### REGULATIONS FOR THE DESIGN, CONSTRUCTION AND OPERATION OF PUBLIC POOLS IN METROPOLITAN NASHVILLE AND DAVIDSON COUNTY



Metropolitan Health Department Bureau of Environmental Health Services Division of Public Facilities

311 23rd Avenue, North Nashville, TN 37203

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# Authority

These Regulations are promulgated under the authority granted to the Metropolitan Health Department of Nashville and Davidson County under Chapter 10.48 Public Swimming Pools of the Metropolitan Code of Law. These regulations establish guidelines for the design, construction and operation of public swimming pools. They have the force of law as authorized by Chapter10.48 and take effect immediately on publication.

# I. Design Detail and Structural Stability

- 1.1 All public pools shall be designed and constructed to withstand all anticipated loadings for both full and empty conditions.
- 1.2 No limits are specified for length or width of public pools. Consideration shall be given to shape from the standpoint of sanitation, safety and the need to facilitate supervision of bathers using the pool.
- 1.3 The shape of any public pool shall be such that the circulation of pool water and control of swimmer safety are not impaired.
- 1.4 A hydrostatic relief valve shall be provided in areas having a high water table. The designing architect or engineer shall be responsible for certifying to the structural stability and safety of the pool.
- 1.5 For design features not specifically addressed in these regulations the Director of Health shall evaluate same and approve or disapprove said features as appropriate.

## II. Minimum Size Guidelines

- 2.1 The minimum size commercial pool constructed in Davidson County (with or without diving board) shall contain at least 860 square feet of water surface area.
- 2.2 In as much as effective operation, sanitation, and safety of pools are directly related to pool size and occupant loading the minimum size of 860 square feet of water surface area shall be provided for every 100 unit complex or less.
- 2.3 A complex (this includes apartments, condominiums, planned unit developments, hotels, motels, trailer spaces, individual residences, etc.) in excess of 100 units shall have additional pool area provided at the rate of a minimum of 215 square feet for every 25 units addition thereto.

Provided, however, the maximum size commercial pool required to be constructed by a large hotel

( a hotel with 1,000 rooms or more adjacent to or operated in connection with exhibition hall space of at least one hundred thousand square feet) located within a premier tourist destination area (a geographical area of the metropolitan government that contains a theme park, golf courses, water theme parks, entertainment complexes, restaurants and other tourist-related activities and businesses) shall not exceed a total 8,000 square feet of surface area, which can be contained in more than one commercial pool.

# III. Pool Construction Materials

- 3.1 All public pools and all appurtenances thereto shall be constructed of materials which are inert, non-toxic to man, impervious, permanent, 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 shall be finished in white or light color.
- 3.2 Pool bottoms of sand, fiberglass, earth or vinyl liners are not permitted in public pool construction. Consideration will be given to the use of fiberglass or acrylic whirlpool shells and fiberglass or PVC membrane swimming pool liners.
- 3.3 Pool finishes including bottom and sides, must be white or light colored material, nontoxic to man, with a smooth finished surface, without cracks or joints, bonded to the supporting members, excluding structural expansion joints.
- 3.4 Ceramic tile or other similar materials used as a slip resistant surface in or around public pools or appurtenances shall meet the following criteria:
  - (a) Finished surfaces are to be unglazed.
  - (b) Material is to meet any applicable manufacturer recommendations regarding suitability of the material for the intended application.
  - (c) A minimum static coefficient of friction rating, where applicable, of 0.6 wet, as determined by ASTM standard test method C-1028-84 is required.
  - (d) A sample of the proposed material, as requested, along with any supporting data is to be submitted to the Health Department for approval prior to the installation of the material.
  - (e) Any material to be used underwater to identify steps, benches, etc. in any public pool shall be of a permanent type and shall be of a color markedly contrasting to the pool interior finish.

(f) On new installations, the alteration, modification or treatment of materials from the manufacturers original specifications will not be approved.

## **IV. Slope of Floors**

- 4.1 All slopes shall be uniform.
- 4.2 The slope of the floor of any portion of a public pool having a water depth of less than 5 feet shall not be more than 1 foot in 12 feet.
- 4.3 In portions with a water depth greater than 5 feet, the slope shall not exceed 1 foot in 3 feet.

# V. Slope of Walls

- 5.1 Wall slopes shall be either (a) vertical for water depth of at least 6 feet; or (b) 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 1 foot horizontally for each 5 feet of depth of sidewall (11° from vertical).
- 5.2 No minimum or maximum slopes are established for whirlpool walls. Consideration will be given based on safety and water circulation.
- 5.3 All corners formed by the intersection of walls and floors shall be coved.

# VI. Depths and Depth Markings

- 6.1 Water depths in feet shall be plainly and permanently marked at or above the water surface on the vertical pool wall and on the edge of the deck or walk next to the pool, at maximum and minimum points and at the points of break between the deep and shallow portions and at intermediate increments of depth, spaced at not more than 20 foot increments.
- 6.2 Depth markings shall be in numerals of 4 inches minimum height and of a color contrasting with the background. Markings shall be on both sides and ends of the pool. Where depth markers cannot be placed on the vertical walls above the water level, other means shall be used. Alternate means of markings are to be plainly visible to persons in the swimming pool.
- 6.3 The minimum depth of water in swimming pools shall be 3 feet except for special purpose swimming pools.

- 6.4 The maximum depth of water at the shallow end of the swimming pool shall not exceed 3 feet 6 inches except for competitive or special purposes swimming pools.
- 6.5 Wading pools shall not have a maximum depth exceeding 24 inches.
- 6.6 The standard depth of whirlpools shall be considered to be three feet. Proposed depths less than or greater than three feet will be given consideration based on safety.
- 6.7 Depth markings are not required on wading pools or whirlpools.

## VII. Inlets

- 7.1 Each swimming pool and wading pool inlet shall be designed as an orifice and provided with directional flow type fittings which will permit adjustment of the direction of flow to obtain optimum circulation.
- 7.2 Return inlets may be located in the walls or floor, but shall be located to produce uniform circulation of water and to facilitate the maintenance of a uniform disinfectant residual throughout the entire pool, without the existence of dead spots. Inlet fittings from the circulation system shall be flush with the pool wall and shall be submerged at least 12 inches below the normal water level.
- 7.3 Where the distance across the shallow portion of the swimming pool is more than 15 feet, multiple inlets must be provided, so spaced that each inlet will serve a linear distance of not more than 15 feet. For swimming pools less than 1,600 square feet and greater than 15 feet in width, the minimum number of inlets to be provided in a pool will be determined by dividing the entire perimeter by 20 except that all swimming pools shall have a minimum of 2 inlets across the shallow end and no two pool inlets shall be separated by a perimeter distance exceeding 20 feet. In swimming pools with a surface area greater than 1,600 square feet or length in excess of 60 feet, side inlets shall be placed at maximum 15 feet intervals around the entire perimeter. In any case, an adequate number of inlets shall be provided, properly spaced and located to accomplish complete and uniform circulation of water and maintenance of uniform disinfectant residual at all times.
- 7.4 Inlet fittings shall not be installed so as to interfere with bathers or create a safety hazard.

