## **Gwinnett County Swimming Pool Ordinance**

#### BOARD OF HEALTH REGULATION

A regulation defining "artificial swimming pool", "natural swimming pool", "swimming pool", etc.; requiring permits for the operation of such pools; regulating the inspection thereof; establishing sanitation standards therefore; and providing for the enforcement of this regulation.

The Board of Health of Gwinnett County, Georgia, ordains: that this revision supersedes the previous regulation number five (5) and becomes effective thirty (30) days after its adoption.

#### Article A.

# Swimming Pools, Public Spa Pools, and Bathhouses

# **Section 9-7001 Title and Purpose**

A regulation establishing minimum standards governing the use and maintenance of swimming pools, and structures; establishing minimum standards governing supplied utilities and facilities and other physical things, and conditions essential to make swimming pools and surrounding premises safe, sanitary and fit for human use; establishing minimum standards governing the condition and maintenance of swimming pools and structures; fixing certain responsibilities and duties of owners, operators and attendants of swimming pools; authorizing the inspection of swimming pools and structures and providing for the condemnation of all swimming pools and structures deemed unfit for human use.

This regulation upon adoption by the Board of Commissioners of Gwinnett County shall be known and may be cited as "The Gwinnett County Swimming Pool Ordinance."

#### **Section 9-7002 Definitions**

The following definitions shall apply in the interpretation of these recommended standards:

- 2.1 SWIMMING POOL. Any structure of inert and enduring material such as concrete, masonry, metal, or other impervious material containing an artificial body of water for swimming, diving, or recreational bathing.
- 2.2 PUBLIC SWIMMING POOL. Any swimming pool, other than a private residential swimming pool, for collective use by numbers of persons for swimming or bathing operated by any person as defined herein, whether he be owner, operator, lessee, licensee, or concessionaire, regardless of whether a fee is charged, and all facilities incident thereto.
- 2.3 PRIVATE RESIDENTIAL SWIMMING POOL. Any swimming pool for a single family residence under the control of an individual homeowner, the use of which is limited to swimming or bathing by family members or their invited guests. Facilities serving 2 5 private residences may upon application be considered as private under this regulation.
- 2.4 PERSON. Any individual, partnership, corporation, and association and may extend and be applied to bodies, politic and corporate.
- 2.5 DESIGN PROFESSIONAL. An architect or engineer registered to practice in Georgia.
- 2.6 PRIME DESIGN PROFESIONAL. The design professional responsible for the entire project.
- 2.7 TURNOVER. The ratio of the volume of water circulated to the capacity of the pool.

#### Section 9-7003 General

The provisions of this regulation are applicable to all swimming pools, both public, and residential as hereinafter designated, located in Gwinnett County, Georgia, provided, however, that both public and private residential swimming pools in existence on the effective date of these regulations, which have permits and are in compliance with the existing regulations, except in cases of major improvement and/or remodeling shall be approved under this regulation; and provided further that swimming pools which serve a restricted clientele only, such as hotels, motels, apartments, and condominiums, shall not be required to meet the requirements hereof relating to telephones, showers, toilets, lavatory facilities and dressing rooms where such facilities are readily available in near or close by structures to all persons who may use the swimming pool.

# 3.1 Permits: (Public)

It shall be a violation of this regulation for any person to operate a public swimming pool in Gwinnett County, Georgia who does not possess an unrevoked operating permit from the Director, Gwinnett County Board of Health. Such permit shall be displayed at all times in a place designated by the Director, Gwinnett County Board of Health. Only persons who comply with all the requirements of this regulation shall be entitled to receive and retain such a permit. Such a permit may be temporarily suspended by the Director, Gwinnett County Board of Health upon the violation by the holder of any of the terms of this regulation; or revoked after an opportunity for a hearing by the Director, Gwinnett County Board of Health upon serious or repeated violation. Before a pool permit is granted pursuant to this Chapter by the Health Authority, each applicant shall pay fees in the amounts established by action of the County Board of Health and County Board of Commissioners. Permit holders who fail to submit any fee by the date required, are subject to permit suspension and administrative closure of the pool. It is the responsibility of an individual or organization, which becomes the owner of a pool to notify the Health Authority immediately. The permit is non-transferable between individuals or organizations. A change of ownership invalidates the permit. Additional fees as per the amounts established by action of the County Board of Health and County Board of Commissioners shall be charged for operating a pool without a valid permit.

### 3.2 Inspection of Swimming Pools (Public):

Periodically, the Director, Gwinnett County Board of Health, or his/ her duly appointed representative shall inspect every operating swimming pool located within Gwinnett County, Georgia. The operational permit may be immediately suspended when a condition is present, which in the judgment of the Health Authority is an imminent health hazard to the public or is a violation of included safety measures as approved by the Gwinnett County Board of Commissioners, including but not limited to the following:

- Low or no chorine, bromine, or other Health Authority approved sanitizer.
- 2. pH outside of established range.
- 3. Glass or other cutting hazards in the pool.
- 4. The filtration pump being non-operational.
- 5. The filter being non-operational.
- The chlorinator/automated sanitizer delivery system being nonoperational.
- 7. A section of a required safety barrier being missing.
- 8. A gate or door into the pool enclosure unable to be securely latched
- 9. A main drain grate being missing, loose, or broken.
- 10. A pool operating with a single main drain/ suction outlet grate which is not a Health Authority approved safety cover.

Reinstatement of a previously suspended permit shall occur after a re-inspection is performed. Said re-inspection must demonstrate the violation(s) which led to the permit suspension have been corrected. It shall be a violation of this regulation to operate a pool without a valid permit. Before a re-inspection shall be performed a fee shall be paid to the Health Authority in the amount established by action of the County Board of Health and County Board of Commissioners. A re-inspection may be performed, at the discretion of Health Authority, due to any violation.

#### **Section 9-7004 Plans and Specifications**

Plans and specifications for proposed new swimming pools or for substantial alterations or reconstruction of existing pools: public swimming pools plans and specifications shall be prepared by design professionals and bear the registration of the design professional.

