

MEMORANDUM

To: Mayor and City Council

From: Steve Foote, AICP

Community Development Director

Date: August 22, 2016

Subject: Amendment to City of Dunwoody Ordinances

Chapter 8, Buildings and Building Regulations, Article I – In General

BACKGROUND

In 2015 the City of Dunwoody updated our adopted Building Codes to align with the most recent mandatory codes adopted by the State of Georgia. Specifically, the City adopted the revised codes required by state law in 2015, as well as one revised permissive code (International Property Maintenance Code, IRC).

The attached page shows in Section 8-1(a) and (b) the various codes adopted by the City of Dunwoody. Section (c) lists the permissive codes also adopted by the City of Dunwoody. One of these, the DeKalb County Health department's 2006 Swimming Pools, Spas, and Bathhouses code has been a part of the city's regulations since incorporation.

A few questions came up recently that required staff to research current practices and regulations applicable to swimming pools. In conducting this research staff attempted to determine the initial purpose for adopting the DeKalb County Health regulation, compared the pool regulations of the county to the state pool regulations in the International Residential Code (IRC), and met with County Health officials.

The result of this research was as follows:

- There is no regulatory issue existing today between the City of Dunwoody and the DeKalb County Health department on pool regulations or approvals.
- City action to rescind the DeKalb County 2006 pool regulations will not create any void or regulatory dispute.
- One of the more notable differences between the County and IRC is the minimum height of barriers; with the County code being five (5) feet and the IRC four (4) feet.
- The Director of the Environmental Health Division indicated that the County intends
 to adopt the State minimum swimming pool regulations later this year (following the
 current revision process) and move away from the current DeKalb County Swimming
 Pools, Spas and Bathhouses code. Such action will result in DeKalb County enforcing
 the same regulations as the City of Dunwoody (the IRC regulations).
- No specific purpose was determined for adopting the DeKalb County code upon incorporation.



• The DeKalb County Health department will continue to review and inspect commercial and public pools, while the City of Dunwoody will continue to review and inspect swimming pools for non-public installations.

RECOMMENDATION

To maintain the consistent application and enforcement of the Mandatory Georgia codes for swimming pools and barriers as contained in the IRC staff recommends that the DeKalb County Health Department 2006 Swimming pools, Spas, and Bathhouses code be rescinded. The recommended changes to the City Code in Chapter 8 are shown in the attachment.

AN ORDINANCE AMENDING CHAPTER 8 OF THE CITY OF DUNWOODY CODE OF ORDINANCES BY UPDATING AND READOPTING STANDARD CODES

- WHEREAS, the City of Dunwoody is charged with preserving the health, safety and welfare of the citizens of the City; and
- WHEREAS, the adopted DeKalb County 2006 Swimming Pools, Spas and Bathhouses Code has been adopted as a permissive Code by the City of Dunwoody since the City's incorporation in 2008; and
- WHEREAS, the City has also adopted the International Residential Code (IRC) which also contains provisions concerning swimming pool construction and conflicts with the County Code by, among others, requiring only a 4 foot fence surrounding the pool while the County Code requires 5 feet; and
- WHEREAS, DeKalb County has indicated that it will adopt the State minimum swimming pool regulations later this year, thus eliminating the need for the Health Department's conflicting regulations.

THEREFORE, Mayor and City Council of the City of Dunwoody hereby ORDAIN as follows:

<u>Section 1</u>: Chapter 8 (Building Code) of the City of Dunwoody Code of Ordinances is hereby amended by revising Article I ("In General"), Section 8-1(c) ("State Minimum Standard Codes") to read as follows:

Sec. 8-1. - State minimum standard codes.

. . . .

(c) It is hereby declared to be the intention of the Council to enforce and adopt the following codes; the latest editions of the state minimum standard permissive codes as adopted by the state department of community affairs, or other applicable agencies:

International Property Maintenance Code

Swimming Pool Code as adopted by the county board of health

. . . .

STATE OF GEORGIA CITY OF DUNWOODY

ORDINANCE 2016-XX-XX

<u>Section 2:</u> This Amendment shall become effective immediately upon its adoption by the City Council, and incorporated into the Code of the City of Dunwoody, Georgia. This Amendment hereby repeals any and all conflicting ordinances and amendments.

SO ORDAINED AND EFFECT	IVE, this day of, 2016
	Approved:
	Denis L. Shortal, Mayor
ATTEST:	Approved as to Form and Content:
Sharon Lowery, City Clerk (Seal)	Office of City Attorney

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State Law reference— Municipal home rule, Ga. Const. art. IX, § II, O.C.G.A. § 36-35-1 et seq.; building trade contractors, O.C.G.A. § 43-14-1 et seq.; enforcement of adopted codes, O.C.G.A. § 8-2-26; state minimum standards codes, O.C.G.A. § 8-2-21; minimum standard codes to have uniform application throughout the state, O.C.G.A. §§ 8-2-25, 8-2-28.

ARTICLE I. - IN GENERAL

Sec. 8-1. - State minimum standard codes.

(a) It is hereby declared to be the intention of the council to enforce and adopt the state minimum standard codes as defined by O.C.G.A. § 8-2-20(9). The adoption includes the latest edition of the following state minimum standard mandatory codes, as adopted and amended by the state department of community affairs:

International Building Code National Electrical Code

International Fuel Gas Code International Fire Code

International Mechanical Code International Energy Conservation Code

International Plumbing Code International Residential Code

(b) The following appendices of said codes, as adopted and amended by the state department of community affairs, are hereby adopted by reference as though they were copied herein fully:

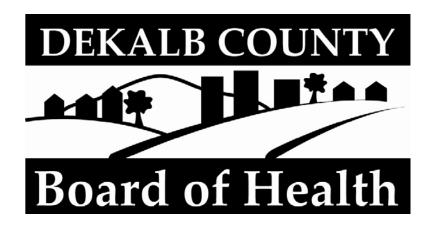
International Mechanical Code	Appendix C	
International Plumbing Code	Appendices C (state version), H, I (state version)	
International Residential Code	Appendix G	
International Energy Conservation Code	Appendices A, B, C, D (new per the sate DCA)	

(c) It is hereby declared to be the intention of the council to enforce and adopt the following codes; the latest editions of the state minimum standard permissive codes as adopted by the state department of community affairs, or other applicable agencies:

International Property Maintenance Code

Swimming Pool Code as adopted by the county board of health

(d) For all permits granted or approved by the county under earlier versions of any or all of these codes, it is hereby declared to be the intention of the council to enforce the code under which the project was approved.



The Code of DeKalb County, Georgia
Chapter 13, Article VIII,
Sections 13-181 through 13-218
Swimming Pools, Spas and
Bathhouses

Adopted June 20, 2006

AN ORDINANCE

A ORDINANCE TO AMEND THE CODE OF DEKALB COUNTY, GEORGIA, CHAPTER 13, ARTICLE VIII, PERTAINING TO SWIMMING POOLS, SPAS AND BATHHOUSES AND FOR OTHER PURPOSES

WHEREAS, the governing authority of DeKalb County is charged with protecting the life, health, safety, property and welfare of the citizens of DeKalb County; and

WHEREAS, the governing authority finds that with new types of pools and new devices and features being installed in pools and at water theme parks in DeKalb County, the existing pool regulations are insufficient to protect the life, health, safety and welfare of the citizens of DeKalb County; and

WHEREAS, the governing authority finds that it is necessary to require that the latest scientific methods to protect safety, guard against bodily injury, enhance bacteriological filtration, and to prevent disease transmission be employed in the operation of pools and water theme parks in DeKalb County.

NOW THEREFORE, **BE IT ORDAINED**, by the Governing Authority of DeKalb County, Georgia, and it is hereby ordained by the authority of same that Chapter 13, Article VIII, of the Code of DeKalb County, Georgia is hereby amended by the deletion of Sections 13-181 through 13-245 and the insertion of new sections 13-181 through 13-218 to read as follows:

PART I. ENACTMENT

By amending Chapter 13 Article VII of the DeKalb County Code by deleting the current Section 13-181 through 13-245 and by inserting in lieu thereof a new Section 13-181 through 13-218 to read as follows:

STATEMENT OF PURPOSE

This ordinance is intended to govern the construction, renovation and operation of public swimming pools, spas, bathing places and bathhouses in DeKalb County, Georgia. Unless otherwise noted, any and all references shall be deemed to be "by the department," namely, the DeKalb County Board of Health. All elements of this article shall apply to all pools, except where additional provisions are noted for specific pool types or features.

ARTICLE VIII. SWIMMING POOLS

Sec. 13-181. Definitions

For the purposes of this article, certain terms and words are hereby defined. Where words are not therein defined, but are defined in section 1-2, those words shall have the meaning as defined therein. The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

- "Abandoned pool" means a pool which the owner and/or permit holder has permanently ceased using (usually resulting in a nuisance) or a pool upon which the pool contractor or builder has ceased construction.
- "Approved" means accepted or acceptable to the department based on a determination of conformity with this article and principles, practices and generally recognized standards that protect public health.
- "Barrier" means a fence, wall, building wall, or combination thereof, which completely surrounds the pool area and effectively obstructs access into the pool area.
- "Bather" means any person, wearing bathing attire, using a pool, spa, hot tub or other bathing facility and adjoining deck area for the purpose of water sports, recreation, therapy or related activities. Bather is also referred to as a user.
- "Bathhouse" means a facility that contains toilet rooms, shower rooms, and dressing rooms to be used by swimmers before and after swimming for the purpose of dressing and/or hygienic bathing.
- "Bathing load" means the maximum number of bathers allowed within the pool enclosure based on the amount of the pool's water surface area.
- "Certified Pool Contractor" means a person who:
- (1) engages in the design, construction or renovation of a swimming pool governed by this article; and

- (2) has passed an examination demonstrating their familiarity with this article; and
- (3) consistently complies with this article; and
- (4) possesses a current business license and valid certification from the department.
- "Closed pool" means a pool, including all areas within the pool enclosure, that are inaccessible to bathers by closing and securing all entry points into the pool enclosure, and is posted with a conspicuous sign "pool closed" at each entry point, as ordered by the department.
- "Deck" means the areas immediately adjacent to a pool, including the coping, that are constructed specifically for bathers to stand, walk or sit upon.
- "Department" means the DeKalb County Board of Health or its authorized representative(s).
- "Design Flow Rate" means the amount of water in gallons passing a specific point in the pool's circulation system in a given time in minutes, expressed as gallons per minute (g. p. m.).
- "Handhold / Foothold" means any surface or object that provides a means for traversing the pool barrier, that is greater than 1½" (one and one quarter inches) in horizontal width and/or is angled less than 45° from horizontal.
- "Hypo-chlorinator" means a mechanical/electrical device for dispensing chlorine in a liquid state in measured doses.
- "Imminent Health Hazard" means a threat or danger to health or safety that is considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that merits immediate correction or cessation of operation to prevent injury or illness.
- "Interactive play device" means any manufactured apparatus using sprayed, jetted, or other type of water source that contacts bathers in a non-threatening manner.
- "Modification" means any repair, change, alteration or substitution made to the pool, pool equipment, decking, bathhouse, pool barrier, or any other area or facility related thereof.
- "Major modification" includes, but is not limited to, deck surface refinishing; filter, pump or chemical feeder replacement; bathhouse floor replacement; plumbing or hydraulic alterations or similar changes that would require a permit. "Minor modification" includes, but is not limited to, replacement of pressure gauges and flow meters.
- "Multi-purpose pool" means a pool which is designed and constructed with a combination of bathing features which includes, but is not limited to, a waterslide, diving well, zero-depth entry, and/or other similar features.