## **VIII.** Outlets

8.1 All public pools shall be provided with multiple maindrain outlets at the deepest point to permit the pool to be completely and easily emptied.

- 8.2 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 1.5 feet per second. The maximum width of grate openings shall be 0.5 inch.
- 8.3 In swimming pools with deep water at or near one end outlets shall be spaced not more than 30 feet apart, nor more than 15 feet from side walls.
- 8.4 Outlets are to be a minimum distance of three feet apart in wading pools.
- 8.5 Openings shall be covered by a properly sized grating of durable construction which shall be secured in such a way that it cannot be removed without the use of tools.
- 8.6 Main drain grates shall be installed within 1/4" flush with the pool floor.
- 8.7 Antivortex type main drain grates are not permitted in water depths of less than five feet.

#### IX. Diving Areas, Diving Apparatus and Slides

9.1 The dimensions of the swimming pool in the diving area shall conform to the following table:

Maximum Height of Board	Min. Water Depth at End of Board and 12 Feet Beyond	Minimum Board Overhang	Min. Pool Width at End of Board and 12 Feet Beyond (Single Board Pools)	Min. Side Dist. to Pool Wall Measured From Centerline of Board
<b>METERS</b>	FEET	FEET	FEET	<u>FEET</u>
2/3	8 - 1/2	2 - 1/2	20	10
3/4	9	3	20	10
1	10	4	22	11
3	12	6	24	12

- 9.2 Diving board heights greater than 3 meters will be subject to special review and safety precautions. Existing diving board stands on pools having inadequate depths according to this regulation will be allowed to continue in use until the diving board stand must be replaced.
- 9.3 At least 15 feet of free and unobstructed head room shall be provided above diving boards.

- 9.4 All platforms, towers or diving boards one meter in height or greater shall be provided with slip resistant steps or ladders and guardrails which extend to the edge of the deck.
- 9.5 Diving boards and stands shall be free of any structural cracks or deterioration.
- 9.6 Diving boards shall be finished with a slip resistant surface and shall be kept tight enough to minimize side to side motion.

#### X. Overflow Gutters and Skimmers

- 10.1 Overflow gutters are normally required on all pools having a surface area greater than 5,000 square feet. Pools having a surface area of 5,000 square feet or less shall be equipped with overflow gutters or skimmers.
- 10.2 Overflow gutters 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 50% or more of the recirculated water and returning it to the filter. All overflow gutters shall be connected to the recirculation system through a properly designed surge system. The gutter, drains, and return piping to the surge system shall be designed to rapidly remove overflow water caused by recirculation, displacement or wave action. The opening into the gutter beneath the coping shall not be less than 4 inches and the interior of the gutter shall be not less than 3 inches wide with a depth of at least 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 2.5 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 1.5 times the cross-sectional area of the outlet pipes.
- 10.3 The overflow edge of the gutter lip shall be of a slip resistant design.
- 10.4 The overflow edge of gutters shall be level within 1/8 inch around the perimeter of the pool.
- 10.5 The gutter bottom shall be sloped towards the gutter outlets with a minimum slope of 1/8 inch per foot.
- 10.6 Surge tanks or surge systems shall have a capacity of not less than one gallon for each square foot of pool surface area.
- 10.7 Gutter drain piping shall slope towards the surge tank with adequate slope to prevent standing water in the piping.
- 10.8 The water level in the pool shall be maintained at the overflow edge of the gutter lip at all times when the pool is in operation.

- 10.9 Skimmers are permitted on public pools provided approved handholds are installed and sufficient motion to the pool water is induced by the pressure return inlets. At least one skimming device shall be provided for each 500 square feet of water surface or fraction thereof. No pool less than 500 square feet shall be constructed without at least one skimming device. In pools where the distance across the shallow ends exceeds 35 feet, a skimming device shall be suitably located in both ends. Pools exceeding 70 feet in width shall have skimmers placed on both ends not exceeding 35 feet on center for shallow and 50 feet on deep end. When such skimming devices are required, they shall be in addition to the normal requirement of one every 500 square feet of pool area calculated based on skimming devices being located along each sidewall. No skimmer shall be located closer than 5 feet to the nearest return inlet. Handholds shall consist of bull-nosed coping or an equivalent approved handhold. The handholds must be not more than 9 inches above the normal water line. Skimming devices shall be built into the pool wall, shall develop sufficient 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 skimmers shall be designed for a total capacity of at least 80% of the recirculation system and no skimmer shall be designed for a flow-through rate of less than 30 gallons per minute or 3.75 gallons per minute per linear inch of weir.
  - (b) The skimmer weir shall be automatically adjustable and shall operate freely with continuous action to variations in water level over a range of at least 4 inches. The weir shall be of such buoyancy and design so as to develop an effective velocity.
  - (c) An easily removable and cleanable basket or screen through which all overflow water must pass shall be provided to trap large solids.
  - (d) The skimmer shall be provided with a device to prevent air-lock in the suction line. If an equalizer line is used it shall provide an adequate amount of water for pump suction should the water of the pool drop below the weir level; provided that, if any other device, surge tank, or arrangement is used, a sufficient amount of water for pump suction shall be assured.
  - (e) Where an equalizer line is used, it shall be sized to meet the capacity requirements of the filter and pump and shall in no case be less than 2 inches in diameter. This pipe shall be located at least 1 foot below the lowest overflow level of the skimmer. It shall be provided with a valve equivalent device that will remain tightly closed under normal operating conditions, but will automatically open when the water level drops as much as 2 inches below the lowest weir level.
  - (f) Equalizer lines shall be installed on all whirlpool skimmers.

(g) All skimmers shall comply in all respects with the latest standards of the National Sanitation Foundation governing recessed automatic surface skimmers.

## XI. Water Supply

- 11.1 The water supply serving the pool and all plumbing fixtures including drinking fountains, lavatories, and showers, shall meet the requirements of the Health Department for potable water.
- 11.2 All portions of the water distribution system serving the pool and auxiliary facilities shall be protected against back-flow and back siphonage either through a suitable air gap, or through an approved backflow prevention device.
- 11.3 Fillspouts shall be located beneath a low diving board or, if a board is not provided, a maximum of four inches from a ladder. The tip of the fillspout shall not overhang the deck edge.
- 11.4 When backflow prevention devices are used, they shall be installed on the discharge side of the last control valve to the fixture, device or appurtenance.
- 11.5 Hose bibbs of not less than 3/4 inch shall be provided around the perimeter of the deck area at intervals such that all parts of the swimming pool deck area may be reached with a 75 foot hose.
- 11.6 Backflow prevention devices shall be installed on all hose bibbs.