- 4.1 The plans shall be drawn to scale and shall be accompanied by complete specifications so as to permit a comprehensive review of the plans including the piping and hydraulic details and shall include:
  - 1. A plan and sectional view with all the necessary dimensions of both the pool and surrounding areas.
  - 2. Complete site drainage details including diversion ditches for surface run-off.
  - 3. 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.
  - 4. Specifications shall contain details of all treatment equipment, including performance characteristics of pumps, chlorinators, chemical feeders, filters, strainers, interceptors and related equipment.
- 4.2 All public swimming pools shall be provided with a recirculation and filtration system except when there is a flow of water of such quality and quantity through the pool that the pool water will at all times conform to the water quality standards set forth in paragraph 28.4 and 28.5.

# **Section 9-7005 Water Supply**

The water supply for all pools, showers, lavatories, drinking fountains, and any other uses in conjunction with the pool shall be adequate in quantity and shall comply with all requirements of the Georgia Safe Drinking Water Act of 1977 and the Rules and Regulations promulgated by the Department of Natural Resources.

5.1 The water distribution system serving the swimming pool shall be protected against backflow by means of an air gap, not less than two service pipe diameters in width, between the service pipe and the flood rim of the receiving vessel, or backflow prevention device approved by Gwinnett County Planning & Development Department and the Director, Gwinnett County Board of Health or his designated representative.

# **Section 9-7006 Structure Design and Materials**

Swimming Pools shall be designed and constructed to withstand all structural stresses including external hydrostatic pressures and flotation.

6.1 Public swimming pools shall be constructed of inert and enduring materials, non-toxic to man, which will provide a smooth and easily cleanable surface with no cracks or open joints, and shall be finished in a light color. Interior corners shall be coved with a minimum radius of 6 inches.

## Section 9-7007 Shape, Slope, and Depth (Public Pools)

The pool shall be designed and constructed so that efficient and safe control of the pool and bathers can be accomplished. For water depth less than 5 feet the slope of the pool bottom shall be uniform and shall not exceed (1) one foot of slope in 12 feet. For depths greater than 5 feet, the slope shall not exceed (1) one foot in 3 feet.

- 7.1 The maximum depth at the shallow end of the pool shall not exceed 3 feet 6 inches except for competitive or special purpose pools.
- 7.2 The minimum depth of water in the pool shall be 3 feet except for special instructional pools or for restricted or recessed areas in general pools which are set aside primarily for the use of children. Such areas when included as part of the pool shall be separated from the pool proper by means of a safety line supported by buoys and attached to the side walls.
- 7.3 The depth of the water at the deepest point, at the shallow end, and at slope break in the pool bottom between the shallow and deep portions of the pool, shall be permanently and

conspicuously marked above water at pool sides and deck. Markers shall be visible at night under artificial illumination where night swimming is permitted.

7.4 Walls of a pool shall be either (a) vertical for water depths of at least 6 feet, or (b) vertical for a distance of 2 feet 6 inches below the water level, below which the wall may be curved to the bottom with a radius equal to the difference between the depth and 2 feet 6 inches.

#### Section 9-7008 Inlets and Outlets (Public Pools)

Inlets and outlets to pools shall be arranged so as to get effective and uniform circulation of the incoming water throughout the pool.

- 8.1 A sufficient number of inlets shall be provided to obtain adequate circulation and prevent dead spots. A maximum spacing of 20 feet shall be provided between inlets.
- 8.2 Maximum flow rates (in gpm) through various fixed inlet branches shall be not more than as listed below:

Maximum Flow Rates					
Size	1"	1 1/4"	1 1/2"	2"	
GPM	10	20	30	50	

8.3 All inlets shall be designed as adjustable orifices, or shall be individually valved, and shall be submerged not less than 24" below overflow level to reduce the escape of disinfecting agents. Inlets shall be flush with the pool wall. Proprietary inlet systems that are part of a gutter or skimmer system and do not meet all of the above inlet requirements, may be considered to meet the requirements of this regulation if the inlet system meets the intent of the above requirements, has been proven to operate satisfactorily, and/or acceptable to the Director, Gwinnett County Board of Health or his representative.

8.4 Two (2) or more outlets shall be provided at the deepest point of the pool to permit the pool to be completely drained. Each low point in the pool shall be adequately served by an outlet. Beginning May 1<sup>st</sup>, 2010, all pools must have multiple main drains, which are connected by a tee piping configuration under the pool, or a single main drain which is unblockable. An unblockable drain grate cover is hereby defined as having a horizontal measurement of at least 29 inches. Any circulation or water feature pump must be supplied water by multiple main drains or a single main drain with an unblockable drain grate cover. The term water features includes but is not limited to water slides, lazy rivers, therapy jets, mushrooms, and water cannons.

8.5 Outlets shall be spaced not more than 30 feet apart and not more than 15 feet from the side walls. All main drain covers, for circulation and water features, shall be maintained in an unbroken and fully attached condition.

- 8.6 The area of all outlet openings shall be covered with gratings or other coverings which are not readily removable by bathers.
- 8.7 Net openings in each floor outlet covering or grating shall be at least (4) four times the area of the discharge pipe or shall provide sufficient area so that the maximum velocity of the water passing the grate will not exceed 1.5 feet per second. The width of openings in grating shall be not less and 1/2 inch and not more than 1 inch.
- 8.8 Outlets shall not connect directly to sewers but shall be installed in such manner that any sewage backing up from the sewer will overflow to waste and cannot reach the pool. Pool drainage, valves and pumps shall be sized to prevent surcharge of the sanitary sewer.

#### **Section 9-7009 Overflow Facilities (Public Pools)**

Positive means shall be provided for continuous removal of scum, sputum and floating debris from the pool surface. Drainage from overflow facilities shall be discharged to waste or to a make-up or surge tank.