- "Not open" means any pool that has been closed by the pool owner, permit holder or designee with all entry points secured and posted with a conspicuous sign that reads "Pool Closed".
- "Permit holder" means the person or entity who possesses a valid permit to operate a swimming pool and is legally responsible for the operation of the swimming pool including, but not limited to, the pool owner, agent for the pool owner, or other such authorized or designated person.
- "Person" means any individual, owner, partnership, corporation, entity or association, or designee, including governmental entities.
- "Pool Operator" means a person who:
- (1) has been trained as a pool operator; and
- (2) is responsible for the pool operation; and
- (3) is familiar with the pool's systems and this article
- "Private Residential Swimming Pool" means any swimming pool, as defined herein, for use by the members of a single-family residence and invited guests under the control of an individual homeowner, the use of which is not open to the general public.
- "Public Spa" means any pool, and all facilities incident thereto, other than a private residential swimming pool, including, hot tubs and recreational whirlpools, primarily designed for individual or small group bathing, which may employ circulated water, tempered water, air-induced bubbles or a combination thereof, and is open for use by the general public, regardless of whether a fee is charged.
- "Public Swimming Pool" means any swimming pool, as defined herein, and all facilities incident thereto, other than a private residential pool, for collective use by the general public for swimming, regardless of whether the person be owner, operator, lessor, lessee, licensor, licensee or concessionaire.
- "Renovation" means any major modifications as defined in this section of an existing pool and/or facility involving replacement or reconstruction of equipment, pool surface, bathhouse, and/or deck, or similar changes.
- "Ritual pool" means a pool in which only baptisms and other similar religious functions are conducted.
- "Seasonal pool" means a pool that is opened for a few months during the calendar year, is then closed and reopens the next year during the same time period.

"Slip Resisting" means a surface that has been so treated or constructed to significantly reduce the chance of a user slipping. The surface shall have a minimum coefficient of friction of 0.6 and not be an abrasion hazard.

"Special purpose pool" means any pool designed and used primarily for training, medical purposes, or physical therapy, or exercise.

"Splash pool" means a pool designed and operated primarily to receive bathers from a water slide.

"Spray pool" means an artificial pool or area into which water complying with this article is jetted but is not allowed to settle.

"Surge Device" means a structure and/or mechanical means for automatically compensating for the displacement of pool water from the pool by bathers, waves or similar actions in order to maintain the pool's normal operating water level.

"Swimming pool" or "pool used in this definition" means a watertight structure composed of concrete, masonry or other approved material and finish, located either indoors or outdoors, which is used or designed to be used by humans for bathing, recreation, diving or other related purposes, together with the buildings, appurtenances and equipment required or used in connection therewith. A swimming pool or pool may be publicly or privately owned, and is operated by a person, as defined in this article, regardless whether or not a fee is charged for admission and use. "Pool" also means any swimming pool, whirlpool, wading pool, spray pool, slide pool, multi-purpose pool, zero-depth entry pool, interactive play attraction, or special purpose pool. Ritual pools are excluded from this article. Pools serving two or less private residences are excluded from this article except for pool barrier/fencing and septic system review.

"Turnover rate" or "turnover" means the period of time required to circulate a volume of water equal to the pool capacity.

"Wading pool" means any pool used or designed to be used for dipping and bathing.

"Wave pool" means a pool that has a mechanical means for generating waves at one end of the pool, typically the deepest portion, with the undulations ending at the other end of the pool, typically a zero-depth entry point.

"Watercourse pool" means a "pool" as defined in this section in which water is moving continuously from one point to another, which users may be partially or wholly submerged, and users may float with or without inner tubes, rafts, or other similar approved water flotation devices. This type of pool is commonly known as a lazy river.

"Water slide," "slide," or "flume" means any device having a water channel, for users to enter into a splash pool.

"Weir" means a flap within a skimmer that adjusts automatically to small changes in water level and assures a continuous water flow to the skimmer.

"Whirlpool" means a pool, spa, hot tub, or other similar structure, which may be used in conjunction with tempered water and air induction or high velocity water circulation systems, and designed for use by a small number of bathers. (Whirlpools that are emptied and cleaned after each individual use are exempt from regulation under this article.)

"Year-round pool" means a pool that is opened and available for use throughout the calendar year.

"Zero-depth entry pool" means a type of pool in which the pool floor intersects the pool water surface.

Sec. 13-182. Purpose and Findings

- a.) This article contains regulations 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.
- b.) This article shall be known and may be cited as the DeKalb County swimming pool regulations.
- c.) The purpose of this article is to provide basic and uniform standards governing the construction and maintenance of swimming pools and related structures and premises located within DeKalb County, Georgia. Such purpose further provides the establishment of reasonable safeguards for the safety, health and welfare of the attendants and users thereof and of the general public.

Sec. 13-183. Permit required

a.) Permit required. No person shall construct, operate or modify a pool without having first applied for and received a valid permit from the department. The permit issued shall be valid until suspended, revoked, or has expired. Failure to pay a permit fee, which includes failure due to returned checks for insufficient funds, shall be a violation of this article and shall invalidate the permit accordingly.

- b.) *Other approvals*. Any person constructing, operating or modifying a pool must comply with all other applicable regulations and codes.
- c.) Use restrictions. The department may set use restrictions on any pool and shall require the permit holder or authorized agent to post appropriate compliance notices conspicuously in public view. The department shall post signs or require signs to be posted prohibiting or limiting the use of any pool for non-compliance with this article. Signs that are property of the department shall be removed only by the department. No person may enter the pool enclosure while the pool is posted "Closed" except an employee or agent of the department or other authorized personnel. The pool area shall remain closed until permission to reopen is requested from the permit holder or designee and permission is granted by the department.
- d.) Wastewater discharge. Direct discharge of polluted waters, such as drainage from overflow facilities, filter backwash waters or contaminated pool drainage from any public or residential pool shall not be made to any outlet or to any portion of the public storm drain system, or to any natural stream or to any body of water or ground surface within the jurisdiction of the board, unless otherwise approved by the director; except that discharge from private residential pools may be discharged on the ground surface, provided the discharge is confined to the pool owner's property and does not result in a nuisance.
- e.) Construction or modification without approval. Any pool constructed or modified without the prior written approval of the department shall be subject to compliance with the current code.

Sec. 13-184. Compliance Requirements

- a) Department inspections. The department shall conduct periodic inspections at each pool to insure that good operating practice is employed and that standards are maintained in compliance with this article. The department shall order the pool permit holder or operator to immediately cease operation whenever the department determines that the pool related facilities and/or appurtenances are not in compliance with this article, or for non-payment of fees. A fee shall be charged for each re-inspection, if necessary, after the initial and follow-up inspections following the closing of a pool. Additional inspections of a pool shall be performed as necessary to ensure compliance with this article. Representatives of the department, after proper identification, shall be permitted to enter any pool area during hours of operation for the purpose of performing inspections to determine compliance with this article.
- b) *Inspection reports*. Findings made during an inspection shall be recorded on an inspection report form. The inspection report shall also summarize the requirements of this article. A copy of the completed inspection report form shall

be furnished to the owner, permit holder and/or designee at the conclusion of the inspection. The current inspection report shall be displayed in a conspicuous place where it is easily readable by the public upon entry into the pool area. The report is not to be removed until a new report is issued.

- c) Additional Documentation. In addition to the inspection report findings, other evidence of non-compliance with this article may also be documented via photographs, samples, and any other means of documentation deemed necessary by the department.
- d) Routine Compliance. Corrective actions for pools shall be implemented when any violations are found to exist, as outlined in the department's current "Enforcement Policy."
- e) Imminent health hazard. When an imminent health hazard is found to exist, corrective actions for pools shall be implemented as ordered by the department, and shall include immediate cessation of operation until the facility is determined by the department to be in compliance with all provisions of this article. Failure of the owner, permit holder and/or designee to comply with the corrective action plan and immediate cessation of operation of the pool shall subject the pool to immediate closure by the department. The following conditions shall be considered as or contributing to an imminent health hazard:
 - (1) The amount of disinfectant in the pool water is above the maximum or below the minimum level; and
 - (2) Inability to clearly see the main drain(s) or the inability to distinguish the type, shape, or number of grate openings in the pool; and
 - (3) Missing essential safety equipment, including but not limited to, life ring and/or rope, Shepherd's hook, or the existence of an inoperable pool phone; and
 - (4) Barrier not effective; and
 - (5) any other condition deemed to be an imminent health hazard by the department including, but not limited to, the following: bathing load exceeded; occurrence of fecal matter, blood or vomitus incident in the pool; sanitary facilities not functioning properly or in an unsanitary condition; safety hazards.

- f) Procedure when infection is suspected. When the department has reasonable cause to suspect possible disease transmission, it may require any or all of the following measures, and any other actions necessary to be taken by the permit holder or authorized agent:
 - (1) The immediate exclusion of any suspected person from the pool; and
 - (2) The immediate closing of the pool concerned until, in the opinion of the department, no further danger of disease transmission or outbreak exists; and
 - (3) Adequate medical and laboratory examination as deemed necessary.
- g) Accident reporting. All drownings or near-drownings, and all disembowelments or near-disembowelments shall be reported in writing within twenty-four (24) hours of the occurrence to the department and shall fully describe the incident. A copy of the paramedic, EMT, medical examiner or police report, if any, shall also be forwarded to the department with the report.
- h) Fecal or vomitus accidents. In order to prevent a fecal or vomitus accident in a pool, the permit holder or designee shall follow the department's current "Recommendations for Reducing the Risk of E. Coli Transmission in a Swimming Pool", which is adopted and incorporated herein by this reference. The permit holder or designee shall properly eliminate the possible contamination of bathers when a fecal, vomitus or blood accident occurs in a pool, by following the department's current "Recommended Procedures for Managing Fecal Accidents or Contamination with Vomitus or Blood in a Swimming Pool", which is adopted and incorporated herein by this reference.
- i) Suspension or Revocation of permit. The department shall have the authority to suspend or revoke any permit for failure to comply with the provisions of this Article. When an application for a permit is denied or a permit previously granted is to be suspended or revoked, the applicant or holder of the permit must be notified in writing, specifically stating any and all reasons why the action is to be taken. Suspension is effective upon service of a written notice at the address on file with the department for the operator, permit holder or by hand delivery thereof, and pool operation must cease immediately. The notice must state the basis for the suspension and advise the owner, permit holder, or designee of the right to a preliminary hearing to be conducted by an experienced supervisory level employee of the department not directly involved in the suspension. The request for a preliminary hearing by the permit holder must be requested in writing within ten (10) days of being served with the suspension or revocation notice. If requested, the preliminary hearing must be held within twenty (20) days of the request. The formal rules of evidence will not apply, but both, the department and the owner, permit holder, or designee may present and cross examine witnesses,

introduce records and exhibits and make argument. The hearing official will be authorized to rescind or modify the suspension with conditions, or to continue the suspension, with or without conditions. If the suspension is not rescinded, the owner, permit holder or designee shall have ten (10) days to make written request for an additional evidentiary hearing before the director or her/his designee. If requested, the *de novo* evidentiary hearing must be held within thirty (30) days of the written request. If a hearing is not requested, upon correction of all violations, the owner, permit holder, or designee may request an inspection to reinstate the permit. The department may revoke any permit to operate a pool if the owner, permit holder or designee does not comply with the requirements of this article; if the operation of the facility does not comply with the requirements of this article; or if the operation of the pool otherwise constitutes an imminent health hazard or safety hazard to the public.