#### XII. Sewer System

- 12.1 The sewer system shall be adequate to serve the facility, including bathhouse, locker room, and related accommodations.
- 12.2 There shall be no direct physical connection between the sewer system and any drain from the pool or recirculation system. Any pool, 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 suitable air gaps so as to preclude the possibility of the backup of sewage or waste into the swimming pool piping system. This air gap distance shall be measured from the base of the discharge line to the top of the sump and shall be a minimum of 6 inches.
- 12.3 The sanitary sewer serving the pool and auxiliary facilities shall discharge to the public sanitary sewer system whenever 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 Health Department.

- 12.4 Backwash sumps shall be properly designed and sized to accept the maximum backwash discharge without overflowing.
- 12.5 The backwash sump discharge line with "P" trap shall be a minimum of one pipe size larger than the filter backwash line.

#### XIII. Recirculation System

- 13.1 Provisions shall be made for complete, continuous circulation of water through all parts of the pool. All pools shall have a recirculation system with necessary treatment and filtration equipment as required in these standards.
- 13.2 A recirculating system consisting of pumps, piping, filters, water conditioning, disinfection equipment and other accessory equipment shall be provided which will filter and disinfect the total pool water volume according to the following schedule:

<u>Type Pool</u>	Minimum Turnover
Swimming Pools	6 hours
Wading Pools	1 hour
Spas, Whirlpool, or Therapy Pools	30 minutes

- 13.3 A higher turnover rate may be required for pools subject to heavy bather loads.
- 13.4 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 pool, at least 8 inches below the water line. Connections shall not protrude from the pool creating a safety hazard.
- 13.5 Whirlpool perimeter piping functioning exclusively in air or jet systems shall be connected to the main recirculation system to the extent that a maximum volume of water within the piping is continuously circulated by the main circulation pump when the jet pump is not in use.

## **XIV.** Piping

- 14.1 All recirculation 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 for suction piping and 10 feet per second for discharge piping. Piping shall be of non-toxic material, resistant to corrosion, and able to withstand operating pressures, and operating conditions.
- 14.2 All perimeter piping shall be PVC schedule 40 or its equivalent and shall comply in all respects with the latest applicable standards of the National Sanitation Foundation for plastic piping components and related materials.

14.3 The perimeter return inlet piping shall completely surround the pool

# **XV.** Filters

- 15.1 All filters shall comply in all respects with the latest applicable standards of the National Sanitation Foundation for filters.
- 15.2 Design filtration rates shall not exceed 15 gallons per minute per square foot of filter surface area for high rate and vacuum sand filters, 3 gallons per minute per square foot of filter surface area for rapid rate sand filters, 2 gallons per minute per square foot of filter surface area for diatomaceous earth filters and 0.375 gallons per minute per square foot of filter square foot of filter surface area for cartridge filters.
- 15.3 The filter plant shall be provided with such pressure, vacuum or compound gauges as are required to indicate the condition of the filter.
- 15.4 Filters shall be designed and installed in such a manner that they may be easily disassembled with allowance made for adequate working space above and around the filter, to allow for the removal and replacement of any part and for proper maintenance and inspection.
- 15.5 All pressure filter tanks shall be equipped with a manual, continuous or automatic air release system.
- 15.6 The filter system shall be designed with necessary valves and piping to permit:
  - (a) Filtering to pool
  - (b) Backwashing of sand filters to waste at a rate of not less than 15 gallons per minute per square foot of filter area or, the functions of filtering to pool or backwashing to waste with the battery as a whole or any unit operated singly depending upon filter design and pump capacity.
  - (c) Complete drainage of all parts of the system.
  - (d) Necessary maintenance, operation and inspection in a convenient manner.
- 15.7 Pressure type diatomaceous earth filters are not approved for new or replacement installation after April 13, 1989.
- 15.8 All filters shall be operated and maintained in accordance with manufacturers instructions and Health Department Requirements.

#### **XVI.** Disinfectant and Chemical Feeders

- 16.1 All public pools shall be equipped with a chlorinator, hypochlorinator, or other disinfectant feeder or feeders which are Metropolitan Health Department approved, and comply in all respects with the latest applicable standards of the National Sanitation Foundation Standard for feeding, processing or generating equipment.
  - (a) The feeder shall incorporate failure-proof features so that the disinfectant cannot feed directly into the pool, the pool piping system, water supply system, or the pool enclosure under any type of failure of the equipment.
  - (b) Feeders 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.
  - (c) The use of compressed chlorine gas is prohibited.
- 16.2 All disinfectant system and chemical feeders shall be installed, operated and maintained according to manufacturers instructions and Metropolitan Health Department requirements.
- 16.3 All disinfectant systems shall be properly sized for the actual pool capacity.

## **XVII.** Pumps

- 17.1 All pumps shall comply in all respects with the latest applicable standards of the National Sanitation Foundation for centrifugal pumps.
- 17.2 Pumps shall be of adequate capacity to provide the required number of turnovers of pool water as specified in Section XIII, paragraph 13.2, and whenever possible shall be located as to eliminate the 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 shall supply a backwash flow rate of at least 15 gallons per minute per square foot of filter area at a 50 foot dynamic head.
- 17.3 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 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.
- 17.4 0-15 minute timers shall be installed on whirlpool air jet or jet pump systems. Timers shall be located in the whirlpool area in such a location that bathers must exit the whirlpool to reactivate the timer.

17.5 Timers are prohibited on filtration system pumps.

#### **XVIII. Heaters**

- 18.1 Heaters shall be installed, maintained and operated in accordance with all requirements of the Metropolitan Codes Administration.
- 18.2 Public 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.
- 18.3 Heater by-pass piping and valves shall be provided on all heaters where the heater core piping is smaller than the recirculation face piping. By-pass piping and valves shall be equal in size to face piping.
- 18.4 A non-breakable, handheld thermometer shall be provided at all whirlpools. A handheld thermometer may be substituted for one in-line thermometer.

#### **XIX. Flow Rate Indicators**

- 19.1 A rate-of-flow indicator, reading in gallons per minute, shall be installed and located, preferably on the pool return line, so that the rate of recirculation is accurately indicated. The indicator shall be capable of flows measuring at least 1.5 times the design flow rate, shall be accurate within 10% of true flow, and shall be easy to read.
- 19.2 Rate-of-flow indicators shall be sized and installed according to manufactures instructions. Suitable spacing for rate-of-flow indicator installation shall be provided.

#### XX. Valves

- 20.1 All valves shall be permanently marked or tagged and a valve operating schedule posted describing normal filtering and backwash valving.
- 20.2 Multiport type valves are not approved for new or replacement installation.

#### XXI. Decks and Walkways

- 21.1 A continuous deck at least 6 feet wide shall extend completely around the swimming pool.
- 21.2 No minimum deck width is required for whirlpools, however, whirlpools, as well as new wading pools, shall be physically separated from swimming pools by a minimum deck width of 6 feet.

