-11-12. Security.

Swimming facilities shall be maintained in a manner which will not create a nuisance or hazard to the public safety and well-being when not in use, and the pool shall be adequately secured against entry by the public in general. The impounded water shall, at all times, be treated in a manner which will prevent

the growth of algae and the breeding of mosquitoes or other vermin.

Sec. 11-11-13. Water supply.

A public water supply shall be used in all pools unless other sources of water are approved by the director.

Sec. 11-11-14. Sewage disposal.

All sewage shall be disposed of into approved sewage treatment works or, in the absence thereof, into an approved individual sewage disposal system.

Sec. 11-11-15. Shape.

Pools may be of any dimension or shape; provided, that satisfactory recirculation of water can be obtained and undue hazards to bathers are absent.

Sec. 11-11-16. Swimming and wading pool construction materials.

Swimming and wading pools shall be constructed of materials which are inert, impervious and nontoxic to man which will provide a tight tank with a smooth, easily cleaned surface or to which a smooth, easily cleaned surface finish can be applied and which may be finished in white or light color. The pool surface must be constructed of an impervious material which will retain a smooth finish with no pits, cracks or open joints. Materials other than those described above may be considered, and if acceptable, may be authorized by the director for use in the construction of therapeutic pools.

Sec. 11-11-17. Recirculation systems.

(a) Filter room. Public pools shall be provided with a structure or room to contain the filtration equipment, pumps and other recirculation system appurtenances. The room shall be finished in a light color and be constructed of materials which are impervious to water and chemicals necessary for the operation of the pool. Adequate illumination of 215 lumens per square meter measured 0.61 meters (24 inches) above floor level shall be provided. The floor of the filter room shall be designed to provide for adequate drainage with a minimum floor slope of 1:50 and a maximum slope of 1:24 to the drain and shall be kept dry particularly in the vicinity of electrical panels. The filter room shall be adequately cross-ventilated, and all equipment shall be installed so that it is convenient to operate and repair. Adequate head room shall be provided above all filters. The provision of any facility for discharging filter backwashing water onto the filter room floor is prohibited. The room shall be provided with a door(s) of sufficient width to

permit the removal of equipment and shall be capable of being secured against entry by unauthorized persons. The entrance to the filter room shall be adjacent to the pool area or so located that the operator can enter the room without having to exit the enclosed pool area.

(b) Description of recirculation system. All public pools shall be equipped with a recirculating system consisting of pumps, hair and lint catchers, filters, disinfection equipment and necessary pipe connections to the inlets and outlets. Adequate provisions shall be made for backwashing filters. The recirculation system shall be designed for the turnover rate of the pool water according to the following table:

- (1) Diving pool, eight (8) hours;
- (2) Swimming pool, six (6) hours;
- (3) Training pool, four (4) hours;
- (4) Wading pool, two (2) hours
- (5) Combination diving and swimming pool, six (6) hours;
- (6) Spa swimming pool, four (4) hours;
- (7) Therapeutic pool, 15 minutes.

The recirculation system of any pool shall be completely separated from the aeration and/or hydrojet system.

The recirculation, aeration and/or hydrojet systems for a therapeutic pool shall be for the sole use of the therapeutic pool and shall not be interconnected with any non-therapeutic pool. The director may permit two (2) therapeutic pools to be served by one (1) recirculation system.

(c) Filters. The recirculation system shall be equipped with a filtration system that will filter the entire contents of the pool at the required rate. Filtration equipment shall be operated continuously 24 hours per day. Diatomaceous earth filters shall be required for the recirculation system of therapeutic pools, unless an equally effective system is authorized by the director. Design criteria for the indicated type of filters shall be as follows:

(1) Rapid sand filter. A filter utilizing sand as the filter media with a filtration flow rate not exceeding 122 liters per minute per square meter (3 gal./min./sq. ft.) of filter area. The backwash rate of flow shall be four (4) times the filtration rate.

(2) Anthracite filter. A filter utilizing anthracite as a filter media with a filtration flow rate not exceeding 122 liters per minute per square meter (3 gal./min./sq. ft.) of filter area. The backwash rate of flow shall be three (3) times the filtration rate.

(3) High-rate filter. A filter utilizing a media capable of filtration at a high rate of flow. The rate of flow shall be greater than 612 liters per minute per square meter (15 gal./min./sq. ft.) of filter area; however, the rate shall not exceed 1,020 liters per minute per square meter (25 gal./min./sq. ft.). The backwash rate of flow shall be the same as filtration rate.

(4) Diatomaceous earth filter. A filter utilizing diatomaceous earth as a filter media. There are two (2) types:

a. Pressure or vacuum type. A diatomaceous earth filter through which a rate of flow does not exceed 81.5 liters per minute per square meter (2 gal./min./sq. ft.).

b. Pressure or vacuum with slurry feeder. A filter equipped to continuously feed a diatomaceous earth suspension and having a rate of flow not exceeding 122 liters per minute per square meter (3 gal./min./sq. ft.).

A backwash sump pit with a standpipe shall be installed to collect spent diatomaceous earth so that it can be collected and disposed of with solid waste. Any other method for accomplishing this may be submitted for consideration. Other filtration systems which are equal to or better than those described above may be used in a pool recirculation system with the approval of the director.

(d) Gauges. Gauges shall be installed on all filter systems to readily indicate the influent and effluent operating pressures of recirculating systems. All gauges shall measure directly in kgs./sq. meter or pounds per square inch and shall have an indicator at least 10 centimeters (four (4) inches) in diameter unless otherwise approved by the director.