- j) Service of notice. A notice of hearing is properly served when it is hand delivered to the owner, permit holder, or designee, or when it is sent via certified or regular U.S. mail, return receipt requested, to the last known address of the owner, permit holder, or designee. A copy of the notice shall be filed in the records of the department.
- k) *Content of Notice*. All notices shall state the date, time, place, and nature of the hearing, and shall be filed in the records of the department.
- l) Hearings. Hearings shall be conducted at a time and place designated by the department. Any oral testimony given at a hearing shall be recorded verbatim via electronic recording device, and the hearing officer may make provisions for sufficient transcription and copies of the recording upon request. The hearing officer shall make a final determination based upon the complete hearing record and shall sustain, modify, or rescind any notice or order considered in the hearing. The decision of the hearing officer shall be final. A written report of the hearing decision shall be furnished to the owner and/or permit holder by the department.

Sec. 13-185. Construction approval

- a.) Plan review. Upon request, the department shall provide construction application forms and hydraulic analysis forms for the approval of pool construction. All applications and any supplemental data shall be submitted to the department for review.
 - (1) Plan preparation. All drawings, specifications and data as required by the department shall be prepared and submitted by a certified pool contractor.

- (2) *Plan details.* Complete plans and details of the pool construction project shall meet the requirements as set forth in the department's current, appropriate pool "Plan Review Construction Checklist" shall be accompanied by prints, including a hydraulic analysis of the pool piping and circulation equipment, samples of pool and/or flooring tiles or other surfacing materials, and manufacturer's cut sheets and/or specifications on all equipment. Prints or drawings shall comply with standard architectural/engineering practice, and shall bear identification of the certified pool contractor. Other additional data or information may be required by the department to clearly demonstrate and document the work to be undertaken. Minimum print scale shall be one-eighth inch per foot (1/8" / 1') architectural, or one inch per ten feet (1" / 10'). A copy of approved pool plans shall be maintained on the premises in the pool office or equipment room.
- (3) Additional data. Additional data required by the department for the purpose of clarification, anticipated use of the pool or to support any changes in design or scope of the project must be submitted prior to issuance of a permit to construct.
- (4) Changes to plans. Once a construction permit has been issued for a pool, construction must be in accordance with approved plans and specifications. Should any changes in the plans become necessary during construction, a letter, describing any changes, revised plans and specifications from the certified pool contractor, shall be submitted to the department for review and approval prior to initiation of such changes. Previously submitted plans shall not be altered without prior approval from the department.
- (5) Plan review fee. A plan review fee shall be remitted to the department with the plans in accordance with the department's current fee schedule. A fee shall be charged for each additional major or minor plan re-submittal after the initial and follow up review in accordance with the departments' current fee schedule.
- (6) Construction security. All pool construction shall be identified by maintaining a visible indication of possible hazard (flagging or "caution" tape, tree save fence, etc.) until the work is completed.

- b.) Certified pool contractor. The certified pool contractor shall be responsible for ensuring that all pool construction is performed in accordance with this article but not for work which is outside his scope and shall be subject to the following conditions:
 - (1) *Certification*. Certification shall be obtained by passing a written examination administered by the department or by a department recognized and approved for reciprocity.
 - (2) Certification Renewal. Renewal of certification shall be completed every five (5) years and prior to the contractor's certification anniversary. Certification renewal will be dependent upon the certified pool contractor's past performance, compliance with this article, and completion of mandatory continuing education conducted and/or accepted by the department within the five (5) year certification renewal period.
 - (3) Fee. A fee shall be remitted to the department with a completed application for certification. A fee shall be remitted for renewal of certification within the five (5) year period and prior to certification expiration in accordance with the department's current fee schedule.
 - (4) Abandoned construction. A certified pool contractor shall not abandon an incomplete installation without notification within 45 days of such event; such notification may not absolve the certified pool contractor of any liability which he/she might otherwise be subject unto for the abandonment.
 - (5) Suspension and revocation. A pool contractor's certificate may be suspended or revoked by the department upon a hearing to determine any violation of any of the requirements of this article pertaining to certified pool contractors.
 - (6) Duration of suspension and revocation. Suspension of a pool contractor's certification shall be levied for a minimum of one year. Revocation of a contractor's certificate shall be levied for a minimum of five years. Two suspensions within a five-year period shall be grounds for permanent revocation. A pool contractor with a suspended or revoked certificate shall not be allowed to submit plans for construction nor construct any pool covered by this article.

- (7) Appeal. A certified pool contractor may appeal in writing prior to the effective date of the suspension or revocation of their certificate. If notice of appeal of the pool contractor is timely filed with the department he or she will be afforded an opportunity for a hearing before this department to show cause why this certificate should not be suspended or revoked. The decision by the department shall be based on the certified pool contractor's performance and shall be final.
- (8) Listing. The department shall maintain a current listing of certified pool contractors which shall include their last known mailing address.
- (9) Inactivity or change. A certified pool contractor who has not presented pool construction plans in the metro Health Districts for a period of two years or longer must be recertified prior to the department's acceptance of their submittal of plans or applications to construct pools. Any certified pool contractor who has a change in employment or address must notify the department in writing within thirty (30) calendar days from the date of the change.
- (10) *Inspections*. A certified pool contractor must request a piping inspection and pressure test, a final construction inspection and, if necessary, any re-inspection of a newly constructed pool that they are responsible for prior to issuance of a permit to operate. A permit to operate will not be issued until all required inspections are completed. The certified pool contractor or his or her authorized representative shall be present at the site for each of these inspections.
- (11) *Instructions*. Upon completion of construction and/or prior to the operation of any pool, the certified pool contractor shall give the permit holder complete oral and written operational instructions for the pool, on all of the pool equipment, on water chemistry, maintenance procedures, and other related information.

- c.) Preliminary plan review. The owner or agent for the owner may request a preliminary review of the plans by the department without obtaining a permit to construct the pool. A fee shall be charged for this consultation service, in accordance with the department's current fee schedule.
- d.) Other agencies' approvals. All work must be inspected and approved by all appropriate agencies prior to issuance of a permit to operate.
- e.) Piping inspection. All pool piping shall be completely exposed and subject to an induced, static water, air, or water/air pressure test at a minimum of fifty pounds per square inch (50 p.s.i.) for a minimum of thirty (30) minutes and shall be inspected by the department prior to being covered by earth, deck or the pool structure. If there are any variations from the approved plans and specifications, such variations must be brought into conformance by the certified pool contractor in accordance with the approved plans. Plans and specifications detailing the variations or changes must be submitted for a construction permit revision prior to continuance of construction.
- f.) Final construction inspection. The department shall conduct an inspection before final pool construction approval. If the construction is not approved on the initial inspection and first follow-up inspection, then a fee shall be charged for each additional inspection until a final approval is granted.
- g.) *Invalid permit*. If construction is not commenced within one year from the date of approval, the construction permit expires and the project must be resubmitted to the department for approval. A written request for an extension of time prior to the expiration of the permit to commence construction may be approved by the department if no changes to the project are proposed or required.

Sec. 13-186. Modification approval.

a.) *Modification approval.* An application to modify a pool must be submitted to and approved by the department prior to the modification being made. All modifications shall be in accordance with plans and specifications approved by the department. Changes in an approved project may be made only after written approval and the written consent of the department. Any additional data required by the department for purpose of clarification, anticipated use or to support the design or scope of the project must be submitted prior to issuance of a permit to modify. Permits to modify are not transferable. A permit to modify a pool is required before any major modification. Modification permits shall be effective for twelve (12) months from date of issuance or until the expiration date on the permit. Written notification shall be made to the department for all other modifications. Replacement of existing equipment with the same equipment

(i.e., same manufacturer, model number and capacity) will not require a permit to modify. If the replacement equipment is not the same as the existing equipment, then a permit, along with submittal of the fee, specification sheet(s), and any other data deemed necessary by the Department, is required prior to commencement of any work.

- b.) *Invalid permit*. If modifications are not commenced by the expiration date of the permit, the permit expires and the project must be resubmitted to the department before work may commence. A written request for an extension of time prior to the expiration of the permit to commence a modification may be approved by the department if no changes to the project are proposed or required.
- c.) *Fees.* A permit fee shall be submitted with the application for a major modification. A fee shall be charged for each re-inspection, if necessary, after the initial and follow-up inspections.

Sec. 13-187. Operational approval.

- a.) Permit required. No person or permit holder shall operate a pool without having first applied for and obtained a valid permit to operate from the department. A permit to operate a pool may be suspended or revoked for any violation of this article. Operating permits will become invalid as indicated by the permit expiration date. Valid operating permits shall be conspicuously posted for public viewing in the pool area as close to the entrance as possible. Any swimming pool operating without a valid permit from the department shall be subject to immediate closure.
- b.) *Permit nontransferable*. Permits are not transferable from one person to another or from one entity to another. If the permit holder is changed, then the current permit to operate the swimming pool is invalid and a new permit to operate is required.
- c.) Permit, current inspection report, and certified pool operator's certificate displayed. The operating permit shall be framed and displayed in a conspicuous place as close to the pool entrance as possible such that it is easily readable by the public at all times. The current inspection report from the department shall be displayed in a conspicuous place where it is easily readable by the public at all times. A copy of the pool operator's certificate shall be conspicuously displayed near the operating permit.
- d.) *Operating instructions*. All instructions necessary for the proper operation and maintenance of all pool equipment and appurtenances must be easily accessible, readable and conspicuously posted in the filter or equipment room.

- e.) Fees. For any pool a fee shall be submitted with the application for a permit to operate a pool. Permits are not transferable from one person to another or from one entity to another. If the permit holder is changed, then the current permit to operate the swimming pool is invalid and a new permit to operate is required. For any pool that is in operation beyond the permit expiration date without permission from the department, the fee for an application for a permit to operate shall be doubled, in accordance with the current fee schedule.
- f.) Pools not in use/abandoned pools. Any pool that is closed, not open, not in use or operation, or seasonal pools that are closed until the next swim season, shall be maintained in a safe and sanitary condition. The owner, permit holder or designee for any abandoned pool shall create an opening through the shell of the bottom of the pool for drainage and fill the entire pool with clean earth. Neither an abandoned pool nor any pool not in use shall be allowed to create a nuisance under law.

Sec. 13-188. Construction.