- 21.3 All pool decks shall be sloped away from the pool at a grade of 1/4 inch minimum to 3/8 inch per linear foot maximum and shall have a slip resistant, non-abrasive, light colored finish.
- 21.4 Water shall not pond or stand on any section of deck or walking surface within the pool enclosure.
- 21.5 All deck drainage shall be to grade or to adequate drainage systems and shall be to waste.
- 21.6 Rainwater from adjacent buildings, parking areas, retaining walls, or higher ground elevations shall not drain onto the pool deck.
- 21.7 Elevation changes in deck shall be marked or identified.
- 21.8 Coping shall be installed level with the pool deck so as not to create a tripping hazard.
- 21.9 Pre-formed whirlpool shells shall be installed with the lip of the shell flush in elevation with the pool deck.
- 21.10 Fittings shall not be installed on the whirlpool lip in such a manner as to create a tripping hazard.
- 21.11 A minimum of 2 feet walk width shall be provided on the sides and rear of any piece of diving equipment, including slides.
- 21.12 Indoor/outdoor turf type carpeting shall not be placed closer to the pool than 6 feet. In addition, around the rear of the diving board or slide, an additional 2 feet of noncovered decking shall be provided. All decks shall be properly drained to prevent ponding water. Approved vacuum cleaning equipment and methods of disinfection are considered a part of equipment supplies. The use of carpeted areas near a pool is not recommended.
- 21.13 The Director of Health may require any carpeting within the pool enclosure to be removed if not properly cleaned or maintained.
- 21.14 Hose bibbs, electrical junction boxes, fillspouts, sewer clean out fittings, etc., shall not be located on the pool deck so as to create a health or safety hazard.

#### XXII. Fencing and Access Control

22.1 All public pools shall be continuously fenced or barricaded to prevent access other than through designated access areas. The fence shall be durably constructed of a permanent material which shall not preclude the utilization of a wall, building or any combination thereof. The fencing or barrier shall be constructed so as to afford no external footholds and shall be of a material impenetrable by toddlers, and at least 4 feet in

height. All gates or doors providing access to any public pool shall be equipped with self-closing and self-latching mechanisms and hardware for permanent locking. Self-closing, self-latching doors or gates are not required at public pools providing certified lifeguards. All access shall be locked to prevent entrance when the pool is not in use. If vertical palings are used for fencing, open spaces between each shall not exceed 5 inches. In addition, the fencing surrounding the pool shall meet the following size requirements:

<u>Fence Details*</u>	<u>Not More Than</u>
Distance from grade to bottom of	5 inches
fence	
Distance from grade to bottom rail	10 inches
Distance between vertical palings	5 inches
Distance from top of fence to top	5 inches
rail*	
When intermediate horizontal	
railings are	
used the maximum distance between	2 inches
vertical palings	

- \* Based on 4 foot fence or barrier - Overall fence height 4 foot minimum
- 22.2 Fence elevations shall continue past changes in grade elevations for a minimum of 24 inches.
- 22.3 Walls, banks, curbs, etc. outside pool perimeter fencing shall not constitute footholds and shall be a minimum of 24 inches distance from the perimeter fence.
- 22.4 Privately or individually owned or controlled walls, buildings, fences or barriers shall not constitute any section of public pool perimeter fencing.
- 22.5 Windows or doors from individual units shall not open into the pool enclosure.

#### XXIII. Steps, Benches, Ladders, Handrails and Guardrails

- 23.1 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, and if the pool is over 30 feet wide, such steps or ladders shall be installed on each side.
- 23.2 Steps shall have a minimum tread depth of 10" and a maximum rise of 10". These measurements shall be uniform from step to step. The minimum tread depth on the top step of steps located in 90 degrees interior corners shall be a minimum of 24".

- 23.3 Underwater whirlpool steps shall be uniform in rise, tread, slope and design without lips or excessively rounded edges or corner junctions.
- 23.4 Steps, recessed treads and ladders shall be of corrosion-resistant material, easily cleanable, and of a slip resistant design.
- 23.5 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.
- 23.6 Where steps, step holes, 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.
- 23.7 Supports, platforms, handrails or steps for pools shall be of substantial construction and of sufficient structural strength to safely carry the maximum anticipated loads.
- 23.8 All ladders shall be so designed as to provide a hand hold 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.
- 23.9 Guardrails shall be provided at all areas within the pool enclosure having drop offs, walls, ledges or elevated grades.
- 23.10 Handrails for underwater steps shall not exceed a maximum of six foot intervals.
- 23.11 Guardrails shall be provided on all elevated whirlpools whether or not a deck or walkway is provided. Such guardrails shall be of durable and permanent construction, and shall be a minimum of 36 inches in height with intermittent horizontal members.
- 23.12. Underwater benches are not approved for water depths over four feet. Underwater benches may be allowed in pools in interior corners provided no portion of the bench protrudes into the pool area or creates a safety hazard. Underwater benches in swimming pools shall be identified with a continuous, permanent, slip resistant, dark colored marking on both the horizontal and vertical surfaces of the bench at or near the nose of the bench.
- 23.13 Underwater benches or seats, as well as underwater steps, in whirlpools, shall be identified with continuous permanent, slip resistant, dark colored markings on the horizontal surface at or near the nose of the seat or step.
- 23.14 There shall be no abrupt drop off or submerged projections into the pool, unless guarded by handrails or guardrails.

# **XXIV** Lighting

- 24.1 Where underwater lighting is required, not less than 0.5 watts shall be employed per square foot of pool 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.
- 24.2 Where underwater lighting is required and the pool is utilized for night swimming, area lighting shall be provided for the deck area and directed toward the deck in so far as practical in a total capacity of not less than the equivalent of 0.6 watts per square foot of deck area. Area and pool lighting combined shall provide the equivalent of 2 watts per square foot of pool area with 2 foot candles of illumination, except that no pool shall be utilized for night swimming without necessary underwater lights operating.
- 24.3 Underwater lighting is not required on existing wading pools or whirlpools where adequate area lighting is provided.
- 24.4 Underwater lights shall be installed on all new or renovated whirlpools.
- 24.5 No overhead light fixtures shall be installed directly over the pool water. Consideration will be given to competition or special purpose pools of exceptional size.
- 24.6 Area lighting fixtures shall be positioned to provide even and uniform distribution of light without excessive glare.
- 24.7 Adequate lighting shall be provided for all enclosed mechanical rooms.
- 24.8 Adequate lighting (artificial or natural) shall be provided in all restrooms, bathhouses, locker rooms, and dressing rooms.

## XXV. Ventilation

- 25.1 Adequate power ventilation (1000CFM min.) shall be provided in all indoor pool mechanical rooms with exhaust to the outside. Adequate make-up air shall be supplied.
- 25.2 Adequate power ventilation to minimize condensation (1000CFM min.) shall be provided in all indoor pool areas.
- 25.3 Adequate ventilation (mechanical or natural) shall be provided in all restrooms, bathhouses, locker rooms, and dressing rooms.