(e) Rate of flow indicators. The recirculation system shall be equipped with a rate of flow indicator which has been approved by the director. The indicator shall read in liters per minute or gallons per minute and shall be located to indicate the rate of flow of filtered water being returned to the pool. The indicator shall be of fixed calibration and properly sized so as to indicate the designed rate of flow at approximately mid-scale.

(f) Hair and lint strainer. At all installations where it is possible for water from the pool to pass through the pumps before passing through the filters, a strainer shall be provided on the suction side of the pump to prevent hair, lint and other matter from reaching the pump and filters. Strainers shall be corrosion resistant with openings not over one-eighth inch in size providing a free flow area at least four (4) times the area of the pump suction line at the strainer connection and shall be accessible for frequent cleaning.

Sec. 11-11-18. Piping systems.

(a) The piping system for pools shall be composed of N.S.F.-approved materials or equal designed for the following operations:

- (1) Filling the pool;
- (2) Recirculating the pool water through the treatment equipment;
- (3) Washing each filter to waste;
- (4) Backwashing to waste;
- (5) Operating suction cleaner;
- (6) Emptying the pool; and
- (7) Draining the system.

(b) There shall be no direct connections between the pool recirculating system and the sewer or the potable water supply. Fill spouts may be located under diving boards, under guard chairs or adjacent to pool ladder handrails in a manner that will not create a tripping or safety hazard.

(c) Waste from backwashing shall be discharged into a storm sewer or in a manner approved by the director. When only a sanitary sewer is available to a swimming pool, the rate of discharge is subject to the approval of the director with the advice of the director of transportation and environmental services or other authority over sanitary sewers and treatment facilities.

(d) The piping system within the filter room shall be securely anchored and shall be color coded as follows:

- (1) Freshwater, blue (to check valve)
- (2) Backwash, black
- (3) Influent, yellow
- (4) Effluent, white
- (5) Vacuum, orange.

(e) 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 10 feet per second (3.05 m/second) for discharge piping, except for copper pipe where the velocity for piping should not exceed eight (8) feet per second (2.44 m/second). Suction velocity for all piping should not exceed six (6) feet per second (1.83 m/second). Design system head calculations shall be required to confirm the adequacy of proposed pipe sizing and pump selection.

(f) A permanent specification placard shall be conspicuously displayed on or adjacent to the filter and shall be properly lighted. Specification shall be printed or engraved in one (1) centimeter high letters and readily legible. The following information shall be included on the placard:

- (1) Name and location of facility;
- (2) Date of construction;
- (3) Capacity in liters (gallons);
- (4) Water surface area in square meters (square feet);
- (5) Turnover rate in hours; and
- (6) Rate of flow in liters per minute (gallons per minute).

Sec. 11-11-19. Pool outlets.

(a) All pools shall have one (1) or more main outlets in their deepest part for continuous removal of water for treatment and reuse or for emptying the pool. A main outlet shall be no less than one (1) meter (3.3 feet) nor more than six (6) meters (19.7 feet) from another main outlet and no more than five (5) meters (16.4 feet) from a pool wall. The main outlet shall be capable of accommodating 100 percent of the designed flow rate.

(b) A main outlet opening shall be covered with a grating which does not create an entrapment or other hazard to bathers, is secured in place and is only removable with tools. The grate opening area shall be large enough to have water entrance velocities not exceeding 0.6 meters per second (two (2) feet per second).

Sec. 11-11-20. Construction safety.

(a) Pumps, filters and other mechanical and electrical equipment for public pools shall be enclosed in such a manner accessible only to authorized persons. Construction and drainage shall be such as to avoid the entrance and accumulation of water in the vicinity of the electrical equipment.

(b) The crossing of outdoor swimming facilities by overhead electrical conductors is prohibited, except as permitted by article 680, National Electrical Code.

Sec. 11-11-21. Hydrostatic relief valve requirement.

In all in-ground pools, one (1) or more hydrostatic relief valves shall be installed for the purpose of relieving the water pressure on the pool shell.

Sec. 11-11-22. Pool lighting.

(a) Where pools are to be used after dark, the swimming pool area shall be equipped with lighting fixtures of such number and design so as to light all parts of the pool, the water therein, and the entire area. Fixtures should be installed in such a manner as to create no hazard to the bathers. The design and installation of the fixtures should be such that lifeguards can clearly see every part of the swimming pool including decks,

spring boards and other appurtenances without being blinded by glare.

(b) Underwater lighting for such pools shall provide 11 watts per square meter or one (1) watt per square foot of water surface and shall require ground fault circuit interrupters (GFCI) (article 680 of National Electrical Code).

Sec. 11-11-23. Decks.

There shall be a deck extending around the entire perimeter of the pool. The deck shall be constructed of concrete or other impervious material. The material shall have a non-slip but smooth finish. The deck shall have a pitch of not less than 1:48 or more than 1:24 and be designed to conduct drainage away from the pool area in a manner that will not create or maintain pools of water or a nuisance. The deck shall be at least 1.5 meters (five (5) feet) wide, including the width of coping. There shall be at least one (1) meter (3.28 feet) of deck behind any diving stand or guard chair. In addition, all fill under decks shall be properly tamped and proper supports shall be provided to prevent decks from settling. A type of pool designed with outlets near or over the top may, within a maximum of three (3) meters 10 feet from the pool edge, have the deck slope to a continuous drain or multiple drains. The overflow or deck drainage from this type of area may be filtered and returned to the pool. Such an arrangement shall necessitate an outside area sloping away from the pool as required above. Roof runoff or other drainage shall not be wasted onto the deck. All areas surrounding the deck shall have surface drainage directed away from the deck area. The decking or floor area around a therapeutic pool or a hot tub shall be one (1) meter (3.3 feet) minimum width and must extend around at least 50 percent of the entire perimeter. The floor covering material shall be non-slip, non-absorbent and adequately drained.