- a.) Finish and materials. Pools shall be constructed of inert, impervious, durable, non-toxic materials that will provide a smooth, watertight and easily cleanable surface. All horizontal, interior pool surfaces at pool depths of five feet (5') or less, including steps, benches, or seats, shall be non-slip. The surface shall have no cracks or open joints and interior corners shall be coved. Except for water line tiles, maximum twelve inch (12") wide racing lane markers, or wall turn targets, the surface below normal water level shall be finished in a very light color. Vinyl pool liners are prohibited. Rough and abrasive materials are prohibited. Any pool with a metal-based shell or utilizing dissimilar metals shall be provided with sacrificial anodes or other approved means to reduce galvanic action and electrolytic corrosion. There shall be no extensions, means of entanglement or other obstructions in the pool that may cause entrapment or injury to the user.
- b.) Design. Pools shall be constructed to provide adequate water circulation, bather access and egress and to afford proper operational control. Pool proportioning between deep and shallow water shall be in accordance with the anticipated uses of the pool, with sound engineering and public health design and construction principles in accordance with (see Appendix - Figure #1 Minimum / maximum dimension requirements) the ANSI Standard for Public Swimming Pools. No pool(s) shall be constructed in a manner that limits the use of life saving equipment, limits the pool operator's ability to supervise the facility or creates a hazard to bathers. No pool shall have more than 20% of its perimeter elevated continuously. Vertical edged corners and all protrusions greater than six inches (6') below water level shall have a minimum three-inch (3') radius. Horizontal edges and corners of steps, benches, seats, and similar surfaces shall have a minimum one-inch (1") radius. The wall-to-floor juncture shall be coved with a minimum three-inch (3") radius. Interior walls shall be vertical and shall not be greater than eleven degrees (11°) from plumb.

- c.) Size. The minimum pool surface area shall be five hundred square feet (500 s. f.), except where otherwise described in this article. Calculations for determining size of a pool and the number and type of associated facilities shall be based on the maximum bathing load. Pool usage shall not exceed the maximum bathing load. The bathing load shall be calculated on the basis of one person for each ten square feet (10 s.f.) of pool surface area where the depth is less than or equal to five feet (5'); one (1) person for each twenty square feet (20 s.f.) of pool surface in that portion where the depth exceeds five feet (5') approved diving area; and 1 person for every three hundred square feet (300 s.f.) where depths exceed five feet (5') and one or more diving boards/platforms are installed. The department shall determine the bathing load for any pool that is designated as a "Special Purpose" pool, any pool with use restrictions, or pools serving facilities with no dwelling units. Pool bathing load shall be determined by the department based on the anticipated usage and assessment of other, similar facilities.
- d.) Depths. Minimum water depths shall be determined by the intended use of the pool. Depth at the slope-break shall not be greater than five feet (5') for pools with depths exceeding five feet (5'). In the diving well, depth shall be as stipulated in the ANSI Standard for Public Swimming Pools Section entitled "Diving" and in accordance with the minimum specifications as indicated in the (see Appendix Figure #2) "Minimum Water Envelopes" from the same standard.
 - **(1)** Depth markers. Permanent, easily-readable, depth markers shall be provided with minimum four inch (4") high, black numbers and letters with a white background, indicated in feet and, when applicable, in inches (i.e., 5 FT or 5 FEET; 3 FT 6 IN or 3 FEET 6 INCHES). Metric depth markings can be used in conjunction with, but not substitute for, required depth markers. The depth of water shall be indicated on the vertical pool wall at or above the waterline. Depth markers shall indicate the actual pool depth within three inches (3") at normal operating water level when measured three feet (3') from the pool wall or at a tangent point where the cove radius meets the floor, whichever is deeper. Depth markers on the vertical pool wall shall be positioned to be read from the waterside. Depth markers shall be placed in such a way that they allow as much of the numerical value to be visible above the waterline as possible. Deck depth markers shall be installed within eighteen inches (18") of the pool wall and positioned to be read while standing on the deck facing the pool water. Horizontal depth markers shall be slip resisting. Depth markers shall be installed at the maximum and minimum water depths and at all points of slope change. Depth markers shall be installed at intermediate increments of water depth not to exceed two feet (2'). Depth markers

shall be spaced not to exceed twenty-five feet (25') intervals. Depth markers shall be arranged uniformly on both sides and both ends of the pool. Depth markers on irregularly-shaped pools shall designate depths at all major deviations in shape.

- (2) "No diving" markers. Deck areas at the shallow portion of the pool or where pool depths are five feet (5') or less shall be permanently marked "No Diving" in black letters with a white background with minimum two inch (2") high lettering, each warning spaced evenly around the pool perimeter, located next to depth markers "No Diving" markers shall be easily readable and slip resisting. An international "No Diving" symbol may be used in conjunction with, but not in lieu of approved, lettered, "No Diving" markers. "No Diving" markers shall be installed within eighteen inches (18") of the pool wall.
- e.) Bottom slopes. The pool floor shall slope uniformly and continuously from the shallow point of the pool at a maximum of one foot in twelve feet (1'/12") to the deep point, the slope break, or other approved depth change. In pools with depths exceeding five feet (5'), the floor shall have a maximum uniform slope of one foot in three feet (1'/3'), see Appendix Figure #1 Minimum/maximum dimension requirements. Each pool shall be constructed to facilitate complete drainage of the pool.
- f.) Steps and ladders. Steps and/or ladders shall be in such number and location as to provide bathers safe egress from the pool. They shall have an easily-cleanable, corrosion-resistant, impervious material, with treads that have a non-slip finish, and shall be self-draining. Steps shall have a maximum riser height of twelve inches (12") and a minimum tread depth of twelve inches (12") with a minimum unobstructed width of twenty inches (20") on both sides of each step. All steps shall have handrails anchored in the bottom step and extended over the coping and anchored in the deck, or a handrail double anchored in the deck that extends out to the center of the bottom step with a maximum height of six inches (6") above the normal water level at that point. Recessed step treads shall have a uniform vertical spacing of twelve inches (12") maximum and seven inches (7") minimum, with a minimum depth of five inches (5") and minimum width of twelve inches (12"). The maximum distance from the coping edge to the upper tread shall be twelve inches (12"). Recessed treads shall be self-draining. Each set of recessed treads shall be provided with a set of handrails or grab rails to serve all treads. An additional step or ladder will be required for each additional seventy five feet (75') or major fraction thereof of pool perimeter over one hundred and fifty feet (150'). Steps shall be clearly and permanently marked on the horizontal surface, within two inches (2") of the step edge, by a minimum 2" dark, continuous line of slip resisting tile.

- g.) Benches and seats. Benches and seats shall be clearly and permanently marked on the horizontal surface within two inches (2") of the step edge, by a minimum 2" dark, continuous line of slip resisting tile.
- h.) Decks. A deck no less than five feet (5') in width, as measured from the inside wall of a pool, shall surround a minimum of 65% of the pool perimeter. No non-deck area shall exceed 20 feet or 20% of the pool perimeter whichever is less. Where immediate access to the pool from the deck or from the deck to pool is prohibited or limited by the extended height of a pool wall, a column, or other structure, a stainless steel grab rail shall be installed continuously along the entire pool wall, at the normal water level, in the areas where access is prohibited or limited.
 - (1) Minimum deck width. A minimum of four feet (4') of unobstructed deck is required behind diving boards and platforms as measured from the edge of the board's or platform's ladder or handrail, whichever is the greatest distance. A minimum of ten feet (10') of complying deck shall separate a pool from any other pool.
 - (2) *Minimum deck area*. The minimum, complying deck area required shall be equal in size to or greater than the pool surface area.

- (3) Deck surface. The required deck shall be unobstructed in all directions and shall be constructed at the same elevation as the outside edge of the coping. Minimum vertical clearance throughout the deck area shall be six feet, eight inches (6' 8"), except the ceiling for an indoor pool, which shall be eight feet (8'). The deck shall be light-colored, slip resisting, easily cleanable and drain properly. Rough and abrasive surfaces are prohibited. Prohibited deck surfaces include gravel, pea gravel, epoxy gravel, wood, carpeting, and vinyl. A sample of the deck surface material shall be submitted, other than broom-finished concrete, for approval prior to installation.
- (4) Deck slope and drainage. Decks shall have a minimum transverse slope of one-quarter inch (1/4") per foot and a maximum of one-half inch (1/2") per foot away from the pool or toward deck drains. The plane of the deck surface shall be uniform, with no steps, curbs, or similar structures, within the minimum required, complying deck area. Decks shall not retain any standing water greater than one-eighth inches (1/8") in depth or greater than one (1) square foot of area for a period of time not to exceed twenty (20) minutes. Deck drainage shall not be incorporated with any pool water or any potable water source. Deck drain grates shall be secured, yet easily removable with an appropriate tool to facilitate cleaning the drains. Adjacent areas to the deck and walkway(s) within the pool enclosure shall be safe and well drained.
- (5) Coping. A coping block made with a bull nosed, raised projection or other approved design, with a minimum one inch (1") radius, shall be installed along the entire perimeter of the pool except at the entry point for zero-depth entry pools. The coping shall not retain any water. The coping shall be considered as pool decking.
- (6) *Hose bibs.* Hose bibs, with backflow prevention, shall be installed within the pool enclosure and located no more than one hundred feet (100') apart.

- (7) Deck joints and gaps. The maximum gaps in decks, between pool decks and the coping, or between other decks or walkways, shall be one half inch (½") of horizontal clearance with a maximum vertical elevation of one quarter inch (¼"). Control joints in decks shall be provided to minimize the potential for cracks. Construction joints where pool coping meets concrete deck(s) or other adjacent structures shall be watertight.
- (8) *Deck edges*. The edge and corners of deck(s) shall be rounded, tapered or designed and constructed to eliminate sharp corners.
- (9) *Trash receptacle*. A minimum of one (1) covered and lined trash receptacle shall be provided and placed in a convenient location in the pool area.
- i.) Construction tolerances. The certified pool contractor shall state on the plans of a pool that construction and design tolerances shall comply with the current edition of the ANSI/NSPI-1, "American National Standard for Public Swimming Pools."

Sec. 13-189. Water quality and sanitation.

- a.) Water source. Water supplied to the pool, bathhouse, drinking fountain, hose bibs, or any other water supply or outlet shall be supplied from a community water supply regulated under the Georgia Safe Drinking Water Act of 1977 (Act 231 O.CG.A. section 12-5-170 (Federal Safe Drinking Water Act PL 93-523). Water supplied to the pool must be delivered through a fill spout with a minimum three inch (3") air gap, installed at least two (2) pipe diameters above the rim of the pool or surge chamber, and located so as not to create an obstruction on the deck or through an approved make-up water system that is installed in a location which is readily accessible for inspection, repair or testing.
- b.) *Backflow prevention*. Approved backflow prevention must be provided on all potable water lines.
- c.) Pool water. A sufficient number of samples may be taken, whenever the department deems necessary, to affirm, via bacteriological analysis, that the pool water meets the requirements in this article. Samples shall be taken while the pool is in use during the peak bathing load. 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" (American Public Health Association) and/or approved equivalent by the department.