## XXVI. Electrical

26.1 There shall be no visible, obvious electrical hazards at any pool.

- 26.2 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 pool deck. Each underwater light shall be properly secured to the pool wall.
- 26.3 No overhead electrical wiring shall pass within 20 feet of the pool enclosure.
- 26.4 All electrical wiring, including all grounding and bonding, shall conform with the National Electrical Code of National Underwriters Laboratory and the Metropolitan Codes Administration.

#### XXVII. Dressing Rooms, Locker Rooms, Showers and Toilets

- 27.1 Bathhouses with toilet and shower facilities shall be provided at all public pools where such facilities are not conveniently available. Apartments, condominiums, hotels, motels, trailer parks, and subdivisions would generally be considered as having conveniently available facilities.
- 27.2 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 the line of sight.
- 27.3 Floors of bathhouses shall be of smooth finished material with a slip resistant surface, impervious to moisture, and sloped to a drain. Junctions between walls and floors shall be coved.
- 27.4 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.
- 27.5 Toilet and shower facilities shall be provided on the basis of the following fixture schedule:\*

	<u>Males</u>	<b>Females</b>
Water Closets	1/75	1/50
Urinals	1/75	
Lavatories	1/100	1/100
Showers (min. of 2)	1/50	1/50

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

\* Fixture schedules should be increased for swimming pools at schools or similar locations where bather loads may reach peaks due to schedules of use.

- 27.6 The layout of the bathhouse shall be such that the bathers on leaving the dressing room pass the toilets and showers en route to the pool.
- 27.7 Showers and sinks shall be supplied with water at a temperature of at least 90 degrees 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.
- 27.8 Indoor/outdoor carpeting shall not be installed in any wet area of any bathhouse, dressing room, locker room, or toilet facilities.
- 27.9 All bathhouse facilities shall be maintained in a sanitary condition at all times.
- 27.10 Floors in all wet areas shall be cleaned and disinfected daily.
- 27.11 Soap, individual handtowels, toilet tissue, and hot and cold running water shall be provided in all bathhouse or restroom facilities at all times.

#### XXVIII. Lifeguards and Lifesaving Equipment

- 28.1 All public swimming pools having a water surface area of 2,250 square feet or greater shall be provided with a certified lifeguard and an elevated lifeguard platform or chair during swimming periods. In pools with 4,000 square feet of water surface area or more additional lifeguards and chairs shall be provided at the rate of one per 2,000 square feet or major fraction thereof.
- 28.2 Chairs or stations shall be located so as to provide a clear unobstructed view of the pool bottom in the area under surveillance.
- 28.3 All public pools charging admission at the pool entrance shall provide a minimum of one lifeguard and additional lifeguards according to Section XXVIII, paragraph 28.1.
- 28.4 All public swimming pools having a diving board, platform or tower one meter or greater in height shall provide a minimum of one lifeguard and additional lifeguards according to paragraph 28.1.
- 28.5 These requirements may be waived at the discretion of the Director of Health for public swimming pools meeting Tennessee Swimming Pool Law and Regulations, Chapter 1200-23-1.04
- 28.6 One unit of lifesaving equipment shall consist of a U.S. Coast Guard type ring buoy to which shall be attached a 60 foot length of <sup>1</sup>/<sub>4</sub>" rope and a life pole or shepherd's crook type of pole having blunted ends with minimum length of 12 feet. Not less than 1 unit of equipment shall be provided at every swimming pool. One unit shall be presumed to be adequate for 2,250 square feet of water surface area. 1 additional

unit shall be provided for each additional 2,000 square feet, or major fraction thereof, of water surface area.

- 28.7 Lifesaving equipment shall be mounted off the pool deck in conspicuous places, distributed around the pool deck at lifeguard chairs, or elsewhere, readily accessible, and maintained in good repair and ready condition.
- 28.8 Where certified lifeguards are provided, rescue tubes may be substituted for the same number of ring buoys.
- 28.9 Lifesaving equipment is not required at wading pools or whirlpools.
- 28.10 A 3/4 inch diameter safety line with floats shall be placed across the surface of the water at or before the location at which the bottom slope breaks at 5 feet of water depth. The safety line and floats shall be maintained in excellent repair and shall be in position across the pool at all times. Recessed anchors shall be provided for all new or replacement installations.
- 28.11 The safety line shall be readily supported by sufficient floats spaced not to exceed 6 feet.
- 28.12 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.

## XXIX. Signs

- 29.1 The following signs shall be conspicuously posted at all public pools:
- (a) Swimming pools not providing certified lifeguards

## "NO LIFEGUARD ON DUTY"

4 inch letters minimum

(b) Swimming pools, wading pools and whirlpools

## "NO CHILDREN WITHOUT ADULT SUPERVISION"

1 inch letters minimum

## "NO GLASS"

1 inch letters minimum

(c) Swimming pools with a  $5\frac{1}{2}$  foot maximum water depth

#### "NO DIVING"

4 inch letters minimum

(d) Whirlpools

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#### CAUTION

- Pregnant women, elderly persons, and persons suffering from heart disease, diabetes, or high or low blood pressure should not enter the spa/hot tub without prior medical consultation and permission from the doctor.
- Do not use the spa/hot tub while under the influence of alcohol, tranquilizers, or other drugs that can cause drowsiness or raise or lower blood pressure.
- Do not use at water temperatures greater than  $104^{\circ}$ F.
- · Do not use alone.
- Enter and exit slowly.
- Observe reasonable time limits (10-15 minutes) then leave the water and cool down before returning for another brief stay.
  - Long exposure may result in nausea, dizziness, or fainting.
    - <sup>1</sup>/<sub>2</sub> inch letters minimum
- (e) Swimming pools, wading pools and whirlpools
  - Swimming is prohibited with less than 2 people in the swimming area.
  - · Instructions for artificial resuscitation
  - · Location of nearest telephone
    - 1 inch letters minimum
    - All persons using this pool shall take a cleansing shower bath in the nude, using warm water and soap and thoroughly rinsing off all soap suds before entering the pool room or enclosure. A bather leaving the pool to use the toilet shall take a second cleansing bath before returning to the pool room or enclosure.

- Any person having an infectious or communicable disease shall not use this pool.
- Persons having any considerable area of exposed sub-epidermal tissue, open blisters, cuts, etc., are advised not to use this pool due to risk of infection.
- Spitting, spouting of water, blowing the nose, etc, in the pool is strictly prohibited.
  - No running, boisterous or rough play, **EXCEPT** supervised water sports, is permitted in the pool, on the decks, diving boards, floats, platforms or in dressing rooms, shower rooms, etc.
  - <sup>1</sup>/<sub>2</sub> inch letters minimum.