- 9.1 Overflow gutters where used shall meet the following standards:
  - 1. Overflow gutters shall extend completely around the swimming pool except at steps or recessed ladders. The lip of the gutter shall be level and shall be designed to serve as a handhold for bathers.
  - 2. Overflow gutters shall be smooth finished and of open, roll-over or semi-recessed type, except overflow gutters for water-level deck type public swimming pools may be countersunk in a deck sloped to drain from the gutter and such gutters shall be covered by a flush mounted grating.
  - 3. Overflow gutters shall be designed to permit ready and effective cleaning and to prevent accidental entrapment of bather's arms or legs.
  - 4. Overflow gutter and outlet design shall provide for continuous removal of not less than 50% of the re-circulated water for return to the filter or to waste.
  - 5. Overflow gutters shall be provided with drainage outlets of 2 inches minimum diameter at intervals of not more than 15 feet. Outlets shall be covered by removable gratings.
- 9.2 Skimmers where used shall comply in all respects with appropriate standards of the National Sanitation Foundation regarding materials, design, operation and safety and shall meet the following standards:
  - 1. Skimmers may be used in lieu of overflow gutters provided the circulation system is designed to produce substantial circulatory movement to pool water for promotion of skimming and of uniform disinfectant distribution and provided a handhold equivalent to bullnose coping with outer 2 inches not over 2.5 inches thick is extended around the pool perimeter not more than 9 inches above the normal water level.
  - 2. Skimmers shall be designed for a flow through rate of at least 30 gallons per minute and the total capacity of all skimmers in any pool shall be at least 80 percent of the required filter flow of the recirculation system. Each skimmer shall be provided with a valve for equalization of flow.
  - 3. Skimmers shall be built into the pool wall and the weir shall be automatically adjustable to water level variations over a range of at least 4 inches. At least one skimmer shall be located to oppose the prevailing wind.
  - 4. Skimmers shall be designed and located to effectively remove floating materials from the water surface of the entire pool area. At least one (1) skimmer shall be provided for each 500 square feet of water surface area or fraction thereof.
  - 5. Skimmers shall be provided with an easily removable and cleanable screen or basket to trap large solids.
  - 6. Skimmers shall be designed or equipped to prevent air lock in the suction line. Equalizer lines, if used, shall be sized to meet capacity requirements of the filter and pump and in no case shall be less than 2 inches in diameter. Equalizer lines shall be installed at least (1) one foot below the lowest weir level and equipped with values or devices to remain closed at normal operating conditions but automatically open when water level drops 2 inches below the lowest weir level.

#### Section 9-7010 Hose and Connections (Public Pools)

Sufficient hose connections, at least 3/4 inch diameter, shall be provided for cleaning the pool, decks, walks, toilets, dressing rooms and other flooded areas used in connection with pools and bathhouses. Hose connections shall be fitted with an approved vacuum breaker.

#### Section 9-7011 Steps, Ladders, and Handrails

Steps or ladders shall be provided at the shallow end of pools where the vertical distance from pool bottom to deck level is over 2 feet. Recessed steps or ladders shall be provided at the deep portion of the pool and if the pool is over 30 feet wide, such steps or ladders shall be installed on each side. A means of egress shall be provided for each 75 feet of pool perimeter.

- 11.1 Steps shall be of non-slip design with minimum tread of 12 inches and maximum rise of 12 inches. Abrupt drops or submerged projections into the pool shall be guarded by handrails.
- 11.2 Ladders shall be corrosion-resistant and shall be equipped with non-slip treads. They shall be designed to provide a hand hold and shall be rigidly installed with clearance between the ladder and the pool wall not less than 3 inches nor more than 6 inches.
- 11.3 Steps inserted in the pool wall shall be of easily cleanable construction, designed to drain into the pool, and shall be at least 14 inches wide and 5 inches deep and a maximum of 12 inches vertical spacing.
- 11.4 Ladders within the swimming pool shall be equipped with a handrail at the top of both sides thereof, extending not less than 30 inches above the coping or edge of the deck.

# **Section 9-7012 Wading Pools (Public Pools)**

Wading pools for non-swimming children may be independent auxiliary pools or may be restricted areas of a general swimming pool. All applicable sections of this standard shall apply to wading pools.

- 12.1 Restricted areas of swimming pools set aside for use as wading pools shall be separated from the main body of the pool by means of a safety line attached to the side walls and supported by buoys. This restricted area of the swimming pool shall have a turnover rate of once every (2) two hours or less with inlets and outlets and overflow facilities sized accordingly.
- 12.2 Independent wading pools shall have maximum depth of not more than 18 inches; the bottom shall be non-abrasive, shall have a non-slip finish and shall be sloped toward a drain at not more than 3 inches in 10 feet nor less than 1 inch in 10 feet. Such wading pools shall be served by a swimming pool recirculation system with turnover rates of once every (2) two hours or less.

## Section 9-7013 Spray Pools (Public Pools)

Spray pools are small independent artificial pools for non-swimming children into which water if sprayed but is not allowed to pond. Spray pools may be supplied by the swimming pool recirculation system or by water meeting the same quality requirements from other sources with all drainage to waste. All applicable sections of this standard shall apply to spray pools.

13.1 Spray pool bottoms shall be non-abrasive, shall have a non-slip finish, and shall be sloped toward a drain at not more that 3 inches in 10 feet nor less than 1 inch in 10 feet.

#### Section 9-7014 Deck Areas (Public Pools Except 14.3 Applies To All)

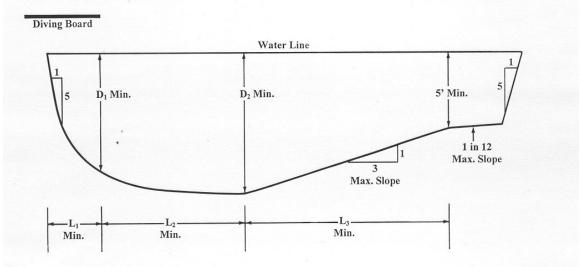
A clear and unobstructed paved deck or walkway shall extend completely around the pool; deck width shall be at least 5 feet measured from the pool side edge, except at the deep end where there is a diving board and width shall be at least 10 feet.

- 14.1 Deck drainage shall be conducted away from the pool area and shall be pitched to drains designed to conduct drainage from the pool to points of disposal in a manner that will not create unsanitary, hazardous, or objectionable conditions. Deck shall be sloped no less then 1/4 inch per foot.
- 14.2 Decks shall have a non-slip surface and shall be of a material and finish that can be cleaned by hosing.
- 14.3 An effective fence or barrier, not less than 4 feet high, shall be provided on the outer side of the walk area to prevent spectators in street attire from traversing the pool walk and prohibit access of unattended children and animals to the pool. A barrier shall not be required around a spray pool, with no standing water. There shall be no more than 4 inches of clearance between the bottom of the fence barrier and ground surface or pool deck. Any gate(s) shall be located at the shallow end of the pool and shall be self-closing and have a lockable self-latching device. Where pools serve special purposes, as therapeutic pools, waiver of this requirement may be acceptable.