- (1) Chemical Quality. The pool shall be maintained in an alkaline condition at all times with the pH between 7.2 and 7.8. Chlorine disinfection shall be provided on all pools except when other approved disinfection methods are utilized. The free-chlorine residual in all parts of the pool shall be maintained at a concentration of no less than one and one-half parts per million (1.5ppm) at all times. Where stabilizing agents are used, a free-chlorine residual shall be maintained at a concentration of no less than three parts per million (3ppm) at all times. The maximum stabilized or unstabilized free chlorine residual shall not exceed ten parts per million (10ppm) except when super-chlorinating or shocking the pool. A N-diethyl-p-phenylenediamine (D.P.D) test kit, or other approved method by the department to measure the free chlorine residual shall be provided and used. When bromine is utilized, the residual in all parts of the pool shall be maintained at a concentration of no less than three parts per million (3.0p.p.m.) and no greater than eight parts per million (8.0p.p.m.). A D.P.D. test kit or other approved method by the department to measure the bromine residual shall be provided and used. If Ultra-Violet (UV), ozone generating or ionization equipment is used, it is only recognized as a supplementary disinfection to the minimum requirements for chlorine or bromine disinfectants.
- (2) Stabilizing chemicals. No stabilizing chemicals shall be utilized in any indoor pool. When cyanuric acid is used as a stabilizing agent, the maximum concentration shall not exceed one hundred parts per million (100 p.p.m.). At pools using cyanurates, a DPD test kit with cyanuric acid test reagents to measure the cyanurate concentration shall be provided and used. The cyanurate test kit must register readings in excess of the maximum permissible concentration.
- (3) *Pool chemicals*. Only chemicals approved by the Environmental Protection Agency and by the department shall be used.

- (4) Testing frequency. The pool water shall be tested for the disinfectant level and pH at least two times each day or as often as necessary if circumstances warrant, including prior to opening and during peak bathing loads. If applicable, the cyanurate level shall be tested at least once a week. Test results shall be entered on a log that shall be maintained in the pool area for ready access whenever the pool is open.
- (5) Cleanliness. All pools shall be kept free from sediment, dirt or debris by frequent brushing and vacuuming of the bottom and sidewalls. Visible scum shall be removed immediately.
- (6) Clarity. At all times when a pool is in use, the water shall be of such clarity that the main drains on the bottom of the pool at the deepest point are clearly visible from the deck. The viewer shall be able to clearly distinguish the type, shape and number of openings of the main drain grates or covers.

Sec. 13-190. Circulation system.

Design and operation. A separate circulation system is required for each pool and a.) shall consist of pump(s), piping, filter(s), water conditioning and disinfection equipment, and other accessory equipment that will clarify, condition, and disinfect the water in accordance with this article. All pool equipment shall meet the standards set forth in the most recent edition of ANSI/NSF-50, "Circulation system components and related materials for swimming pools, spas/hot tubs" or other, independent testing and certifying organization, and shall be approved by the department. The equipment shall be operated continuously on a twenty-four (24) hour basis to obtain the minimum required number of four (4) turnovers per day, or one turnover every six (6) hours. All pool piping systems shall be designed to accommodate one hundred percent (100%) of the design flow rate. During normal pool operation, a maximum of twenty percent (20%) of the circulation flow shall be through the main drain and a minimum of eighty percent (80%) shall be through the overflow gutters or skimmers. All circulation system components, including filter(s), pump(s), hair lint strainer(s) and other similar components, shall function properly and be maintained in a clean condition. For circulation systems utilizing over-the-gutter circulation, an approved surge device shall be provided. Timers used in conjunction with any circulation equipment are prohibited whenever the pool is open for use, but may be used when the pool is not open during the off season.

- (1) Pumps. Pump(s) shall be adequate in number and capacity to provide the required pool turnover rate. Pumps shall supply the design circulation and backwash flows at a dynamic head sufficient to overcome friction losses in the piping, appurtenances and maximum filter head loss. If more than one pump is utilized in design or construction, then all of the pumps shall be the same including manufacturer, size, capacity, and other similar factors. Pump performance curves shall be submitted with the plans.
- (2) Filters. Filter(s) shall be sized and maintained to accommodate the required design circulation flow. If more than one filter is utilized in design or construction, then all of the filters shall be the same including manufacturer, size, capacity, and other similar factors.
- (3) Inlets. A minimum of two (2) adjustable inlets installed flush with the pool wall or floor shall be located in conjunction with the proposed method of circulation so as to provide effective, uniform circulation of the incoming water throughout the pool and to prevent stagnant areas. The total number of inlets shall be calculated based on one (1) inlet for twenty (20) linear feet of pool perimeter (or major fraction thereof). Inlets shall be evenly spaced either along the pool perimeter or on the pool floor. Inlets shall be installed below the normal water level. Floor inlets shall be provided on all pools with surface areas exceeding two thousand square feet (2000 s. f.). Wall inlets may be used in addition to the minimum required number of floor inlets for steps, seats, and sunning areas. Wall inlet fittings shall not project more than one and one-half inches (1½") from the surface of the pool wall.
- (4) *Main drain openings*. Unless the pool is initially designed without a main drain, each pool shall be provided with two (2) or more hydraulically balanced main drain openings for each main drain line at the deepest portion and constructed to completely drain the pool. Main drain openings must be covered by an approved, secured grating, removed only by a tool and not removable by bathers. The open area of the drain cover shall be at least four (4) times the cross-sectional area of the drain pipe, and sufficient flow area shall be provided so that the full flow velocity at any part of the grate will not exceed one and one half feet (1½') per second. Openings between grate bars shall not exceed one half inch (1/2"). Main drain openings shall be constructed

in parallel, in a tee configuration, and spaced evenly across the deep portion of the pool, with a minimum spacing of five feet (5') between each main drain opening. Any previous "grandfather clause" is hereby revoked.

- (5) Skimmers and overflow gutters. A surface skimming or gutter system shall be provided for each pool and shall be designed and constructed to skim the pool surface when the water level is maintained within the operating water level range of the system's weir device or rim.
- (6) Vacuum cleaning system. A vacuum system shall be provided for pool cleaning. Wall-mounted type vacuum systems are prohibited. If approved for use, portable vacuum systems shall not be stored on the pool deck.
- (7) Flow meters. An adequately sized flow meter, capable of measuring and indicating a minimum range of one half (½) to one and one half (½) times the design flow rate shall be installed on the pool return line to accurately indicate the circulation rate in gallons per minute. Flow meters shall be conspicuously located and installed in accordance with the manufacturer's instructions for placement.
- (8) Heaters. Pools equipped with heaters shall have a fixed thermometer in the circulation line. Water temperature shall be thermostatically controlled. Adequate external valves and piping shall be provided to enable bypassing the heater and to facilitate complete removal for repairs without interruption of pool circulation. At all times the temperature in the pool water shall not exceed one hundred and four degrees Fahrenheit (104° F). Heaters shall be installed according to the manufacturer's instructions and in accordance with all applicable state, county and local codes. An unbreakable thermometer designed for use in a pool must be available for bathers and pool staff to monitor pool water temperatures. Control of the pool's water temperature shall not be accessible to bathers.

Sec. 13-191. Piping and hydraulics.

- a.) *Piping*. The piping system shall consist of non-toxic materials and be able to withstand a minimum pressure of fifty pounds per square inch (50 p.s.i.). Piping configuration shall be designed to minimize friction losses. All piping used for pool circulation and manufacturers must meet the standards set forth in the current edition of ANSI/NSF 50, "Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs", or alternate criteria approved by the local health authority. All pool piping shall bear the N.S.F. seal for potable water and be schedule 40 or greater. Pipe installation shall comply with the applicable local plumbing code and this article. All valves and piping in the equipment room shall be clearly labeled, and water flow direction shall be indicated on exposed piping in the filter room. Piping shall be installed to facilitate complete drainage of the system. Heat bending of any pool piping for installation is prohibited.
 - (1) *Maximum velocity*. Velocity shall not exceed ten feet per second (10 f.p.s.) in pressure piping or five feet per second (5 f.p.s.) in suction piping.
 - (2) Main drain line. The main drain line shall be designed and constructed to accommodate 100% of the design flow rate and head loss calculations shall include friction losses of the pipe, fittings and the hair and lint strainer. The size of the main drainpipe shall be continuous throughout the length of the line.
 - (3) Skimming system lines. The skimming system lines shall be designed and constructed to accommodate 100% of the design flow rate. The flow-through rate of the skimming system, based on the manufacturer's minimum recommendations, shall be used to determine the turnover rate if the turnover rate exceeds the manufacturer's recommendations
 - (4) Waste lines. Pool wastewater shall be directed to a sanitary sewer. The backwash waste line shall be no smaller than the size of the pipe exiting the filter for the entire length of the backwash line. Discharge points shall be shown on the plans.
 - (5) *Piping details*. Plans must include complete details of all pool piping. All pool piping shall be supported in accordance with manufacturer's recommendations.

- (6) Filters. Existing pools utilizing sand filters with an unknown total dynamic head shall be considered to have a minimum of sixty (60') feet of head. Existing pools utilizing diatomaceous earth filters with an unknown total dynamic head shall be considered to have a minimum of fifty (50') feet of head on vacuum systems and ninety (90') feet of head on pressure systems. Existing pools utilizing cartridge filters with an unknown total of dynamic head shall be considered to have a minimum of fifty (50') feet of head.
- (7) Hydraulic calculations. Hydraulic calculations shall be submitted on approved department forms together with the pool plans. All pool pipe sizing shall be determined by a friction/flow chart for schedule 40 rigid PVC pipe based on the "Williams and Hazen" formula using a constant of 150 or approved equivalent. If approved, other types of piping shall be sized in accordance with an approved friction/flow chart. A copy of the friction/flow chart and a copy of the chart used to determine equivalent pipe lengths shall be submitted with the plans and specifications for new pool construction or for pool piping modification.

Sec. 13-192. Filters.

- a.) Design. Filters shall be sized to accommodate or exceed the design flow rate of the system and provide water clarity as noted in subsections (a)(1) and (a)(2) below.
 - (1) Filters shall meet the standards of or be listed in the most recent edition of ANSI/NSF 50, or other approved certification organization listing.
 - (2) Filters shall be designed so that filtration surfaces can be inspected and serviced.
 - (3) The maximum flow rate of filters shall not exceed the requirements of the most recent edition of ANSI/NSF 50 or other approved organization certification listing.
- b.) *Internal pressure*. On pressure-type filters, a means shall be provided to permit the release of internal pressure.

- (1) Any filter incorporating an automatic internal air release as its principal means of air release shall have a lid(s) that provide(s) a slow and safe release of pressure as a part of this design and shall have manual air releases in addition to automatic releases.
- (2) A separation tank used in conjunction with a filter tank shall have a manual method of air release or a lid that provides a slow and safe release as it is opened.
- (3) The following statement shall be conspicuously visible within the area of the air release: "Do not start the system after maintenance without first opening the air release and properly reassembling the filter and separation tank and opening the air release valve."
- c.) Filter Piping. Piping furnished with the filter shall be of suitable material capable of withstanding one and one half (1½) times the working pressure. The suction piping should be of such construction that it will not collapse when there is a complete shut-off of flow on the suction side of the pump.

Sec. 13-193. Sand filters.

- a.) Appurtenances. Each filter tank shall have an access port for inspection and servicing. Each filter shall have both influent and effluent pressure gauges with a minimum face size of two (2) inches (2"), and a manual air relief valve. The filter system shall have an adequately sized, in-line backwash sight glass, on the backwash line. All appurtenances shall be conspicuously located for quick inspection.
- b.) *Piping and valves*. The filtering system shall be designed with all valves and piping required to permit filtering to pool, filtering to waste, filter bypass to waste, and complete drainage of the system. The piping layout shall accommodate proper maintenance, operation and inspection.