All of the above signs shall have clearly legible letters in a color contrasting with the background.

#### XXX. General Safety and Sanitation

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- 30.1 No food or drink shall be permitted in the immediate area of the pool. Food and drink will be allowed within the enclosure of public swimming pools provided non breakable containers are used. The permittee assumes all responsibility and pools may be closed by the Health Department if conditions become unsanitary.
- 30.2 Adequate trash containers with tight fitting lids shall be provided at all public pools. Trash containers shall be maintained in a sanitary condition at all times.
- 30.3 Adequate ceiling and deck clearance shall be provided around all public pools. Light fixtures, drop ceilings, doors, furniture, lifesaving equipment, etc. shall not be installed, positioned or maintained in such a manner so as to create a safety hazard.
- 30.4 Glass walls, partitions, or doors shall be marked or identified to indicate their presence.
- 30.5 No pets or animals of any kind except seeing eye dogs shall be permitted within the pool enclosure of any public pool.

#### XXXI. Disinfection and Quality of Water

31.1 All public pools, when in use, shall be continuously disinfected by a chemical which imparts an easily measured, free available residual effect. All public pools shall be equipped with an approved automatic chlorinator, hypo-chlorinator, or other disinfectant feeder, capable of maintaining at least 0.4 ppm free available chlorine residual, or equivalent, during peak bathing periods.

- 31.2 Such automatic feeders shall be operating satisfactorily at all times when the pool is open for use.
- 32.3 Hand feeding disinfectant into the pool is prohibited except for emergency or infrequent disinfection purposes.
- 31.4 If other halogens or disinfectants are used, residuals of equivalent disinfecting strength to chlorine shall be maintained.
- 31.5 A DPD type testing kit capable of measuring free available chlorine to within 0.1 ppm, pH to within 0.2 pH units, chloramines to within 0.2 ppm and cyanuric acid, where applicable, shall be provided at each public pool.
- 31.6 The pool water shall be maintained with a free available chlorine residual or equivalent according to the following:

	Recommended	Required
	Chlorine	Chlorine
	<b>Residual</b>	<b>Residual</b>
Swimming and Wading Pools	1.0 - 2.0 ppm	0.4 - 3.0 ppm
Whirlpools	3.0 ppm	2.0 - 4.0 ppm

- 31.7 Pool water shall be maintained in an alkaline condition as indicated by a pH of not less than 7.2 and not greater than 7.6.
- 31.8 Chloramines (combined chlorine) residuals shall not exceed 0.2 ppm.
- 31.9 Cyanuric acid (stabilizer) concentration shall not exceed 100ppm.
- 31.10 The alkalinity of the water shall be at least 50 ppm as measured by the methylorange test.
- 31.11 The water shall have sufficient clarity at all times so that a black disc, 6 inches in diameter, is readily visible when placed on a white field at the deepest point of the pool. Further, the main drain shall be clearly visible at all times the pool is open for use.
- 31.12 The Director of Health may accept other disinfecting materials or methods when they have been adequately demonstrated to provide a satisfactory residual effect which is easily measured and is otherwise equally effective under condition 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.
- 31.13 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 water quality or pool sanitation must be approved for use by the Director of Health.

- 31.14 Not more than 15% of the samples covering any considerable period of time shall either (a) contain more than 200 bacteria per milliliter, as determined by the standard (35 degrees C) agar plate count, or (b) show positive test (confirmed test) for coliform organisms in any of the five 10-milliliter portions or a sample of 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).
- 31.15 The Health Department shall arrange for the testing of water samples as often as it deems necessary when the pool is in operation.
- 31.16 The maximum water temperature in swimming pools and wading pools shall not exceed 85 degrees F unless prior written authorization is given by the Director of Health to do so.
- 31.17 The maximum water temperature in whirlpools shall not exceed 104 degrees F.
- 31.18 Condensate from dehumidifying systems shall drain to waste and shall not be returned to the pool in any manner.
- 31.19 Pools shall be shocked as necessary to oxidize contaminates.
- 31.20 Whirlpools shall be completely drained and refilled as necessary to insure the highest standards of water quality and sanitation.

#### XXXII. Supervision of Pools

- 32.1 Every public pool shall be operated under the close supervision of a capable individual knowledgeable in pool operation, maintenance and regulations. The Director of Health may require 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.
- 32.2 Proper operating records, which may include the following, shall be kept daily showing:
  - (a) Bather loads total
  - (b) Peak bather load
  - (c) Volume of fresh water added
  - (d) Operating periods of recirculation pumps and filters and corresponding rate of flow meter readings.

- (e) Amounts of chemicals used
- (f) Disinfectants residual readings.
- (g) pH readings
- (h) Maintenance (and malfunctioning) of equipment.
- 32.3 A certified lifeguard shall be on duty at all times when the pool is open for use by bathers as provided for in Section XXVIII, paragraph 28.1 28.4. The lifeguard shall have the authority to enforce all rules of safety.
- 32.4 The following personal regulations shall be enforced:
  - (a) All persons using the pool shall take a cleansing shower bath in the nude, using warm water and soap, and thoroughly rinsing off all soap suds before entering the pool room or enclosure. A bather leaving the pool to use the toilet shall take a second cleansing bath before returning to the pool room or enclosure.
  - (b) Any person having an infectious or communicable disease shall be excluded from the pool. Persons having any considerable area of exposed sub-epidermal tissue, open blisters, cuts, etc., shall be warned that these are likely to become infected and advised not to use the pool.
  - (c) Spitting, spouting of water, blowing the nose, etc., in the pool shall be strictly prohibited.
  - (d) 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.
  - (e) Suitable placards embodying the above personal regulations and instructions shall be conspicuously posted in the pool room or enclosure.

## XXXIII. Cleaning of Pools

- 33.1 Visible dirt on the bottom of the pool and visible scum or floating matter on the water surface shall be removed as often as necessary to keep the pool clean.
- 33.2 Visible film on the pool wall at the waterline shall be removed at least daily.
- 33.3 Only chemicals and cleaning compounds specified by the manufacturer for use in pools and approved by the Health Department shall be used to clean pools.

#### XXXIV. Maximum Bather Loading

- 34.1 For the purposes of computing user-loading, those portions of the pool 5 feet or less in water depth shall be designated as "non-swimmer" areas. Portions of over 5 feet in water depth shall be designated as the "swimming" area.
- 34.2 In order to compute swimmer and bather capacity, pool areas shall be determined as follows:
  - (a) Ten square feet of pool water surface area shall be provided for each non-swimmer at time of maximum load.
  - (b) Twenty four square feet of pool water surface area shall be provided for each swimmer at time of maximum load.
  - (c) Three hundred square feet of pool water surface area shall be reserved around each diving board or diving platform. This area shall not be included in computing the area of the swimming section.
- 34.3 The maximum bather load for whirlpools shall be based on 1 bather for each 125 gallons of water.
- 34.4 Not more than the maximum design bather load shall be permitted in the pool at any time.