# **Section 9-7015 Diving Areas and Equipment (Public Pools)**

The dimensions of the swimming pool in the diving area shall conform to Figure No. 1.

Figure No. 1



Board Height Over Water	Minimum Dimensions				
Over water	D1	D2	L1	L2	L3
26" (2/3 meter)	7'0"	8'-6"	2'6"	8'-0"	10'6"
30" (3/4 meter)	7'6"	9'-0''	3'0"	9'-0"	12'-0"
1 meter	8'-6"	10'-0"	4'-0"	10'-0''	15'-0"
3 meter	11'-0"	12'-0"	6'-0''	10'-6"	21'-0"

NOTE: Placement of boards shall observe the following minimum dimensions. With multiple board installations minimum pool widths must be increased accordingly.

1 Meter or Deck Level Board to Pool Side	9' (2.74m)
3 Meter Board to Pool Side	11' (3.35m)
1 Meter or Deck Level Board to 3 Meter Board	10' (3.05m)
1 Meter or Deck Level to another 1 Meter or Deck Level Board	8' (2.44m)
3 Meter to Another 3 Meter Board	10' (3.05m)

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

15.2 Diving board steps and ladders shall be of corrosion-resistant material, easily cleanable and of non-slip design, and kept in good repair. Handrails shall be provided at all steps and ladders leading to diving boards with elevations one (1) meter or more above the water. Platforms and diving boards which are one (1) meter or more high shall be protected with guard railings.

#### Section 9-7016 Electrical

All electrical materials and workmanship shall be in compliance with the Gwinnett County Construction Code and current adopted edition of the National Electrical Code.

- 16.1 In all installations to be used at night, pools, deck areas, dressing rooms, toilets, equipment rooms, chemical rooms, and concessions shall be lighted in accordance with the following minimum standards:
  - 1. Under Water Lighting:
    - Indoor: 100 lamp lumens/square foot of pool surface.
    - Outdoor: 60 lamp lumens/square foot of pool surface.
  - 2. Deck Lighting foot candles maintained in service: (Public only)

Outdoor	Indoor	
Exhibition	20 F.C.	50 F.C.
Recreation	10 F.C.	30 F.C.
Minimum Mounting Height	30 Feet	20 Feet

- 3. Lighting in dressing rooms, toilet, equipment rooms, chemical rooms, concessions, and related areas shall be in compliance with the above reference codes.
- 16.2 Switches, starters, panel boards and similar electrical equipment shall be located in areas not readily accessible to bathers.
- 16.3 Each underwater light shall be individually grounded.
- 16.4 No overhead electrical wiring shall pass within 20 feet of the swimming pool enclosure.

# **Section 9-7017 Recirculation and Filtration System**

The entire recirculation and filtration system shall be designed for continuous operation and shall have sufficient capacity to clarify the entire pool volume in 8 hours or less thus providing at least three (3) turnovers daily. Where separate wading pools are provided for children, recirculation capacity shall provide for complete turnover of the wading pool content every 2 hours or less. Comment - The pool turnover rate of 8 hours will provide satisfactory water quality under "normal" conditions. Turnover rates of less than 8 hours should be considered when the maximum patron load can be expected for extended periods and/or the environmental conditions (temperature, sunshine, debris, wind, etc.) are expected to be extreme.

- 17.1 A rate-of-flow indicator, reading in gallons per minute, and a flow regulating valve shall be installed and located so that the rate of recirculation and backwash rate will be indicated and can be controlled.
- 17.2 All recirculation and filtration equipment that requires adjustment and maintenance, and sight-glasses, dials or meters that must be recorded shall be readily accessible and have unobstructed clearance from walls, ceiling, and other equipment, and shall be well lighted.
- 17.3 Swimming pool heaters when used shall be certified by a nationally recognized organization and shall be in compliance with the Gwinnett County Gas & Electrical Codes.

#### **Section 9-7018 Pumping Equipment**

Pumps and motors shall have sufficient capacity to provide the required number of turnovers specified in Section 9-7017 above and for providing adequate flow and head to backwash filters at rates set forth below.

- 18.1 Recirculation pumps shall be located below the pool water level to provide positive pressure on the suction side, or positive priming method shall be provided. A check valve shall be installed on the pump discharge line.
- 18.2 Requirements for filtration shall be based upon the maximum head loss developed immediately prior to backwashing the filters. Comment additional head of 5%-10% should be added for pump ware, piping changes, etc.(safety factor).

#### Section 9-7019 Hair and Lint Strainer (Public Pools)

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-eight width in size providing a free flow area at least (4) four times the area of the pump suction line and shall be readily accessible for frequent cleaning.

## Section 9-7020 Suction Cleaner (Public Pools)

A suction cleaner, either built in or portable type, shall be provided for removing sediment from the pool floor and shall be capable of reaching all parts of the pool floor. Built-in cleaners shall provide sufficient connections in the pool walls at least eight inches below the water line. Portable or jet-type units shall be provided with backflow protection for the water system.

#### Section 9-7021 Piping

Pool piping shall be detailed on the plans as to size and material. Buried flexible plastic pipe shall not be used. Piping shall be of non-toxic material, resistant to corrosion, and able to withstand operating pressures. Plastic pipe, when used shall be NSF approved. Piping shall be in compliance with the Georgia State Plumbing Code.

- 21.1 Piping shall be designed to carry the required quantity of water at a maximum velocity not to exceed 6 feet per second on piping to the suction side of the recirculation pump and not to exceed 10 feet per second in discharge lines.
- 21.2 Piping shall be positively supported to prevent settlement which may cause air pockets or sediment traps or rupture of lines. Piping shall be provided with uniform slope and with positive means of draining water to prevent damage from freezing.
- 21.3 Valves shall be provided to cut off flow during cleaning or inspection of strainers and pumps.

## Section 9-7022 Disinfectant Feeders (Public Pools)

All pools must have a chlorinator/ automated disinfectant feeder system. Equipment and piping used to apply disinfectant chemicals to the water shall be of such size, design and material that they may be cleaned. Feeders shall not be cross-connected with potable water systems. Materials used for such equipment and piping shall be resistant to the action of chemicals to be used therein.