Sec. 13-194. Diatomaceous earth filters.

a.) Filter tank and septa. The filter area shall be determined on the basis of effective filtering surfaces, with no allowance given for areas of impaired filtration - such as broad supports, folds or portions which may bridge the filter elements. Where dissimilar metals are used, provision shall be made to avoid electrolytic corrosion by galvanic action. The bottom of open vacuum filter tanks shall slope to a drain to facilitate complete drainage of the tanks.

- b.) Appurtenances. Pressure filters shall be equipped with an air-relief valve, influent and effluent pressure gauges with a minimum face size of two inches (2"), and an in-line sight glass, on the backwash line. A vacuum gauge with a minimum face size of two (2) inches (2") shall be provided on the pump suction line for vacuum filter systems. All appurtenances shall be conspicuously located for quick inspection.
- c.) Piping and valves. The filtering system shall be designed with all valves and piping to permit filtering to pool, pre-coat recirculation and/or pre-coat to waste, complete drainage of the system, bypass filter to waste, and backwashing to waste. The piping layout shall accommodate proper maintenance, operation and inspection. If pre-coat recirculation is used in a pressure system, an in-line sight glass, minimum two inches (2") in length, and a valve shall be provided in the pre-coat piping.

Sec. 13-195. Cartridge filters.

- a.) Appurtenances. Each filter shall be equipped with an air relief valve and influent and effluent pressure gauges with a minimum face size of two (2) inches (2"). All appurtenances shall be conspicuously located for quick inspection.
- b.) *Piping and valves*. The filtering system shall be designed with valves and piping to permit filtering to pool, bypass filter to waste, and complete drainage of the system. The piping layout shall accommodate proper maintenance, operation and inspection.
- c.) *Cartridges*. Two (2) sets of cartridges shall be provided so that one set may be cleaned while the filter is in operation. Disposable cartridges will be replaced when the required filtration rate is impaired. Modular-type cartridge filters, if approved, are not required to have a second set of cartridges.

Sec. 13-196. Skimmers and overflow gutters.

- a.) *Surface Skimming*. The actual water level shall be maintained within the operating water level range of the system's weir device or rim. Each skimmer or overflow system shall be designed and installed so as not to constitute a hazard to the user, and to prevent entrance or entrapment of limb, body, or hair.
 - (1) Number required. Each pool utilizing skimmers shall have at least two (2) skimmers. One additional skimmer shall be provided for each five hundred square feet (500 s.f.) of water surface area, or fraction thereof, for pools having up to two thousand square feet (2,000 s.f.) of water surface area. Pools ranging from two thousand and one square feet (2,001 s.f.) up to five thousand square feet (5,000 s.f.) of water surface area shall have one additional skimmer for

- each two hundred and fifty square feet (250 s.f.) of water surface area, or fraction thereof, in excess of two thousand square feet (2,000 s.f.) of water surface area. (See Appendix Figure #4, "Pool Surface Area vs. Number of Skimmers.")
- (2) Skimmer location. Skimmers shall be built into the pool wall and shall be evenly spaced along the pool perimeter and located to prevent stagnant areas in circulation.
- (3) Skimmer design. Each skimmer shall be designed for a flow through rate of at least twenty-five gallons per minute (25g.p.m.). Additional skimmers shall be provided when the design flow through rate, based on the turnover rate of the pool, exceeds the manufacturer's recommendations. If the manufacturer's recommended maximum flow through the skimmers is not available, then a maximum of fifty-five gallons per minute (55 g.p.m.) per skimmer shall be utilized.
- (4) Skimmer weir. Each skimmer shall have a properly designed and operating weir or other departmentally approved means of providing effective skimming.
- (5) Equalizer line. Each skimmer shall be provided with a device to prevent air-lock in the circulation system suction line. Equalizer lines shall be at least one and a half inches (1½") in diameter, installed at least one foot (1') below the weir level, provided with an equalizer valve, provided with a check valve, and provided with a grated opening installed flush with the pool wall or floor, not exceeding one and one-half inches (1½") or the diameter of the pipe exiting the skimmer.
- (6) Adjustments for circulation. Each skimmer shall be equipped with a valve that is adjustable to allow for fluctuation in water flow to balance water circulation during operation.

- (7) *Screen*. A non-corrosive screen shall be provided to trap large debris. It shall be installed to allow ready removal and cleaning from an opening in the deck.
- (8) Skimmer access. Skimmer openings in the deck shall be secured with a cover that is installed flush to the deck surface, has a slip-resisting surface, and is of such strength to withstand normal deck use.
- b.) Overflow gutters. Overflow gutters shall be constructed of sufficient size to retain normal overflow, and the top of the gutter shall be uniformly level. Complete specifications and details of the gutter system and hydraulics analysis, sealed by a state certified engineer, shall be submitted with the pool plans. Overflow gutter drain lines shall be connected to the circulation system through a surge chamber or other approved surge system. The surge system capacity shall be based upon a minimum of one (1) gallon of surge chamber volume for each square foot of pool surface area. The hydraulic capacity of the overflow gutter system shall be capable of handling one hundred percent (100%) of the circulation flow. Gutter drain lines shall carry the pool overflow to the circulation system.
- c.) Recessed gutters. Recessed gutters shall not be less than four inches (4") deep and four inches (4") wide with a minimum of four inches (4") open area above the gutter lip. No part thereof shall be visible from a position directly above the gutter.
- d.) *Open gutters*. Open gutters shall not be more than six inches (6") deep nor less than twelve inches (12") wide.
- e.) *Rollover or trough gutters*. Rollover or trough gutters shall be provided with a sturdy, non-corrosive, non-slip grate to completely cover the trough. The grate shall be securely fastened to the gutter during operation. Openings in the grate shall not exceed one-quarter inches (1/4").

Sec. 13-197. Disinfection and chemical feeders.

- a.) *Disinfection required*. The water in each pool shall be continuously chemically treated with an approved disinfecting agent, with associated, approved equipment, whereby the residual can be easily measured by simple and accurate field tests. Each pool shall have its own, separate, disinfecting equipment.
- b.) *Hypo-chlorinators*. Positive-displacement, peristaltic, or other approved types of hypo-chlorinators or chemical solution feeders used for hypo-chlorination shall be of sturdy construction, shall be able to withstand normal wear, corrosion and deterioration by disinfectant solutions, and shall be capable of continuous, metered feeding of required, approved solution on a 24-hour basis. The feed rate shall be adjustable from zero to full range. Hypo-chlorinators shall be capable of feeding an unstabilized chlorine dosage to the circulation flow from chlorine solutions at a pressure greater than the circulation system pressure. Fail-safe

features approved by the department shall be incorporated to prevent the disinfectant solution from siphoning or feeding directly into the pool, pool piping, water supply, or pool enclosure if the circulation equipment is not in operation or fails. External "on-off" timers used in conjunction with hypo-chlorinators are prohibited. An adequately sized, corrosion-resistant, and appropriately labeled container with a tight-fitting lid shall be provided and used to hold chlorine solutions. Chlorine solutions shall be delivered down-line from the pool filter and, if applicable, the pool heater, to achieve an effective pressure differential. A hypo-chlorinator shall be required for any pool with a surface area greater than two thousand square feet (2,000 s. f.).

- c.) Chemical feeders. If chemical feeders are provided to add pH solutions into return pool piping, they shall meet the requirements of subsection (b) above. A single feeder may not be alternately used for chlorination and pH control. Timers used in conjunction with chemical feeders are prohibited. An adequately sized, corrosion-resistant, and appropriately labeled container with a tight-fitting lid shall be provided and used to hold pH solutions. A chemical feeder shall be required for any pool with a surface area greater than two thousand square feet (2,000 s. f.)
- d.) *Carbon dioxide gas.* Pools utilizing compressed carbon dioxide gas for pH control shall adhere to all applicable local, state, and federal requirements.
- e.) Chlorine erosion feeders. Only those erosion feeders specifically approved by the department may be used for pool disinfection. Erosion feeders designed for delivering stabilized chlorine shall be utilized for pools with surface areas greater than two thousand square feet (2,000 s.f.) in conjunction with hypo-chlorinators for super-chlorination and chemical feeders for pH control meeting the requirements of subsection (b) and (c) above. Erosion feeders shall be capable of feeding a chlorine dosage to the circulation return piping. Each pool shall have its own erosion feeder, if an erosion feeder is permitted.
- f.) Bromine feeders. Only those bromine feeders specifically approved by the department may be used for pool disinfection. Bromine feeders shall be capable of feeding a bromine dosage to the circulation return piping. Each pool shall have its own bromine feeder, if a bromine feeder is permitted.
- g.) Other chemicals and methods. No other chemical for disinfection or pH control may be used unless the chemical is specifically approved by the U.S. Environmental Protection Agency and the department following demonstration of all aspects of the disinfection and toxicological properties thereof. No other method of disinfection or pH control may be used unless listed by the National Sanitation Foundation, complies with the most recent edition of ANSI/NSF-50, "Circulation system components and related materials for swimming pools, spas/hot tubs," and is approved by the department.

- h.) Gas Chlorination prohibited. Chlorine gas cylinders are prohibited for use in all new pools. Existing pools using gas chlorine shall convert to an alternative disinfectant during any major renovation.
- i.) Hand feeding. Whenever a pool is open to a member of the public, no disinfectant or pH control chemical may be added by hand, whether to skimmers or directly to the pool, as the sole or primary method of adding disinfecting or pH control chemicals.
- j.) Automatic controllers. If an automatic controller for adjusting chemical levels is to be used at a pool, the device and connections thereof shall be installed in accordance with the manufacturer's instructions. The device must be directly wired to the recirculation pump and a flow switch, such that when the pump stops, the chemical feeders are switched off. Automatic controllers must be submitted for approval by the department prior to installation. An automatic pool chemical controller, if approved for installation, shall not substitute for the requirement to manually perform onsite chemical pool water tests.
- k.) Chemical storage. All pools shall have adequate, safe and secure dedicated storage for pool chemicals. If used, storage rooms must have ventilation with one air change every three minutes exhausted to the exterior away from occupied areas. Chemical vaults or storage containers must not allow a person to enter inside.

Sec. 13-198. Equipment room.

- a.) Equipment Room or Enclosure. Pumps, disinfection equipment, filters, appurtenances and any other approved equipment shall be located in a permanent room, or completely enclosed area. The entry door shall open to the exterior of the equipment room or enclosure and shall be kept locked except for servicing the pool equipment. The equipment room or enclosure and any storage area used for pool supplies, additional equipment, or chemicals shall be kept clean, safe and adequately lighted. Approved overhead protection shall be provided to completely cover the entire equipment room or enclosure.
- b.) Ventilation and drainage. Ready access, suitable drainage (such as a sump pump) and ventilation of fresh make-up air must be provided for all equipment rooms. The enclosure must be ventilated with outside air by a chlorine-resistant exhaust fan with vents that are located a maximum of four inches (4") above the floor level, equipped with automatic louvers to achieve cross-flow ventilation located at the top of the enclosure for admitting fresh air, and capable of providing one (1) enclosure air change every three (3) minutes. The exhaust fan shall be installed so as to exhaust the equipment room air away from the pool enclosure and adjacent inhabited areas. The entire enclosure shall have a concrete floor that slopes one-quarter inch per foot (1/4" / 1") to a floor drain connected to a sanitary sewer. A hose bibb with an approved backflow prevention system shall be provided in the equipment room or enclosure.