#### XXXV. Renovation of Pools

- 35.1 Any significant pool changes shall at least meet the original equipment specifications. This type change is to be previously approved by the Health Department Public Facilities Division and an inspection conducted by this Division upon completion. Replacements are to be in accordance with current applicable standards.
- 35.2 No provision of these regulations shall be deemed to require a construction change in any portion of the facility regulated by these regulations, when such facility was installed and is maintained in accordance with the law in effect prior to the effective date of these regulations, except when any such construction regulated by these regulations is determined by the Director of health to be, in fact, dangerous, unsafe, unsanitary or a nuisance, and a menace to life, health or property.

## XXXVI. Severability

The provisions of any part, section, subsection, paragraph, phrase or clause of these Regulations that shall be adjudged invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, compare, or invalidate the remainder of these Regulations, but should be confined in its operation to the part, section, subsection, paragraph, phrase, or clause of these Regulations that shall not be directly involved in the controversy in which such judgment shall have been redeemed.

# Chapter 10.48

# **Public Swimming Pools**

Sections:

10.48.010	Definitions.
10.48.020	Applicability and purpose of chapter.
10.48.030	Adoption of rules and regulations - Compliance required.
10.48.040	Application for permit.
10.48.050	Plans and specifications.
10.48.060	Permit required - Expiration and transferability.
10.48.070	Inspection and licensing fees - Classification of pools.
10.48.080	Health and safety requirements.
10.48.090	Pool maintenance - Operation of equipment.
10.48.100	Records.
10.48.110	Inspection - Right of entry.
10.48.120	Revocation of permits - Reissuance.

#### **10.48.010** Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

"Chief medical director" means the chief administrative officer of the board of health or his designated representative.

"Conventional pool" means a public pool used or designed to be used for bathing, swimming or diving (with or without diving boards, platforms or other apparatus).

"Department of health" means the department of health of the metropolitan government. Such term shall include the board and all of its agents, employees and activities.

"Hydrotherapy," "Whirlpool" or "Spa-Type Pool." These pools are not designed for swimming but for therapeutic use and for physiological and psychological relaxation. They are not drained, cleaned and refilled after each use and they may include, but are not limited to, high-velocity air or water circulation systems utilizing hot, cold or ambient temperature water. The water temperature of such pools shall not exceed one hundred five degrees Fahrenheit (forty degrees centigrade). They have closed-cycle water systems for complete water recirculation, filtration and disinfection.

"Private pool" means a pool facility used only by an individual, family or living unit for members and their guest(s), and shall not serve any type of cooperative housing or joint tenancy of four or more living units. The design, construction and operation of such pools are not subject to these regulations.

"Public swimming pool" or "public pool" means a structure of concrete, masonry or other approved materials, used for bathing or swimming, or for instructional purposes in swimming, diving or other aquatic activities by humans, and filled with a filtered and disinfected water supply, together with buildings, appurtenances and equipment used in connection therewith. A public swimming pool or public pool means a conventional pool, spa-type pool, wading pool, special purpose pool or water recreation attraction, to which admission may be gained with or without payment of a fee and includes, but is not limited to, pools operated by camps, churches, cities, clubs, counties, health spas, institutions, parks, state agencies, schools, subdivision, or the cooperative living-type projects of four or more living units, such as apartments, boarding houses, condominiums, hotels, mobile home parks, motels, recreational vehicle parks and trailer parks. The inclusion in the definition of "public swimming pool" of those serving four or more living units where the living units are predominately of individual or family ownership (such as in a fourplex or larger multiple housing unit or a condominium) is for the protection of health and safety of the pool patrons and shall not be construed to mean that such pools are to open to use by the general public.

"Special purpose pool" means a public pool used exclusively for a particular purpose, with design and operational features that provides patron participation, which is different from that associated with conventional pools, spa-type pools, wading pools or water recreation attractions.

"Wading pool," or "child's pool" means a public pool used, or designed to be used, primarily by nonswimming children for wading purposes.

"Water recreation attraction" means a facility designed for recreation where participants routinely experience partial or whole body contact with the water such as, but not limited to, hydro slides, artificial waves, etc. (Ord. 89-813 § 1,1989: prior code §§ 20-1-1 (part), 20-1-183)

# **10.48.020** Applicability and purpose of chapter.

The provisions contained in this chapter apply to all public swimming pools, including all facilities incident thereto. The purpose of this chapter is to provide a guide for the design, construction, operation and maintenance of such pools so that health and safety hazards will be minimized. (Prior code § 20-1-184)

# **10.48.030** Adoption of rules and regulations - Compliance required.

Reasonable regulations shall be promulgated by the department of health covering design, construction and operation of public swimming pools. No permit to construct, alter or remodel or license to operate shall be granted unless the pool conforms with such regulations. (Prior code § 20-1-185)

# 10.48.040 Application for permit.

The application for permit to construct or remodel a public swimming pool shall be on such forms as may be prescribed by the department of health, together with any supporting data as may be required for the proper review of the plans. (Prior code § 20-1-186 (b))

## 10.48.050 Plans and specifications.

- A. No person shall begin construction of public swimming pool or shall substantially alter or reconstruct any public swimming pool without first having submitted plans and specifications to the department of health for review and approval. All plans and specifications shall be submitted in triplicate. Approval by the department of health shall not be construed to indicate approval of the strength or safety of any equipment or to indicate compliance with any requirement of a building code adopted pursuant to Section 16.08.010 and Chapters 16.28 through 16.40 and 16.48 through 16.50 of this code, as the same may be amended. Neither shall such approval by the department of health relieve any person from the duty to comply fully and completely with any and all applicable provisions of this code, nor any other requirement of Nashville and Davidson County, the state of Tennessee and the United States Government.
- B. The pool and facilities shall be built in accordance with the plans approved, unless approval of changes has been given in writing by the department of health. The owner or his agent shall notify the department of health at specific predetermined stages of construction and at the time of completion of the pool to permit adequate inspection of the pool and related equipment during and after construction. The pool shall not be placed in operation until such inspections show compliance with the requirements of this chapter pertaining to swimming pools.
- C. The criteria to be followed by the department of health in the review and approval of plans shall be promulgated as rules and regulations as authorized by this chapter.