Sec. 11-11-24. Diving area and boards.

(a) At least 4.57 meters (15 feet) of free and unobstructed head room shall be provided above diving boards.

(b) The minimum dimension from a diving board to a sidewall and from one board to another board shall apply as stated in Table I.

(c) The dimensions in diving areas shall be determined as Table II.

TABLE I

Height of Diving Board Above Water	Board ξ to Adjacent Board ξ of Equal or Lesser Height	Board ξ to Sidewall
0.00 to 0.60 meters (0.00" to 2.'0")	3.05 meters (10 Feet)	3.05 meters (10 Feet)
0.61 to 0.75 meters (2.'1" to 2.'6")	3.35 meters (11 Feet)	3.35 meters (11 Feet)
0.76 to 1.00 meters (2.'7" to 3.'3")	3.35 meters (11 Feet)	3.66 meters (12 Feet)
1.01 to 3.00 meters (3.'4" to 9.'10")	3.66 meters (12 Feet)	3.66 meters (12 Feet)
Greater than 3.0 meters (9.'10") - as required by the Administrative Authority.		

ξ = Center line of diving board

TABLE II

Height of Diving Board Above Water	Depth of Water at Radius Center (Fig. 1) or Plunnet (Fig. 2)	Distance Ahead of Plunnet	Depth of Water at Distance L From Plunnet	Overhang of Diving Board Beyond Pool Edge
H	D ₁	L	D ₂	O _h
0.00 to 0.61 meters (0'0" to 2'0")	2.6 meters (8'6")	3.35 meters (11'0")	2.6 meters (8'6")	0.91 meters (3'0")
0.62 to 0.77 meters (2'1" to 2'6")	2.75 meters (9'0")	3.5 meters (11'6")	2.69 meters (8'10")	1.22 meters (4'0")
0.78 to 1.00 meters (2'7" to 3'3")	3.35 meters (11'0")	3.66 meters (12'0")	3.28 meters (10'9")	1.52 meters (5'0")
1.01 to 3.00 meters (3'4" to 10'0")	3.66 meters (12'0")	4.27 meters (14'0")	3.58 meters (11'9")	1.83 meters (6'0")
Greater than 3.00 meters (10'0")				