- c.) Equipment clearance. All equipment and piping shall be installed to facilitate servicing with minimal effort. Filter tanks shall be at least eight inches (8") apart, twelve inches (12") from walls, and thirty-six inches (36") from the ceiling. (Minimum eight foot (8") ceiling height). Clearance around all equipment and appurtenances must permit unobstructed, ready access for inspection, maintenance, and operation.
- d.) *Electrical controls*. No switches, starters, panel boards or similar electrical equipment shall be located in areas accessible to bathers, except for therapy or booster pump jet or inlet timers and emergency shut-off switches that must be properly grounded.
- e.) Zoning. In the event that a separate equipment room meeting the requirements of this section cannot be provided (building setbacks, zoning restrictions, etc.) and sufficient evidence of this can be given the department, the department may allow for a variance from the equipment room so long as the equipment is provided with a secure enclosure to prevent unauthorized access and is approved for such installation.

Sec. 13-199. Diving areas and equipment.

- a.) Dimensions. Dimensions (width, depth and length) of the diving area shall be in accordance with anticipated use by divers and with the most recent edition of ANSI/NSPI-1, "American National Standards for Public Swimming Pools", or the applicable sanctioning organization recognized and approved by the department (see Appendix Figures #1 & #2).
- b.) Clearance. Diving boards or diving platforms must be installed no less than ten feet (10') apart (edge to edge) and no less than ten feet (10') from any pool side wall, or in accordance with the manufacturer's specifications, whichever is the greater distance. At least fifteen feet (15') of free, unobstructed clearance shall be provided above diving boards and diving platforms.
- c.) Finish and Use. Diving boards and platforms shall have a light colored, non-slip finish. Starting platforms shall be used only for competitive swimming, shall have a light-colored, non-slip finish, and shall be removed from the deck when not being used for their intended purpose.

d.) Safety. Approved diving equipment shall be installed only on pool types that are equal to or larger than the pool type designated by the manufacturer. Diving equipment shall be installed according to the manufacturer's instructions and specifications and this article. All diving stands higher than twenty-one inches (21") measured from the deck to the top of the secured end of the board shall be provided with stairs and/or a ladder. Steps and ladders shall be of corrosionresistant material, easily cleanable and with treads that are non-slip and selfdraining. Platforms and diving equipment of one meter (1m) shall be protected with guardrails that shall be at least thirty inches (30") above the diving board or platform surface and extend to the edge of the pool wall. All platforms or diving equipment higher than one meter (1m) shall have dual guardrails that are approximately eighteen inches (18") from the bottom rail and thirty-six inches (36") from the top rail above the diving board or platform surface. All platform or diving equipment greater than one meter (1m) in height shall have dual guardrails installed at a maximum of one meter (1m) above the deck level and continuous above the board or platform, and in accordance with manufacturer's specifications. Diving equipment shall be permanently anchored to the pool deck. A sign stating "Only one user allowed on diving board or platform at any time" shall be posted at the base of access to the diving board. For access to a diving board or platform by a ladder, a sign shall be posted at the base stating "Only one user allowed on the ladder at any time."

Sec. 13-200. Lighting.

- a.) Lighting required. Artificial lighting shall be provided for all indoor pools and any outdoor pools to be used after dusk. Lighting shall be adequate to illuminate the entire swimming pool and enclosure without glare. Electrical wiring, fixtures, and installation shall conform to all applicable state, county and local building code requirements. Ground-fault interrupters must be provided. Light fixtures located within the pool area shall be protected by a shatter-resistant lens. Underwater lights with a colored lens or bulb are prohibited. Supplemental lighting, such as fiber optics, shall not be considered as the primary source for pool lighting.
- b.) Lighting requirements. Lighting in dressing rooms, sanitary facilities, and equipment rooms shall comply with the local code requirements. Pool and deck areas shall be lighted in accordance with the following minimum requirements:
 - (1) Underwater Lighting. A minimum of one (1) watt underwater lighting per square foot of pool surface area shall be provided. Underwater light fixtures shall be installed so as to effectively illuminate the entire pool.

(2) Deck and Pool Lighting. A minimum of twenty (20) foot candles shall be maintained in service on all deck areas. A minimum of ten (10) foot candles shall be maintained in service on all deck and pool surface areas whenever the pool is closed.

Sec. 13-201. Sanitary facilities.

- Sanitary facilities required. Adequate sanitary facilities including toilets, urinals, a.) lavatories and showers are to be enclosed in a bathhouse and are required at all new pools, except for those pools that meet the criteria stated in subsection (b) below. In determining the number of sanitary fixtures required, the minimum bathing load as determined by APPENDIX Figure #3, or the maximum bathing load of the pool, whichever is less, shall be used. Each pool shall have the "Maximum Bather Load" determined at time of plan review. The bathing load composition shall be assumed to be one-half (½) men and one-half (½) women. The bathhouse and sanitary facilities shall be maintained in a clean and sanitary condition. A standard architectural drawing of the bathhouse showing the layout of the facility, the location of all fixtures, the flooring, including drainage and slopes, and any other pertinent information that the department deems necessary to ensure compliance with this article, shall be submitted for approval by the department prior to any work performed. Fixtures shall be installed in accordance with applicable plumbing codes and shall be properly protected to prevent crossconnections.
- b.) Sanitary facilities. If all dwelling units or individual sanitary facilities, meeting the requirements of this article, are located within 300" of the pool, as measured from the inside the nearest pool wall, no additional sanitary facilities will be required. If sanitary facilities are provided but not required for bathers they shall meet all requirements of this article. If there is more than one pool at a single address or property and all units are within three hundred feet (300") in any direction from at least one of the pools, then no separate bathhouse is required. A shower with tempered water with a temperature range maintained between 70° F and 104° F, meeting local plumbing code requirements, shall be provided at each approved entrance into the pool area if no bathhouse is required. Footbaths are prohibited.
- c.) Facility size requirements. Facilities shall be provided in proportion to the maximum bathing load (see Appendix Figure #3) based on the number of dwelling/living units outside a three hundred foot (300') radius as measured in any direction from inside the nearest pool wall. Separate facilities shall be provided for men and women. Family or unisex facilities will be allowed only when the minimum number of required men and women's facilities are provided. In calculating facility size requirements, the number of required fixtures shall be rounded up to the next whole number.

- (1) *Toilets*. One (1) toilet shall be provided for each bather increment of one hundred (100) men or fifty (50) women.
- (2) *Urinals*. One (1) urinal shall be provided for each one hundred (100) men. A toilet may be substituted for a urinal with department approval.
- (3) Lavatories. One (1) lavatory, with tempered water with a temperature range between 70° F and 104°F, shall be provided for each one hundred (100) men or women.
- (4) Showers. One (1) shower, with tempered water with a temperature range between 70° F and 104°F, shall be provided for each one hundred (100) men or women. Showers shall be an integral part of the interior of the bathhouse and located for bather use prior to entering the pool area. Shower floors shall slope one-quarter inch (1/4") per foot to a drain and shall meet the same requirements for bathhouse floors as stated in subsection (e) below. An exterior shower shall not substitute for the minimum required number of interior showers.
- d.) Location. The bathhouse to pool configuration shall be such that bathers must pass through or by the bathhouse as they enter into the pool enclosure. If the entrance(s) into the pool area is more than twenty-five feet (25') from the bathhouse, then a shower with proper drainage and backflow prevention is required at each approved entrance. A minimum of ten feet (10') of complying deck or walkway shall be provided between the bathhouse/sanitary facilities and the edge of any pool within the pool enclosure.
- e.) Floors. Floors shall be smooth, impervious, light-colored, non-slip easily cleanable, shall have a slope of one-quarter inch (¼") per foot to drain(s), and shall be coved at the wall junction with ceramic tile or approved equivalent. A sufficient number and effective spacing of floor drains shall be provided to ensure complete drainage. A maximum of ten percent (10%) of the total floor surface area may be any color. Any standing water in the floor shall not exceed a depth of one-eighth inches (½"), shall not exceed one (1) square foot in area, and shall not remain on the floor more than ten (10) minutes. A sample of the proposed flooring material, other than concrete, shall be submitted to the department upon request for approval prior to installation.

- f.) Walls. Partition walls shall terminate at least six inches (6") above the floor or shall be placed on a continuous raised masonry or concrete base at least four inches (4") high.
- g.) *Hose bibs*. At least one (1) hose bib with backflow prevention shall be provided with a sufficient length of hose to service both the men and women's sections of the bathhouse.
- h.) Water fountain. If provided, an approved, sanitary drinking fountain shall be conveniently accessible within the pool enclosure to all bathers.
- i.) Light and ventilation. The interior of the bathhouse, including the sanitary facility area, locker or dressing area, and hallway, shall be well-lighted with a minimum of thirty foot- candles (30 f. c.), as measured at floor level, of incandescent light or equivalent for each square foot of floor area, and shall be adequately ventilated with a minimum of one (1) air change every five (5) minutes.
- j.) *Solid waste disposal*. An adequately sized, covered and lined trash receptacle shall be provided in each men and women's sanitary facility area.
- k) Bathhouse amenities. At all times, an adequate supply of liquid soap, toilet paper and paper towels shall be provided and stored in appropriate dispensers conveniently accessible to users. A minimum of one (1) diaper changing station for babies shall be provided in each men's and women's section of the bathhouse. Bar soap shall not be provided to bathers.

Sec. 13-202. Safety.

- a.) *Pool barrier*. Each public and residential outdoor pool, including in-ground and above-ground pool facilities, shall be completely enclosed by a separate effective barrier.
 - (1) Construction. Examples of effective pool barriers are a fence, wall or building that does not permit entrance or access into the pool area. Barriers shall be constructed so as to facilitate control of bather entry into the pool area, to prevent unauthorized entry, and to prevent animals and unsupervised children from entering the pool area. The barrier shall not be less than five feet (5') in height, as measured from the exterior grade. No climbable objects shall be allowed within three feet (3') from the barrier

measured horizontally from the exterior grade. At least two contiguous, horizontal elements of the barrier must be separated by a minimum of forty eight inches of unclimbable, vertical space, as measured from the tops of the horizontal elements, with no projections or recessions exceeding one and one quarter inches (11/4") to allow a foothold or handhold. The barrier shall not have any openings wherein a sphere, four inches (4") in diameter, is able to be passed through any portion of the barrier, either between barrier elements or from the bottom of the horizontal bar or element of the barrier to the finished grade. The barrier shall be installed in accordance with this approved plans, and, if applicable, manufacturer's instructions. Barriers or fences composed of wood are prohibited, except for residential pools. No decorative elements within the required, complying fence material are allowed. Maximum mesh opening size for chain link fences shall be one and one quarter inches $(1\frac{1}{4})$.