- 22.1 A means of disinfecting the pool water which provides a residual agent in the pool water shall be used. The disinfecting agent shall be subject to simple field tests for determination of concentration. Chlorinators or other disinfectant feeders shall be capable of supplying at least the equivalent of one pound of available chlorine per 8 hours per 10,000 gallons of pool capacity; rate of feed shall be adjustable and shall be indicated on the feeder.
- 22.2 Chlorinators or other disinfectant feeders shall be of sturdy construction and materials which will withstand wear, corrosion or attack by disinfectant solutions or vapors and which are not adversely affected by repeated adjustments or other conditions anticipated in the use of the device. The feeder shall be easily disassembled for cleaning and maintenance and shall be designed and constructed to minimize stoppage from chemicals used. Feeder design shall include fail-safe features to prevent the disinfectant feeding directly to the pool or its components under any type of failures of equipment or maintenance.
- 22.3 Disinfectant feeders shall have a graduated and clearly marked dosage adjustment to provide flows from full capacity to 10% of such capacity. The device shall be capable of continuous delivery within 10% of the dosage at any setting.

- 22.4 When the disinfectant is introduced at the suction side of the pump, a device shall be provided to prevent air lock of the pump or recirculation system.
- 22.5 When chlorine gas is used the following additional features shall be provided:
  - 1. The chlorine and chlorinating equipment including scales and (1) one extra chlorine cylinder, shall be in a separate well-ventilated room. Floors of such rooms shall not be below ground level. The room shall be provided with an exhaust fan located at floor level and vented to the out-of-doors. Exhaust fan shall produce a complete exchange of air in 2 minutes. Louvers shall be provided at the top of the room on the wall opposite the exhaust fan for admitting fresh air. The room shall be sealed (air tight) from adjacent rooms to prevent chlorine gas circulation.
  - 2. The door of the chlorine and chlorinating equipment room shall not open to the swimming pool or filter room and shall open to the out-of-doors. A viewing window and exterior-controlled artificial illumination and exhaust fan shall be provided so that essential performance of the equipment may be observed without/before entering the room.
  - 3. Facilities shall be provided for anchoring chlorine cylinders to a wall or other support to prevent their falling over.
  - 4. The chlorinator shall be a solution feed type, capable of delivering chlorine at its maximum rate without releasing chlorine gas to the atmosphere.
  - 5. The chlorinator shall be designed to prevent the backflow of water into the chlorine solution container. All piping containing chlorine gas either under pressure or under vacuum shall be located in chlorine equipment room.
  - 6. A closed gas mask cabinet, accessible without a key shall be located outside of the chlorinator room. The cabinet shall be equipped with a gas mask designed for use in a chlorine atmosphere and of a type approved by the U.S. Bureau of Mines.
  - 7. Installation of chlorinator equipment, and initial operation thereof, shall be under the supervision of personnel experienced with the installation and operation of such equipment.
- 22.6 When a hypochlorite solution is to be fed through hypochlorinator equipment, such equipment shall also provide the following additional features.
  - 1. Feed shall be positive under all conditions of pressure in the circulation system.
  - 2. A method shall be provided for reducing to a minimum the entry into a swimming pool of free calcium released from calcium hypochlorite.
  - 3. A method shall be provided to prevent siphoning of hypochlorite solution when the recirculation pump and hypochlorinator are both turned off.

# Section 9-7023 Filtration Equipment (Public Pools)

Filter shall be capable of maintaining water in the pool which meets physical standards set forth in Section 9-7023 herein. Sufficient filtering area shall be provided to meet the design pump capacity as required by Section 9-7023 herein. Filters shall comply in all respects with appropriate standards of the National Sanitation Foundation regarding materials, design, operation and safety.

23.1 A sight glass shall be installed on the waste discharge line of pressure filters to observe the progress of filter washing. The filter system shall be provided with influent and effluent pressure, vacuum or compound gauges shall be provided with shut- off cocks. Air-relief valves shall be provided at the high point of the filter. In vacuum filter installations where the circulating pump is 2 horse-power or higher an adjustable high vacuum shut-off shall be provided to prevent damage to the pump by cavitation.

- 23.2 Rapid sand filters shall be designed for a filter rate to the swimming pool of not more than 3 gallons per minute per square foot of bed area at a time of maximum headloss with sufficient area to meet the design rate of flow required by the prescribed turnover.
  - 1. For standard underdrain systems not less than 20 inches of screened sharp filter sand with effective size between 0.4 and 0.55 mm., and a uniformity coefficient not exceeding 1.75 supported by at least 10 inches of graded filter gravel shall be provided. A reduction in this depth or elimination of gravel may be permitted where equivalent performance and service are demonstrated.
  - 2. At least 12 inches of freeboard shall be provided between the upper sand surface and the backwash overflow invert.
  - 3. Each pressure filter unit shall be provided with an access opening of not less than a standard 11 inches x 15 inches manhold and cover.
    - 4. Facilities shall be provided for adding chemicals for coagulation and pH control.
  - 5. Filter piping shall be designed and valved to permit individual backwashing of filters to waste at not less than 15 gallons per minute per square foot of filter area, to permit isolation of individual filters for repairs while keeping others in service to permit complete drainage, and to permit maintenance, operation and inspection in a convenient manner.
  - 6. Sampling cocks shall be provided to enable sample collection of pool water as it leaves the pool and as it leaves the filters.
  - 7. 23.3 Diatomaceous earth filters shall be designed for a filter rate to the swimming pool of not more than 2.0 gallons per minute per square foot of effective filtering surface without continuous body feed and not greater than 2.5 gallons per minute per square foot with continuous body feed.
  - 8. Appurtenances shall be provided for precoating with diatomaceous earth slurry. Provisions for recirculating during the precoating operation shall be made where filters permit passage of earth through elements during precoating operations. Sight glass will be required for pressure filters.
  - 9. Where body feed is provided, the device shall be accurate (+-10%) and shall be capable of continually feeding within a calibrated range, adjustable from 2 to 6 ppm, at the design capacity of the recirculating pump.
  - 10. Filtering area, where fabric is used, shall be determined on the basis of effective filtering surfaces as created by the septum supports with no allowances for areas of impaired filtration, such as broad supports, folds, or portions which may bridge.
  - 11. Filters shall be equipped for cleaning by one or more of the following methods: back-washing, air-bump-assist backwashing, spray wash (mechanical or manual), or agitation.
    - 12. Provision shall be made for completely and rapidly draining the filter.
- 23.4 High rate sand filters shall be designed for a filter rate to the swimming pool of not more than 20 gallons per minute per square foot of filtering surface shall meet the standards set forth in items 23.1 and 23.2 herein.
- 23.5 Cartridge filters shall be designed for filter rate to the swimming pool of not more than 0.33 gallons per minute per square foot of effective filter area.
  - 1. Filter(s) shall be equipped with at least influent and effluent pressure gauges with gauge cocks and an air-relief valve.
  - 2. Two (2)sets of filter cartridges shall be provided to facilitate cleaning and drying of one set while the other is in operation. Disposable cartridges shall be replaced when initial filtration rate is impaired by clogging.