Use A.A.U. Standards

TABLE II - CONTINUED

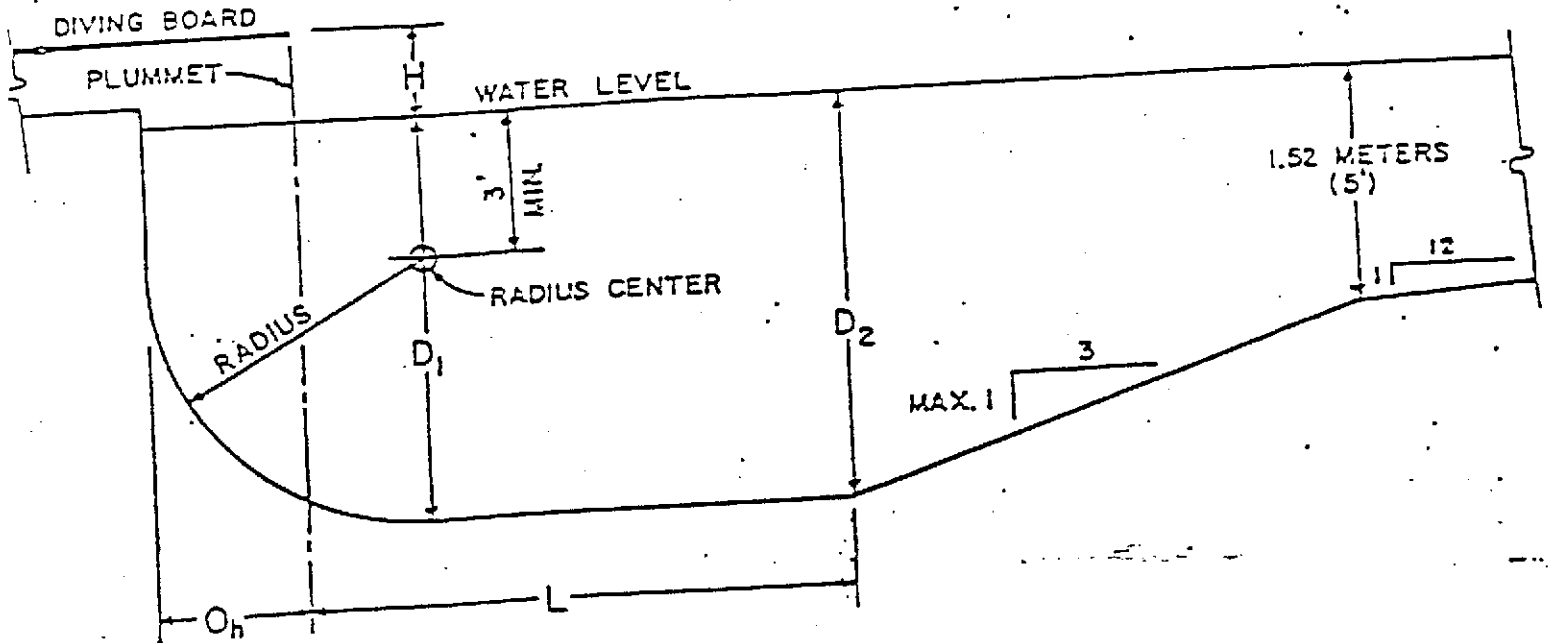


FIGURE 1

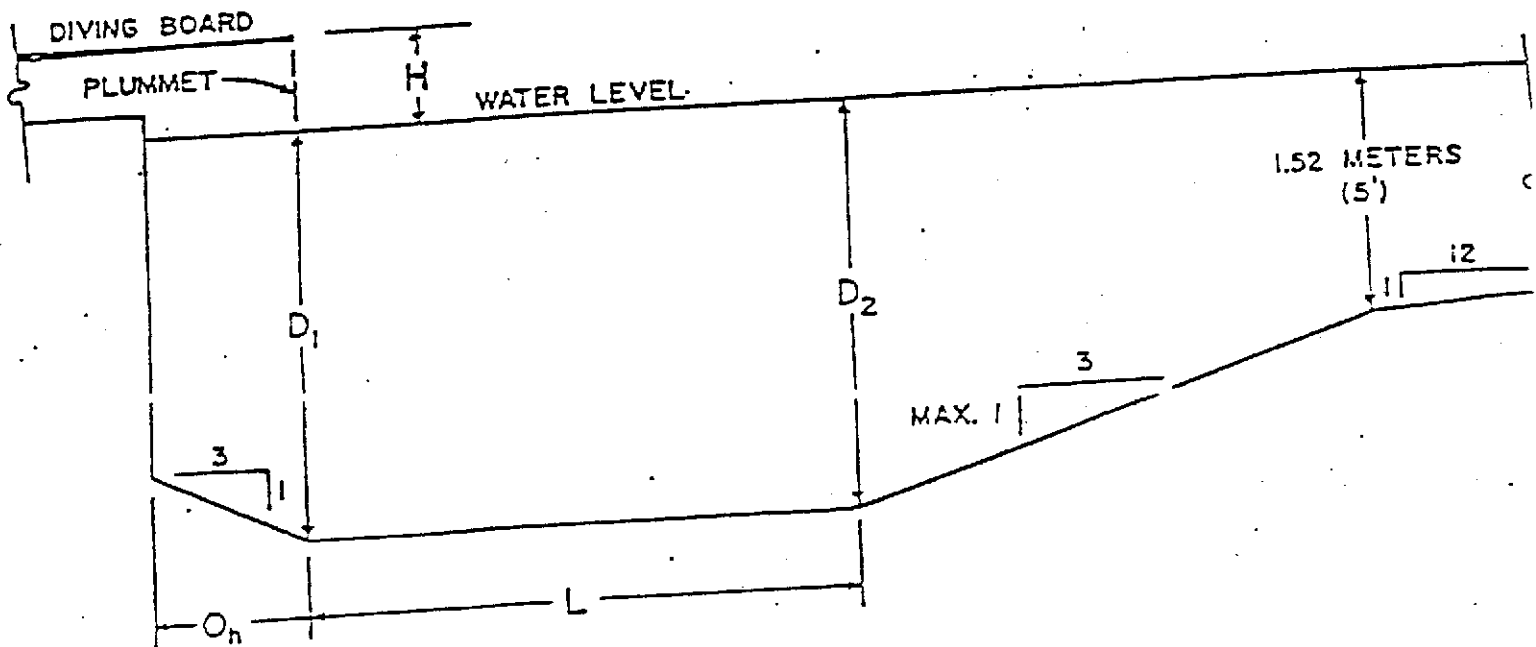


FIGURE 2

Sec. 11-11-25. Steps and ladders.

(a) Swimming pool. Two (2) or more means of egress must be provided for all pools having a perimeter greater than 30.5 meters (100 feet) and one (1) means of egress for pools 30.5 meters (100 feet) or less. The number and location of such means of egress shall be based on one (1) additional means of egress for each additional 61 meters (200 feet) of pool perimeter or fraction thereof. The treads of all steps, ladders and stepholes shall be of non-slip construction. When built-in steps are constructed, they shall not protrude into the pool, and they shall be provided with one (1) or more handrails.

(b) Therapeutic pools. Step risers measuring 30.5 centimeters (12 inches) shall be permitted in therapeutic pools when two (2) safety rails are provided. The rails shall be installed over the steps with the leading edge extending to a point no less than 30.5 centimeters (12 inches) from the plane of the bottom riser. (Where the depth over a bench around the perimeter, except for the steps, is 61 centimeters (24 inches) or less handrails are not required.) Therapeutic pool steps shall be located at a point where the deck is at least one (1) meter (3.3 feet) wide. The top surface edge of benches and steps shall be outlined in contrasting color by a marking line at least 2.5 centimeters (one (1) inch) wide.

Sec. 11-11-26. Slope of bottom.

In water depths of less than 1.5 meters (five (5) feet), the maximum slope shall not exceed 1:12. In depths greater than 1.5 meters (five (5) feet), the slope shall not exceed 1:3.

Sec. 11-11-27. Pool inlets.