- D. The plans shall be drawn to scale and accompanied by proper specifications so as to permit a comprehensive engineering review of the plans, including the piping and hydraulic details, and shall include:
  - 1. Plan and sectional views with all necessary dimensions of both the pool and surrounding area;
  - 2. A piping diagram showing all appurtenances, including treatment facilities in sufficient detail, as well as pertinent elevation data, to permit a hydraulic analysis of the system;
  - 3. The specifications shall contain details on all treatment equipment, including catalog identification of pumps, chlorinators, chemical feeders, filters, strainers, interceptors and related equipment.
- E. Any person submitting plans and specifications in accordance with the provisions of paragraph A shall pay an initial filing fee per the following schedule:
  - 1. Plan for new construction......\$250.00
  - 2. Revision of previously approved plan...... \$100.00
  - 3. Plans for modification to existing pools.... \$100.00

These filing fees shall not be refundable if the plans are not approved or if the application is withdrawn or if the pool is not built or modified, nor shall a prior fee be applied to any subsequent review. (Ord. 92-396 § 1, 1992; Ord. 89-813 §2, 1989; prior code § 20-1-186 (a), (c) - (e))

## **10.48.060 Permit required - Expiration and transferability.**

No person shall operate or maintain a public swimming pool unless he has obtained a permit to operate such pool from the department of health. Such permits shall be valid for one year, unless otherwise revoked for cause. Only persons who comply with this chapter shall be entitled to receive and retain such permit. Such permits are not transferable. (Prior code § 20 - 1 - 187)

## **10.48.070** Inspection and licensing fees - Classification of pools.

- A. All public swimming pools within Davidson County must apply for and receive an operating permit from the metropolitan health department (see Section 10.48.060). Each pool must be inspected by the metropolitan health department and be required to pay an inspection and licensing fee.
- B. The annual rate of such fees shall be structured as follows:

Class 1. All public swimming pools at apartment complexes, motels, hotels, clubs, etc., private or public, which normally confine their pool activities to approximately four months

annually, shall be classified in Class 1. Class 1 swimming pool permits shall be issued upon the inspection and approval by the metropolitan health department for an annual fee of one hundred dollars.

Class 2. All public swimming pools at apartment complexes, motels, hotels, clubs, etc., private or public, which normally confine their pool activities to approximately six months annually, shall be classified as Class 2. Class 2 swimming pool permits shall be issued upon the inspection and approval by the metropolitan health department for an annual fee of one hundred fifty dollars.

Class 3. All public swimming pools which would normally be utilized year-round shall be classified as Class 3 swimming pools. This will include swimming pools found at health clubs, spas, etc., and all other swimming pools which will require a number of inspections and are required to maintain sanitation year-round. Class 3 swimming pool permits shall be issued upon the inspection and approval by the metropolitan health department for an annual fee of three hundred dollars.

C. The classifications of swimming pools set out in subsection B of this section shall not include swimming pools owned by private individuals at their private residences, but shall include all swimming pools to be utilized by any portion of the public at any institution, private or public. (Ord. 92-396 § 2, 1992; Ord. 89-813 §§ 3-5, 1989; prior code § 20- 1-187.1)

# 10.48.080 Health and safety requirements.

- A. No person having a communicable disease shall be employed or work at a public swimming pool. All patrons or swimmers suspected of having an infectious disease shall be excluded.
- B. Appropriate facilities shall be provided for the safety of bathers as may be required by the department of health. This shall include lifesaving equipment, safety devices, lifebuoys, lifehooks, first-aid kits, telephone, and adequate staff during the swimming period who are competent in lifesaving and artificial resuscitation. Competent lifeguards shall be on duty during all swimming periods when a use fee is charged.
- C. Every swimming pool shall be under the supervision of a capable individual who shall assume the responsibility for compliance with all provisions of this chapter relating to pool operation and maintenance, and safety of bathers.
- D. The pool area will be surrounded by a fence or other suitable barricade of sufficient height and construction to deter small children from wandering into the pool.
- E. Instructions regarding emergency calls shall be prominently posted.
- F. Not more than the maximum design bather load shall be permitted in the swimming pool at any one time. (Ord. 89-813 §§ 6-8, 1989; prior code § 20-1-189)

# **10.48.090 Pool maintenance - Operation of equipment.**

The pumps, filters, disinfectant and chemical feeders and related appurtenances shall be kept in operation at all times the swimming pool is in use and for such additional periods as needed to keep the pool water clear and of satisfactory bacterial quality. (Prior code § 20-1-192)

## 10.48.100 Records.

The operator of each pool shall keep a daily record of information regarding operation including disinfectant residuals, pH maintenance, procedures, recirculation, together with other data as may be required on forms furnished by the department of health. These data shall be kept on file by the operator for not less than two years for review by the department of health or submitted periodically to the department of health, as may be required by the chief medical director. (Ord. 89-813 § 9, 1989; prior code § 20-1-191)

# 10.48.110 Inspection - Right of entry.

The department of health is authorized to conduct such inspections as it deems necessary to ensure compliance with all provisions of this chapter, and shall have right of entry at any reasonable hours to the swimming pool for this purpose. (Prior code § 20-1-190)

# **10.48.120** Revocation of permits - Reissuance.

- A. The department of health may revoke any permit for failure to comply with the duly promulgated regulations referred to in this chapter or in cases where the permit has been obtained through nondisclosure, misrepresentation or misstatement of a material fact.
- B. Before a permit is revoked, the person to whom the permit has been issued shall have notice in writing enumerating instances of failure to comply with the regulations. He shall be given an opportunity for appeal to the board of health, regarding the reasonableness of the revocation of permit.
- C. 1. The department of health may order a suspension of a permit and may order

the owner or operator of a public swimming pool to prohibit any person for

using it if it finds:

persons

a. A failure of the equipment, structure, area or enclosure of the public

swimming pool which jeopardizes the health or safety of the using or operating it; or

b. That the public swimming pool lacks properly functioning equipment or proper material for recirculating, treating, or testing the water used for swimming or bathing; or

- c. A lack of required supervisory personnel or required lifeguards; or
- d. That the operator of the public swimming pool is not maintaining the required water quality; or
- e. That the operator does not possess a valid operating permit.
- 2. If the department of health orders the closing of a public swimming pool, it shall issue a written order to the owner or operator, or their representative, stating with particularity the reason for the order of closure along with its finding that the condition giving rise to the order represents a serious threat to the public health and safety. The order must state that the public swimming pool is to be closed immediately and must specify the corrective action necessary for the reinstatement of the permit.
- 3. The order must be served upon the owner, operator, representative or a person in charge of the public swimming pool. The person on whom the order is served shall close the public swimming pool immediately and shall prohibit any person from using it.
- 4. After the specified corrective action has been taken, the owner or operator or his representative shall notify the department that the public swimming pool is ready for reinspection. If upon reinspection the corrective action is approved, the department shall order the reinstatement of the permit, at which time the public swimming pool may be opened for use. If upon reinspection the corrective action is not approved, the operating permit remains suspended and the public swimming pool must be kept closed and out of use until corrective action is approved.
- 5. If a person is served with an order suspending the permit, the permit may be

revoked unless the operator:

- a. Closes the public swimming pool immediately; and
- b. Takes any corrective action required by the order within the time therein specified.
- D. The permit shall be reissued upon proper application and upon

presentation of evidence that the deficiencies causing revocation

have been corrected. (Ord. 95-1433 § 1, 1995; prior code § 20-1-188)