#### Section 9-7024 Make-up Water Facilities (Public Pools)

All pools shall be equipped with provisions for adding make-up water to compensate for water loss through evaporation and to waste so that a constant water level is maintained while the pool is in operation to enable continuous flow into skimmers or overflow gutters.

#### Section 9-7025 Bathhouses (Public Pools)

Bathhouses containing dressing rooms, showers, toilets, and lavatories shall be required for public swimming pools. Bathhouses shall be in compliance with Gwinnett County Building, Plumbing, Mechanical, Gas, and Electrical codes.

- 25.1 Bathhouse facilities may not be required for swimming pools located on premises of motels, hotels, or other transient residences, and apartment complexes where such facilities are available in adjacent structures and the swimming pool use is restricted to the employees, occupants, and guests of such establishments. The governing authority shall determine any bathhouse requirements for such establishments. Comment Consideration by the governing authority should be given to: distance to adjacent structures, bather load estimates, operator control, and health matters when evaluating bathhouse requirements for these potentially exempt establishments.
- 25.2 Bathhouses may also contain public areas, manager's area, first-aid room, and like areas. 25.3 Where bathhouses are used by both sexes at the same time, separate and clearly labeled dressing rooms separated by a tight partition shall be provided for each sex; entrances and exits shall be screened to break the line of sight.

## **Section 9-7026 Bathhouse Facilities (Public Pools)**

- 26.1 Dressing room floors shall be easily cleanable, non-slip finish, impervious to moisture and sloped to drain. Walls and partitions shall be of easily cleanable construction and junctions of walls and floors shall be coved.
- 26.2 Dressing rooms, toilet rooms, shower rooms, shall be ventilated by natural or artificial means to effectively eliminate odors and condensation.
- 26.3 Shower, toilet and lavatory facilities shall be provided in accordance with the following schedule and shall be based on pool capacity computations set forth in Section 9.7027 herein, or on scheduled use periods as at schools. Showers shall not be required to be provided for patrons of a spray pool, with no standing water:

Fixture	Males	Females
Water Closets	1/60	1/40
Urinals	1/60	NA
Lavatories	1/60	1/60
Showers (minimum of 3 each side)	1/40	1/40

Drinking Fountain. Minimum of one (1) to be located in swimming pool area. Hose bib with vacuum breaker required in each toilet room as a minimum.

- 26.4 Toilet and shower room floors shall be constructed of impervious materials with no open cracks or joints, have an easily cleanable, non-slip finish and shall pitch toward a drain. Juncture of walls and floors shall be coved.
- 26.5 The location of dressing rooms shall be arranged so that bathers leaving a dressing room must pass the toilets and showers en route to the swimming pool.
- 26.6 Showers and lavatories shall be supplied with warm water at a temperature of 90 degrees to 110 degrees F from a single source. Hot water temperature control devices shall not be available to patrons. 26.7 Any food service facilities associated with the bathhouse or swimming pool must meet the requirements of the Gwinnett County Board of Health Rules and Regulations for Food Service.

#### **Section 9-7027 User Load Computation**

In computing user loading, those portions of the swimming pool 5 feet or less in depth shall designated as "non-swimmer" areas and those portions over 5 feet in depth shall be designated as "swimmer" areas.

- 27.1 To compute the in pool swimmer and bather capacity, swimming pool areas shall be determined as follows:
  - 1. Ten (10) square feet of pool water surface area shall be provided for each non-swimmer expected at time of maximum load.
  - 2. Twenty-four (24) square feet shall be provided for each swimmer expected at time of maximum load.
  - 3. Three hundred (300) square feet of pool water surface area shall be reserved around each diving board or diving platform and this area shall not be included in computing the area of the swimming section. During the preliminary design phase of a swimming pool facility, the owner (operator), prime design professional, and the governing authority should agree on pool and deck capacities, depending on the establishment or area served. In general, the experience and knowledge of the area by the governing authority should be the prime factors in capacity determinations.

#### Section 9-7028 Disinfection and Water Quality (Public Pools)

The chemical, physical, and bacteriological quality of pool water shall be such that it is sanitary, clear, and safe for swimming.

- 28.1 Swimming pools when open or in use shall be continuously disinfected by a chemical which imparts an easily measured free available residual effect. The minimum free available chlorine level shall be 1.0 ppm. If the cynanuric acid level is 50 ppm or higher, the minimum free available chorine level shall be 1.5 ppm. The cyanurate level shall not be greater that 100 ppm. A testing kit for measuring the concentration of cyanuric acid, accurate within 5.0 ppm, shall be provided at each swimming pool using cyanuric acid or chlorinated cyanurates.
- 28.2 Other disinfecting materials or methods shall be acceptable satisfactory residual effect which is easily measured and to otherwise be equally as effective under conditions after they have been adequately demonstrated to provide a of use as the chlorine concentration required herein, and not be dangerous to public health, create objectionable physiological effect, or impart toxic properties to the water.
- 28.3 The swimming pool water shall be maintained in an alkaline condition as indicated by a pH of not less than 7.2 and not over 7.8. A pH testing kit accurate within 0.2 pH unit shall be provided at each swimming pool. A total alkalinity of the water shall be at least 80 ppm.
- 28.4 The water shall be of sufficient clarity, so as the main drain covers shall be clearly visible.
- 28.5 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 of a sample or more than 1.0 coliform organism per 50 ml. when the membrane filter test is used. All samples shall be collected, dechlorinated, and examined in accordance with the procedures outlines in the latest edition of Standard Methods for the Examination of Water and Wastewater (APHA).
- 28.6 Chemicals used for algae control and in the control of water quality shall be registered by the Federal Environmental Protection Agency as applicable and used in accordance with label directions.