Where inlets are in pool walls, such inlets shall be spaced not more than six (6) meters (19.7 feet) on center around the pool perimeter. Where inlets are in the pool bottom, the number of such inlets and location shall be so designed as to ensure the proper distribution of filtered water. All inlets, except fresh water inlets, wading pool inlets and prefabricated gutters with 45-degree angle inlets in the bottom shall be at least 38 centimeters (15 inches) below the overflow level of the pool. Each inlet shall be provided with a means of adjusting flow through a range of at least 50 percent of its design capacity. The control shall be readily accessible.

Sec. 11-11-28. Suction cleaner.

A suction cleaner shall be provided. Where a suction cleaner is operated by the recirculating pump, a device(s) shall be provided for throttling the flow(s) from the various pool outlet(s) (main drain, skimmer, surge tank, etc.). The suction

cleaner line shall be connected through a hair catcher. Portable vacuum cleaner units shall be provided with adequate sewerage near the pool for the discharge of effluent. Hydraulic jet-type suction cleaners shall be permitted in lieu of the above where fresh water pressure is 2.1 kg/cm² (30 p.s.i.) or greater and where the water service line is provided with an approved backflow prevention or anti-siphon device if connected to the public or private potable water supply.

Sec. 11-11-29. Overflow gutters, skimmers.

Overflow gutters or skimmers shall be provided on the vertical wall of all pools, and be so designed as to adequately skim the pool surface.

(a) Where overflow gutters are used, they shall extend completely around the swimming pool, except at steps or recessed ladders. The overflow gutter shall also serve as a handhold. This gutter shall be capable of continuously removing 60 percent 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. The opening into the gutter beneath the coping shall not be less than 10 centimeters (four (4) inches) and the interior of the gutter shall be not less than 7.6 centimeters (three (3) inches) wide with a depth of at least 7.6 centimeters (three (3) inches). 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 6.35 centimeters (2.5 inches) for the top five (5) centimeters (two (2) inches). The overflow outlets shall be provided with outlet pipes which shall in any case be at least five (5) centimeters (two (2) inches) in diameter. The outlet fittings shall have a clear opening in the grating at least equal to one and one-half times the cross-sectional area of the outlet pipe.

(b) Where skimmers are used the number provided shall be the greater of one (1) skimmer per 12.2 meters (40 feet) of the perimeter, or one (1) per 37.2m² (400 square feet) of pool surface or less, spaced so as to provide maximum skimming action of the pool surface.

(1) Skimmer throats shall not be greater than the width required for weirs 25 centimeters (10 inches) long.

(2) Skimmer weirs shall be automatically adjustable to variations in water level over a minimum range of 7.6 centimeters (three (3) inches).

(3) A removable basket or screen to trap large solid matter shall be provided in each skimmer.

(4) The outlet pipe from each skimmer shall contain a device for regulating the flow of water from the skimmer throughout the entire range from the design rate-of-flow to shutoff.

(5) The water velocity through the skimmer shall not be less than 95 liters per minute (25 gallons per minute) nor greater than 132 liters per minute (35 gallons per minute).

(6) The system shall be designed to operate 100 percent through skimmers.

Sec. 11-11-30. Safety and rescue equipment; other safety features.

(a) Every swimming pool shall be equipped with the following aids to safety and rescue which shall be readily accessible at all times:

(1) One (1) or more light but strong poles with blunted ends not less than four (4) meters (12 feet) in length with shepherd hook attached.

(2) One (1) or more throwing ring buoys, not less than 38 centimeters (15 inches) in diameter, having a 68-kilogram (150-pound) strength test line attached of sufficient length of reach, twice the width of the pool, placed on racks at strategic points adjacent to the pool.

(3) A 24-unit first aid kit or other such first aid kit as shall be approved by the director which shall be kept filled and readily accessible for emergency use.

(4) A readily accessible room or area designated and equipped for emergency care of casualties. Minimum equipment shall include a stretcher, a backboard and two (2) blankets.

(5) A direct dial telephone with telephone numbers for the police, rescue services and fire department.

(6) The depth of water in pools shall be clearly marked at every 0.3 meter (one (1) foot) increment of depth and at least every 6.1 meters (20 feet) on both the horizontal and vertical surfaces of the pool wall. Numerals and letters shall be at least 12.7 centimeters (five (5) inches in size) and a good contrast with the pool walls and deck.

(7) Fixed and floating platforms in swimming pools shall be constructed with an air space of at least 0.3 meter (one (1)

foot) between the water surface and the underside of the platform.

(8) An elevated lifeguard chair shall be provided when the depth of the pool exceeds 1.52 meters (five (5) feet). There shall be one (1) lifeguard chair provided for every 2,000 square feet of water surface area within the pool enclosure.

(9) A life line shall be provided at the 1.52 meter (five (5) feet) break in grade between the shallow and deep portions of the swimming pool, or within 0.15 meters (six (6) inches) of either shallow side of the break, with its position marked with visible floats at not greater than 2.13 meter (seven (7) feet) intervals. The life line shall be securely fastened to wall anchors of corrosion resistant materials and of a type which shall be recessed or have no projection which shall constitute a hazard when the line is removed. The line shall be of sufficient size and strength to offer a good handhold and support loads normally imposed by bathers.

Sec. 11-11-31. Disinfection equipment.

(a) Chemical feeding equipment. Means shall be provided for regulating the feeding of chemicals to the water in the recirculation system. The installation of mechanically operated, positive displacement chemical feeders is required.

(b) Chlorinating equipment. All pools shall be provided with approved chlorinating equipment which shall be capable of maintaining a dose not less than 1.0 ppm of free chlorine when operating at 25 percent of design capacity.

(c) The use of chlorine gas as a disinfectant shall require the approval of the director. Such approval will be granted only after it has been demonstrated that the gas chlorinator room or area will be located in a manner which will not adversely affect the safety and health of patrons, pool personnel or the public. Chlorine gas feeding equipment and chlorine gas cylinders and other hazardous chemicals shall be installed in an enclosed space or room separate from the filter room and electrical panels and shall be equipped with a door capable of being locked. Gas chlorinator rooms shall be equipped with a forced draft fan exhausting to the outside from the floor level. The exhaust fan shall be capable of providing 60 air changes per hour against the resistance offered by duct work or any other local factors. A fresh air inlet shall be provided near the ceiling. The gas chlorinator room shall be located above ground level and below deck level of the swimming pool. The chlorine gas tanks shall be protected from direct sunlight and fastened in place during storage and use. An approved self-contained gas mask for chlorine or a gas mask with a supply of oxygen under positive pressure or compressed air, either of which have been approved by

the Bureau of Mines, in addition to local approval by the fire department, shall be provided where chlorine gas is being utilized. The mask shall be located accessible to, but outside of, the gas chlorinator room. The chlorinator shall be provided with an emergency cutoff device to prevent gas discharge or injection of gas during electrical outage.

Sec. 11-11-32. Water temperature control.

The temperature of spa and therapeutic pools is not to exceed 40°C (104°F). An accurate thermometer shall be provided for constant monitoring of the water temperature.

Sec. 11-11-33. Drinking fountains.

Each swimming facility and health spa shall have at least one (1) drinking fountain within the pool area or exercise area readily accessible to patrons.

Sec. 11-11-34. Showers, water closets, lavatories, etc.

(a) Adequate showers, water closets, urinals and lavatories shall be provided for each sex, assuming an even distribution of the sexes at the time of maximum load, or maximum facility usage. At swimming facilities, the part of the structure containing the showers, water closets, urinals and lavatories shall be designed so that these facilities shall be in a line of travel used by the patrons prior to entering the pool area and shall be provided with an entrance and a separate exit opening directly to the pool deck; however, such exit shall not be near the deep portion of the pool(s). All sewage generated from the operation of a swimming facility must be discharged into an approved sewage treatment works or individual sewage disposal system.

(b) Floors for all dressing rooms, showers, toilets and lavatories shall have a minimum pitch of 1:48 to the drains with no low spots which will allow water to stand. Such floors shall be smooth but have a non-slip finish, and the room shall be ventilated so that the floors do not remain damp or wet.

(c) Separate dressing rooms shall be provided for both sexes. Metal lockers, wire baskets, hooks or other sanitary means of storage of clothing and personal accessories shall be provided. All storage containers for clothing shall be kept clean and sanitary.

(d) Showers shall be provided in the proportion of one (1) for each 40 persons at the time of maximum load at each swimming pool or in the proportion of one (1) shower for each 20 persons at the time of maximum facility usage at each health spa. Each shower shall supply an adequate quantity of heated water at a minimum temperature of 48.9°C (120°F) through a device that will

prevent scalding. Water from each shower shall drain separately. Each shower shall be provided with suitable liquid soap dispensers.

(e) Toilet facilities shall be provided in the proportion of one (1) water closet for each 40 females at the time of maximum load or maximum facility usage. One (1) water closet and one urinal shall be provided for each 60 males at the time of maximum load or maximum facility usage.

(f) Lavatories shall be provided in the proportion of one (1) for each 60 persons expected at the time of maximum load or maximum facility usage. Each lavatory shall be provided with suitable liquid soap dispensers.

(g) Motels and other like establishments which restrict the use of the swimming facility to occupant guests shall be deemed to comply with subsection (c) of this section. The director may waive any of the provisions of subsections (d), (e) and (f) of this section if he determines that existing facilities are sufficient to protect the public health.

(h) A separate custodial mop sink shall be provided in each health spa for use exclusively for cleaning purposes and must be located within 100 feet in a line of travel of the shower and toilet rooms.

Sec. 11-11-35. Fencing.

All swimming pool areas shall be completely enclosed with an approved fence or equivalent barrier, at least 1.22 meters (four (4) feet) high, and shall have at least one (1) gate of 1.22 meters (four (4) feet) minimum width. Gates in this enclosure shall be self-closing and shall have latches or locks at least 1.22 meters (four (4) feet) above the surface. Emergency and service gates having a horizontal opening of at least 2.44 meters (eight (8) feet) shall be provided for outdoor pools. Where grassed area is provided within the pool enclosure, it shall be separated from the pool deck by a 0.9-meter (three (3) feet) high fence with a waist high shower spray (pull chain actuated) at each entrance to the pool deck.

Sec. 11-11-36. Spectator areas.

Spectator areas shall be separated from the pool area so that spectators do not have access to the pool area. Spectator balconies shall not overhang any portion of the pool surface.

Sec. 11-11-37. Wading pools.

(a) The slope of the bottom of any wading pool shall be no greater than 1:15 nor less than 1:40.

(b) Wading pools shall be so designed that no obstructions are located within an area bounded by a line 1.5 meters (4.92 feet) outside of the pool perimeter.

(c) Wading pools shall be separated from the main pool by a fence or other suitable barrier at least 0.9144 meters (three (3) feet) high.