# **Section 9-7029 Operation and Maintenance (Public Pools)**

A pool operator, with a certification approved by the Health Authority, shall be employed or contracted by the pool owner. An emergency contact phone number, of a person responsible for the pool, must be posted in clear public view on the exterior of at least one of the pool enclosure entrances. Pool owners shall be responsible to notify the Health Authority immediately upon learning of a fecal, vomit, or blood accident in the pool. Pool owners shall be responsible to follow all the current recommendations of the Centers for Disease Control and Prevention for responding to fecal, vomit, or blood accidents in pools.

- 29.1 The operator of each pool open for use shall keep daily records of pool operations including total bather load, peak bather load, volume of fresh water, filter influent and effluent pressure gauge readings, rate of flow meter readings, amount of chemical used, disinfectant residuals, pH readings, algae control measures taken, alkalinity, maintenance and malfunctioning of equipment including cleaning of filters, and such additional records as may be required. Such records shall be kept available for inspection by the Board of Health for a period of at least one (1) year.
- 29.2 Routine daily and weekly operating procedures shall be posted in a location frequented by the operator. Manufacturer's instructions for operation and maintenance of mechanical and electrical equipment shall be kept on the premises and available for the operators use.
- 29.3 Pumps, filters, disinfectant and chemical feeders, flow indicators, gauges, and all related parts of the pool water purification system shall be kept in operation whenever the pool is available for use, and at such additional periods as may be necessary to maintain the water in the pool in a clear and disinfected condition.
- 29.4 Floating scum, sputum and debris shall not be allowed to accumulate in the pool. The sides and bottom of pools, decks, and other surfaces shall be kept free of slime and algae to prevent unnecessary slipperiness and danger of accident or drowning, and shall be cleaned as often as necessary to keep in a clean condition.
- 29.5 Where chlorine gas is used, a valve protection hood shall be kept in place on the cylinder except when the cylinder is connected to a chlorinator. A valve stem wrench shall be maintained on chlorine cylinders connected to chlorinators so that the supply can be shut off quickly in emergencies.
- 29.6 Replacement canisters for the chlorine gas mask shall be provided and a record kept of all gas mask usage to insure that the mask will be serviceable when needed. The gas mask, replacement canisters, and record usage shall be kept in a closed container located outside the chlorinator room.
- 29.7 Dressing rooms, showers, toilet rooms and fixtures, equipment rooms and equipment, concession and spectator areas, and all parts of the pool enclosure shall be kept clean in good repair. Walls, ceilings and equipment shall be painted as often as necessary to minimize deterioration. The entire pool area shall be maintained in a sanitary condition and free of litter and vermin.
- 29.8 Soap shall be provided at showers and lavatories.
- 29.9 Bathing suits and towels provided by the pool management shall be laundered and sanitized after each use.

# Section 9-7030 Bather Supervision (Public Pools)

- 30.1 At any time a lifeguard, certified by Red Cross or other Health Authority approved organization, is not present at an open pool, a sign stating "No Lifeguard on Duty" shall be posted in clear public view except at spray pools, with no standing water.
- 30.2 Visitors and spectators shall be kept separated from spaces used by bathers.
- 30.3 No food, drink, bottles or wrappers shall be permitted in the immediate area of the swimming pool or on the decks surrounding the pool.
- 30.4 Bathers shall take a cleaning shower, using warm water and soap, before entering the pool and before returning to the pool following use of the toilet.
- 30.5 Persons having an infectious or communicable disease, which can be transmitted by water, shall be excluded from public swimming pools. Persons with open blisters or cuts shall be warned of infection and advised not to use the pool.
- 30.6 No running, boisterous or rough play, except water sports, shall be permitted in the pool enclosures, dressing rooms, shower rooms, or other areas.
- 30.7 Spitting, spouting of water, blowing the nose, etc., in the swimming pool shall be strictly prohibited.

30.8 Suitable placards embodying provisions of this section shall be conspicuously posted in the swimming pool room or enclosure and in the dressing rooms and offices at all swimming pools.

Placards shall also state the maximum user loads in the various areas of the swimming pool facility

## **Section 9-7031 Safety Precautions (Public Pools)**

Life saving and emergency first aid equipment and facilities shall be provided at all swimming pools. A telephone and list of emergency numbers including physician, ambulance and hospital should be provided.

- 31.1 A life line shall be provided at or near the break of grade between the shallow and deep portions of a public swimming pool with it position marked with colored floats at not greater that 5 foot spacing. Life line shall be 3/4" minimum diameter and its terminals shall be securely anchored and of corrosion resistant material and of type which will be recessed or have no projections which will constitute a hazard. A life line shall not be required during a period restricted to competition and/ or lap swimming.
- 31.2 Every swimming pool shall be equipped for safety and rescue with one or more light but strong poles (bamboo or other), or shepherds' crook, having blunt end and which is not less than 16 feet of length for making reaching assists or rescues.
- 31.3 Every pool shall be equipped with one or more throwing buoys of not more than 18 inches in diameter with 1/4" line attached at least equal in length to the maximum width of the pool plus 10 feet.
- 31.4 Lifesaving equipment described in paragraphs 31.2 and 31.3 above shall be mounted in conspicuous places near the pool edge, ready for access, its function plainly marked, kept in good repair and ready condition, and bathers or others shall not be permitted to tamper with it, use it for any purpose other than its intended use, or remove it from its established location.
- 31.5 Every swimming pool shall be equipped with a standard 24-unit first aid kit. The first aid kit shall be kept filled and readily accessible for emergency use. A backboard is advisable for isolated areas and for large pools. Comment: the governing authority can require additional first aid materials depending on distance of pool to medical facilities and availability of emergency medical services.
- 31.6 One lifeguard chair should be provided for each 2,000 square feet of pool surface area or fraction thereof. If a pool is more than 40 feet wide and requires more than one lifeguard stand, these stands should be located on opposite sides of the pool.
- 31.7 All glass is prohibited in the pool enclosure. Any broken glass or any other sharp surface in the pool enclosure, capable of cutting a patron, will be a violation of this regulation.