(d) A wading pool shall have a filter system completely separate from any swimming pool.

Sec. 11-11-38. Grandfather clause.

Any pool constructed prior to May 15, 1984, shall be deemed to be in compliance with the structural requirements of this chapter. Any structural changes, modifications or remodeling of the pool shall meet the requirements of this chapter.

ARTICLE C

Operation.

Sec. 11-11-39. Condition of equipment.

All equipment shall be maintained in satisfactory operating condition during operation of the pool by the facility's license holder or his agent. The premises, including the pool(s) and decks, shall be maintained in a clean and sanitary condition. Except for unforeseen or emergency conditions, cleaning of the pool, deck and bathhouse will not be permitted when bathers are present.

Sec. 11-11-40. Clarity of water.

When the pool is open for use, the water shall be sufficiently clear to permit a disc 15 centimeters (six (6) inches) in diameter, divided into alternate black and white segments and placed on the bottom of the pool at the deepest point to be clearly visible from the pool deck at all distances up to 10 meters (10 yards) in a horizontal direction from the projection of the disc on the pool surface. The disc may be permanently affixed to the bottom of the pool. The easily visible main drain grate will be an acceptable substitute for such disc.

Sec. 11-11-41. Water treatment.

(a) Chemicals other than chlorine, sodium hypochlorite, calcium hypochlorite, muriatic acid, soda ash, sodium bicarbonate, aluminum sulfate (alum), sodium bisulfate and calcium chloride shall not be used to treat swimming pool water without permission from the director.

(b) Aluminum sulfate (alum) shall be fed continuously by means of a chemical feeder into the recirculation systems using rapid sand or anthracite filters. The injection point shall be at a sufficient distance prior to the filters (influent side) to permit complete flocculation.

(c) When the swimming pool is open for use a minimum of 1.0 ppm free chlorine residual shall be maintained in all parts of the pool. A means of disinfecting the therapeutic pool water shall be employed which provides a disinfecting residual in the pool water.

The following operational parameters shall be met:

<u>Disinfectant Levels (ppm)</u>	<u>Minimum</u>	<u>Ideal</u>
Chlorine (free)	1.0	1.0-1.5
Bromine (free) when approved	0.8	1.5
Iodine (free) when approved	1.0	1.5

(d) When the swimming pool is open for use, the pH of the pool water shall be maintained between 7.2 and 8.0.

(e) Approved test kits for free disinfectant residual and pH shall be available and in good working order at all times.

(f) Where cyanuric acid is authorized as a stabilizing agent of residual chlorine, or if the source of residual chlorine is from a chlorinated cyanurate, a free chlorine residual of at least 1.0 ppm shall be maintained with cyanuric acid residuals of 35 ppm and at least 1.5 ppm free chlorine shall be maintained with cyanuric acid residuals of 50 ppm. The concentration of cyanuric acid shall not exceed 100 ppm. A testing kit for measuring the concentration of cyanuric acid, accurate within five (5.0) ppm shall be provided at each swimming pool using cyanuric acid or chlorinated cyanurates.

(g) The operator or manager of each swimming pool shall cause an adequate supply of chemicals for the proper treatment of pool water to be on hand and available for use at all times.

(h) The operator or manager of each swimming pool shall maintain and operate all mechanical equipment in a safe and proper manner. All cleaning equipment and materials shall be stored in a safe manner.

(i) Protective clothing (i.e., face masks, rubber gloves and aprons or coveralls) shall be provided for personnel handling hazardous chemical compounds.

(j) Hand-feeding of chemicals shall not be permitted during hours of operation or within 30 minutes of opening.

(k) Spa pools shall be drained and filled at least once every month.

Sec. 11-11-42. Records.

Record forms supplied by the director shall be maintained up-to-date and shall be available for inspection while the pool is in use. Disinfection tests (i.e., free chlorine residual) and pH tests shall be made and recorded at opening and at least once every two (2) hours thereafter while the pool is in operation.

Sec. 11-11-43. Placards.

Placards approved by the director and covering personal health and safety regulations shall be posted within the swimming facility. Areas restricted to operating personnel shall be prominently identified. Signs warning employees of emergency procedures to be followed in case of exposure or contact with hazardous material shall be posted in the room or area where such hazardous materials are stored and/or used.

Sec. 11-11-44. Spectators.

No person in street shoes shall be allowed on the deck of the swimming pool within 1.5 meters (five (5) feet) of the water except the operating personnel, the director or personnel engaged in repair work. Exceptions may be made for those participating in swimming meets, but in no event shall spectators in street clothing at these meets be permitted on any part of the deck area draining into the swimming pool.

Sec. 11-11-45. Food and drink area.

Any person in the process of eating or drinking shall be confined to the area designated for the preparation and serving of food and drink. This area shall be at least 6.10 meters (20 feet) from the pool edge and separated from the pool by a fence or suitable barrier. No bottled drinks or glass containers shall be permitted in the pool area.

Sec. 11-11-46. Dressing rooms.

(a) Soap. Liquid soap shall be provided at each shower and lavatory.

(b) Dressing room floors. The floor of the dressing room shall be maintained in a clean condition.

(c) General housekeeping. All of the dressing room facilities shall be maintained in a healthful and safe manner. Toilet paper shall be provided at each water closet and female urinal.

Sec. 11-11-47. Precautions relative to communicable diseases.

Any person having an obvious skin disease, nasal or ear discharge, inflamed eyes, or any communicable disease shall be excluded from the swimming facility.