# Section 9-7032 Public Spas

- 32.1 Section I Definitions
  - 1. Public Spas (including hot tubs and recreational whirlpools). Any pool other than a private residential pool primarily designed for individual or small group bathing with circulated water which may employ tempered water, air induced bubbles or combination thereof with the intent of producing a relaxing or therapeutic effect operated by any person as defined herein, whether he be owner, operator, lessee, licensee, or concessionaire, regardless of whether a fee is charged, and all facilities incident thereto.
  - 2. Private Residential Spas. Any pool as defined in 32.1.,a., but for a single family residence under the control of the individual homeowner, the use of which is limited to members of his family or their invited guests.
- 32.2 Shape, Slope, and Depth Maximum water depth shall be 4 feet measured form the water line.
- 32.3 Steps, Ladders, and Handrails The maximum depth of any seat or sitting bench shall be 2 feet measured from the water line. Seat or bench may be part of steps.
- 32.4 Recirculation and Filtration System
  - 1. Recirculation capacity shall provide for complete turnover of the pool content ever 30 minutes.

- 2. The pool recirculation and filtration system, air induction system, booster pump system when used, heater, and disinfectant system shall be separate equipment from that used by the swimming pool. However, all equipment may be located in the same room.
- 3. The maximum temperature of the pool water shall be 105 degrees. A thermostatic control for pool water shall be required and shall not be for patron use.
- 4. The air induction system shall prevent water back-up and the air source shall not induce contaminants.

#### 32.5 Bathhouse Facilities

- 1. Where the pool is adjacent to a swimming pool facility and patron control is through the swimming pool bathhouse, the spa pool patron load shall be included in swimming pool load.
- 2. For separate pool facilities, a shower, lavatory, water closet and dressing room shall be provided for each 36 patrons of each sex. A drinking fountain shall be required.

### 32.6 Safety Precautions

- 1. Where the pool is adjacent to a swimming pool facility and patron control is through the swimming pool bathhouse, the requirements of this section are not applicable.
- 2. For separate pool facilities, the requirements of this section are not applicable, except for emergency use, a telephone or emergency signal shall be directly connected to an area that is attended at all times the pool is open to patrons. Emergency procedures and pool use regulations shall be posted.

# Section 9-7033 Natural Public Bathing Beaches

- 33.1 Definitions shall apply and shall be amended as follows:
  - 1. Natural Public Bathing Beaches. Any natural or altered body of water such as, but no limited to, an artificial or natural pond, spring, lake, river, or stream for swimming, diving, or recreational bathing, for collective use by a number of persons operated by any person as defined herein, whether the owner, operator, lessee, licensee, or concessionaire, regardless of whether a fee is charged, and all facilities incident thereto.
  - 2. Private Residential Natural Bathing Beach. Any natural bathing body of water as defined above for a single family residence under the control of an individual homeowner, the use of which is limited to swimming and bathing by family members or their invited guests.
- 33.2 Plans and specification as required by Gwinnett County Planning and Development Department shall apply to facilities incident to the Natural Public Beach.
- 33.3 The Georgia State Plumbing Code shall apply to water supply facilities incident to the Natural Public Beach.
- 33.4 For water depths up to 4 feet 6 inches, the beach bottom should consist of stabilized sand and/or gravel and the bottom slope should not exceed 1 foot in 15 feet.
- 33.5 The water depth surrounding any diving float or fixed platform not more than 2 meters above the water surface shall be not less than 9 feet for a distance of not less than 12 feet from all sides of the float or platform.
- 33.6 Gwinnett County Electrical Code shall apply to Natural Public Beaches.
- 33.7 Bathhouses and bathhouse facilities regulations shall apply to Natural Public Beaches. The Director, Gwinnett County Board of Health may exclude shower facilities requirements.
- 33.8 The user load determination shall be made during the preliminary design phase. The owner (operator), prime design professional and the Director, Gwinnett County Board of Health or his representative and the Gwinnett County Department of Planning and Development should agree on beach capacities depending on the establishment or areas served.
- 33.9 The Natural Public Beach water quality shall meet or exceed those established by the Department of Natural Resources, Rules and Regulations for Water Quality Control for Criteria for All Water and Recreation Water Use Classification. The location of the beach shall be on a body of water classified as recreational as determined by the Department of Natural Resources.

# Article B. Public Spa Pools and Bathhouses

# Sections 9-7034 Through 9-7068 Reserved

# Article C. Administration and Enforcement

#### Section 9-7069 Variance

This chapter shall be administered by the Director, Gwinnett County Board of Health, who shall have the authority to grant a variance from the requirements of this chapter as follows:

- 1. Where it is demonstrated to the satisfaction of the Director that strict compliance with the standards would result in practical difficulty to or undue hardship upon the property owner due to special conditions or causes;
- 2. Where the public or private interest in the granting of the variance is found by the Director to clearly outweigh the interest of the application of uniform rules; and,
- 3. Where such alternative measures are provided which in the opinion of the Director will provide adequate public health and safety protection. In granting a variance, the Director may attach thereto any conditions which may be deemed advisable so that the purpose of this chapter will be served, public health, safety and welfare secured. Such variance shall not waive any requirement of other Federal, State, or County Codes which may also be applicable to the design, construction or operation of any items covered by these Health Regulations.

# Section 9-7070 Severability

Should any court of this State or of the United States declare any section, part, paragraph or clause of this chapter unconstitutional or invalid for any cause or reason, then such decision shall affect only that section, part, paragraph, or clause so declared to be unconstitutional and invalid, and shall not affect any other section, part paragraph or clause of this chapter.

# Section 9-7071 Conflicts With Other Codes, Laws, or Regulations

Nothing in this resolution is intended to, nor will it serve to supersede any other Federal, State, or County code, regulation, or ordinance. Where a conflict may be deemed to exist, the stricter shall apply.

# **Section 9-7072 Enforcement**

This regulation, upon adoption by the Gwinnett County Board of Commissioners shall be enforced by the Gwinnett County Board of Health, as a duly adopted ordinance of Gwinnett County. Any person violating any provision in this regulation shall be guilty of violating a duly adopted ordinance of Gwinnett County, and upon conviction by a court of competent jurisdiction shall be punished either by a fine not to exceed five hundred dollars (\$500.00), or by confinement in the county jail for a total term not to exceed sixty (60) days, or both.

The court shall have the power and authority to place any person found guilty of a violation of this regulation on probation and to suspend or modify any fine or sentence. As a condition of such suspension, the court may require payment of restitution or impose other punishment allowed by law.