Sec. 11-11-48. Boisterous and rough play.

Boisterous or rough play and running at any swimming facility is prohibited. Regulated water sports may be permitted under adequate supervision.

Sec. 11-11-49. Lifeguards.

There shall be a minimum of one (1) lifeguard on duty at all times when the public pool is open for use. A minimum of one (1) additional lifeguard shall be required for each additional 75 persons or fraction thereof. Any individual retained as a lifeguard shall possess the qualifications for meeting the standards recommended by the American Red Cross or other training for life-saving personnel as may be approved by the director. Lifeguards shall be proficient in cardiopulmonary resuscitation (CPR) techniques as evidenced by a certificate from a course approved by the director. In order to maintain proper safety standards, the director may, based on the pool layout and the number of swimmers, require that more than the minimum number of lifeguards be provided. Lifeguards shall wear distinguishing emblems or clothing while on duty. The lifeguard(s) shall at all times observe and supervise persons using the swimming facility to ensure that health and safety rules and practices are enforced.

Therapeutic pools 1.22 meters (four (4) feet) or less in depth and provided with direct supervision shall not be required to provide a lifeguard. The director may grant exceptions for therapeutic pools of greater depth when such pools are used for special purposes and have direct supervision. Where unattended therapeutic pools are accessible to children seven (7) years of age or less, a secure cover or lid must be provided to prevent entry.

Sec. 11-11-50. Condominium swimming pools--alternate provisions.

(a) The unit owners' association of a condominium may elect to operate a swimming pool under its control in accordance with the provisions of this section by:

(1) Adopting written rules and regulations concerning the operation, maintenance and use of the swimming pool under its control and supervision, and provided that such rules and regulations include provisions acceptable to the director for lifeguards during likely periods of substantial use (10 or more persons) and reasonable control of access for experienced

swimmers only or supervised use for non-experienced swimmers during other hours; and

(2) Filing the written rules and regulations with the director.

(b) Upon said filing and notwithstanding any other provision of this chapter, the following alternate provisions shall apply to the operation and use of the condominium swimming pool, provided, that all other applicable provisions of this chapter shall remain in full force and effect:

(1) At least one (1) holder of a valid swimming pool operator's permit must be present on the premises of the condominium and available at all times the condominium swimming pool is open for or is in use. An operator is not required by this section to be immediately present at all times at the pool but must be immediately available to the pool in case of an emergency.

(2) Except as provided in the previous subsection, no lifeguard shall be required by this chapter at the condominium swimming pool; provided, no such swimming pool may be used at any time by any person alone unless another responsible person is also present within five (5) feet of the water's edge at all times the pool is in use.

(3) No physical facility for the preparation, service or consumption of food and/or drinks shall be less than 20 feet from the rim of the condominium swimming pool. Food and drink may be consumed up to the rim but not in the swimming pool.

Sec. 11-11-51. Laundering.

Bathing suits, towels and other reusable cloth materials furnished by a pool shall be properly laundered so as to be sanitary before being issued to bathers.

Sec. 11-11-52. General housekeeping of health spa facilities.

All floors, walls, ceilings, showers, bathtubs, saunas, steam and vapor rooms, cabinets, toilets, stalls and other physical facilities of the health spa must be in good repair and maintained in a clean and sanitary condition. All equipment and fixtures shall be thoroughly cleaned and effectively disinfected as often as needed to prevent the development of algae, fungi, mildew, mold or bacteria which may endanger the public safety or health.

Sec. 11-11-53. Ventilation--health spas.

In the exercise room of a health spa the air ventilation rate shall meet or exceed 0.56 cubic meters (20 cfm) per minute per occupant. The ventilation of the locker, shower and toilet rooms of a health spa shall be sufficient to minimize the accumulation of moisture and surface condensation and shall be no less than 0.90 cubic meters (30 cfm) per minute per occupant. The ventilation air shall not be allowed to recirculate. Make up air shall be tempered as required.

Sec. 11-11-54. Regulations--adoption, promulgation and penalty.

(a) The director is hereby authorized and empowered to make, establish, adopt, promulgate and from time to time amend or supplement such regulations and such administrative remedies, practices and procedures as may be necessary or convenient to clarify, interpret, construe or otherwise aid in the enforcement of the provisions of this chapter; provided, that the same shall not be in conflict with the provisions of this chapter and, provided further, that no regulation shall be effective or enforceable until officially promulgated as hereinafter specified.

(b) Such regulations as are adopted by the director shall be deemed officially promulgated only after:

(1) A tentative draft of the proposed regulations shall be compiled and printed.

(2) A public hearing shall be held for comments on the contemplated regulations. Notice of the hearing shall be published at least 14 days prior thereto and shall include notice of the availability of the tentative draft for public inspection.

(3) After the conclusion of the public hearing, the director shall adopt such regulations as he may deem advisable as a final printed document or supplement, which shall be dated and clearly identified as regulations of the department of public health of the city governing swimming pools and health spas.

(4) Copies thereof shall be filed with the director and shall be made readily available to the public in sufficient numbers to meet demand, for which a reasonable fee to cover printing and handling expenses may be charged.

Section 2. That the title of and an informal memorandum explaining this ordinance shall be published in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The city clerk shall have the full text of this ordinance printed in sufficient numbers to supply copies to meet request. The city clerk shall

note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

CHARLES E. BEATLEY, JR.
Mayor

Final Passage: May 12, 1984