- end of the pool through a self-closing gate(s) or door(s) that has a positive-latching mechanism mounted a minimum of forty-five inches (45") above the ground surface directly below the gate. The entrance gate must be able to self-close when opened four inches (4") or more as measured from the gate latch to the latching mechanism.
- (3) *Closure*. When the pool is not open for use access to the pool area shall be prohibited by the closing and securing of all entry points. Pool covers alone will not satisfy this requirement.
- (4) Construction. A detailed drawing of the barrier, including the barrier composition, placement, dimensions, elevations, and any other pertinent data as required, shall be submitted to the department and must be approved prior to installation. The barrier must be completely constructed prior to filling and/or operation of the pool.
- b.) *Pool operator*. A pool operator shall be responsible for the operation of a pool. The pool operator shall be in full charge of all pool use and shall have authority to enforce all rules of safety and sanitation, and shall be responsible for the proper

maintenance of the pool and all physical and mechanical equipment. The pool operator shall be trained in a pool operator' course approved by the department. Additional personnel shall be provided as needed to supervise other pools and facilities and to ensure bather compliance with pool entry conditions. The pool operator's name, telephone number, and address shall be conspicuously posted at the exterior of the pool area's main entrance. A fee may be charged for pool operator training by the department. The provisions for training shall become effective two (2) years after date of enactment of this article for existing pools and shall become effective immediately for new pools.

- c.) Record keeping. Each pool operator shall maintain and make available for inspection onsite upon request a daily record of operating information, together with other data as may be required for each pool relative to operation of the pool. The records to be made available for inspection shall include data on disinfectant levels, pH, maintenance procedures, together with such other data as may be required by the department relative to maintenance of the pool. The certified pool operator shall be responsible for closing the pool when necessary and excluding unauthorized persons from entering the pool area.
- d.) Lifesaving equipment. Each pool shall be provided with a Shepherd's hook attached to a non-telescoping pole, with a minimum length of fourteen feet (14'), and made with a blunt end. Each pool shall be provided with a Coast Guard approved lifesaving ring having an outside diameter of fifteen to twenty-four inches (15"-24"), firmly attached to a one-quarter inch to three-eighths inch (¼"-¾8") diameter throwing rope that is as long as one and one half (1½) times the maximum width of the pool, or fifty feet (50'), whichever is longer. Additional sets of lifesaving equipment are required for pools longer than fifty feet (50') and shall be provided for each fifty feet (50') of pool length or major fraction thereof. Lifesaving equipment shall be mounted in a conspicuous place and be readily available for use and in good condition.
- e.) Lifeguard chairs. If used, the chairs shall be located to provide lifeguards a clear, unobstructed view of the entire pool, including the pool bottom at its deepest point. Lifeguard chairs shall be secured from bathers when not in use. Portable lifeguard chairs shall be removed from the pool-deck edge and secured when not in use. Lifeguard chairs shall only be occupied by a qualified lifeguard at all times the pool is open.
- f.) No lifeguard on duty. Where no lifeguard is on duty, signs shall be posted in a conspicuous location at or near the entrance to the pool area and within the pool area stating, in clear legible letters at least four inches (4") high, "WARNING NO LIFEGUARD ON DUTY."
- g.) *Telephone*. An operable, hard-wired, weatherproof telephone, with direct 911 access or capability installed in a conspicuous location shall be readily available at all times within the pool enclosure. Directions to telephone locations must be conspicuously posted if the telephone is not readily visible in the pool area.

- h.) *Emergency telephone numbers*. A list of local emergency telephone numbers including Police, Fire and Ambulance shall be posted at the telephone. Alternatively, the telephone may be equipped with 911 speed dial access. The telephone number of the pool operator and manager and of the department shall be posted at the telephone.
- i.) Emergency action plan. Each pool facility shall have in place a departmentally approved emergency action plan. A written copy of the emergency action plan shall be located to allow for immediate access in case of an emergency. The emergency action plan shall include a "Chemical Emergency Evacuation Plan," "Emergency Crisis Plan," "Water Rescue and Injury Emergency Plan," "Drill Procedures for Emergency Situations," and other emergency plans and safety programs. The plans shall be periodically practiced, but not when the pool facility is open.
- j.) *Electrical requirements*. All requirements for electrical compliance shall conform to code(s) of all authorities having jurisdiction.
- k.) First aid kit. Each pool shall be supplied with a readily available first aid kit equipped to treat at least fifteen (15) people and that meets OSHA (Occupational Safety and Health Administration) requirements for that size kit. The container shall be durable and weather-resistant, and shall at all times be kept supplied and ready for use. The first aid kit shall be mounted in a conspicuous location in the pool area, or secured by pool personnel on site knowledgeable of its whereabouts. If the kit is not in the immediate pool area, then adequate signage shall be posted within the immediate pool area with a minimum one-inch (1") high letters that clearly states the location of the first aid kit.
- 1.) Float line with floats. A tightly stretched polypropylene or nylon rope or float line with plastic floats shall be installed across the pool along the slope-break in pools where the depths exceed five feet (5'). The floats shall be spaced no greater than seven feet (7') apart. The floats shall be secured so that they will not move. The float line shall be of sufficient size and strength to provide an adequate handhold and support loads imposed by all bathers. The float line shall be securely fastened to recessed wall anchors made of corrosion-resistant materials. A float line shall also be installed to separate swimming from other areas within the pool, such as sliding, diving, or from an amusement area in a multi-purpose pool. A four-inch (4") non-slip tile shall be installed directly beneath and for the entire length of each float line.
- m.) Rules and regulations. Safety rules and regulations shall be easily readable and shall be conspicuously posted in the pool area. The lettering shall be a minimum of 3/4", except as otherwise noted, and shall state the following:

- (1) "No glass, sharp objects or hazardous materials allowed.
- (2) "No animals other than seeing-eye dogs allowed."
- (3) "Shower and rinse thoroughly before entering the pool."
- (4) "No food or drink allowed within five feet (5') of pool."
- (5) "Children must be accompanied by an adult." **Minimum** 2" letters.
- (6) "Bathers with open wounds, skin conditions, or any communicable condition not allowed"
- (7) "No solo bathing" **Minimum 2" letters**
- (8) "Bathers shall wear bathing attire"
- (9) "No spitting, spouting, blowing nose, or any bodily excretion allowed"
- (10) "No running, rough or boisterous play allowed."
- (11) "Maximum bather load _____."
- (12) Hours of operation.

Sec. 13-203. Wading pools.

- a.) *Application*. All sections of this article shall apply to wading pools with the following exceptions:
- b.) *Construction*.
 - (1) Location. A wading pool must be located so that a lifeguard or operator may easily keep bathers under surveillance. A wading pool shall not be located adjacent to the deep end of any other pool. If a wading pool is located within another approved pool area, and if a separate barrier is installed for the wading pool area, then clear visibility through the wading pool barrier shall be provided.

- (2) *Depth.* The depth of a wading pool shall not exceed eighteen inches (18").
- (3) Slope. The bottom slope shall not be more than one foot (1') in twelve feet (12'). Wading pools shall be completely self-draining.
- (4) Walk areas and decks. A minimum of ten feet (10') of complying deck surface shall separate a wading pool from any part of any other pool, as measured from the wading pool edge to another, nearest pool edge.
- (5) Underwater Lighting. Underwater lighting is not required for wading pools, but other lighting requirements as stated in the section "Lighting".
- c.) Circulation system.
 - (1) Circulation. The circulation equipment shall be operated continuously on a twenty-four (24) hour basis to achieve the minimum requirement of one turnover every two (2) hours. Fill and draw-type wading pools are prohibited from use.
 - (2) *Skimmers*. One skimmer shall be provided for each two hundred square feet (200 s.f.) of wading pool surface area. Equalizer lines shall be installed at the lowest portion of the wall or in the floor, and be covered by a non-removable, approved grate.
 - (3) *Inlets*. A minimum of two (2) adjustable inlets shall be provided. The number of inlets shall be calculated based on one inlet per ten (10') feet or major fraction thereof of pool perimeter. Inlets shall be evenly spaced either along the pool perimeter or on the pool floor. Wall inlets shall be placed as close to the pool floor as possible.

Sec. 13-204. Spray pools.

- a.) *Application*. All sections of this article shall apply to spray pools with the following additional provisions:
 - (1) Construction. The bottom of a spray pool shall slope a maximum of one foot (1') in twelve feet (12') to an approved drain. The bottom of a spray pool shall be completely self-draining and allow for no standing water.

Water attraction devices, if provided shall comply with the section in this article entitled "Interactive Play Devices." All play equipment shall conform to standards set forth by the most recent edition of the U.S. Consumer Product Safety Commission, "Handbook for Public Playground Safety," which the department adopts herein by this reference, or the most recent edition of the American Society for Testing Materials, "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," which the department also adopts herein by this reference, and in accordance with the manufacturer's instructions for installation and operation. Depth markings and "No Diving" markings are not required.

- (2) Circulation. The circulation equipment shall be operated continuously on a twenty-four (24) hour basis to obtain the minimum required number of one turnover every thirty (30) minutes. All circulated water from the pool shall be collected in an approved surge device.
- (3) Water source. Spray heads shall be served by an approved water source that has approved backflow prevention. Spray heads and supply fixtures shall not constitute a tripping hazard. Spray heads shall be installed so as to eliminate any possibility of their submergence.
- (4) *Location*. Spray pools must be located so that the lifeguard or operator may easily keep bathers under surveillance. Spray pools shall not be located near the deep end of any other pool.
- (5) Safety. Spray pools are exempt from the section in this code titled "Safety Life Saving Equipment."

Sec. 13-205. Whirlpools.

a.) Application. All elements of this article for pools shall apply to whirlpools with the following additional provisions: Whirlpools that are emptied and cleaned after each single-bather use are exempt from this article.

- (1) *Depths*. Water depth shall be no more than four feet (4'). No seat or bench shall be more than two feet (2') below the normal waterline.
- (2) Slopes. Slope of the whirlpool floor shall not exceed one foot (1') in twelve feet (12'). The whirlpool floor, seat and steps shall be completely self-draining.
- (3) Walk areas and decks. A walk area or deck no less than feet five feet (5') in width as measured from the inside wall of the whirlpool shall surround the whirlpool on at least one half ($\frac{1}{2}$) of the perimeter of the whirlpool.
- (4) *Thermometer*. All whirlpools shall have a non-mercury based, shatter-proof thermometer that is in close proximity to and can be viewed by bathers at all times.

b.) Circulation system.

- (1) Circulation. The circulation equipment shall be operated continuously on a twenty-four (24) hour basis to obtain the minimum required rate of one turnover every thirty (30) minutes. One (1) skimmer shall be provided for each one hundred square feet (100 s. f.) of whirlpool surface area. Air intakes for therapy pumps shall be protected with an approved screen or grate, shall be located within the equipment room, and shall have the intake opening installed at least twelve inches (12") from the surface of the floor.
- (2) Inlets. A minimum of two (2) inlets shall be provided. Inlets shall be evenly spaced a maximum of 10 feet (10') apart or major fraction thereof and located as close to the floor as possible or in the floor. No inlet shall be less than eighteen inches (18") below the normal water level. Hydrotherapy inlets shall be installed flush with the pool wall or floor.
- (3) Main drain openings. Source water for hydrotherapy systems shall be through the main drains, a surge chamber, or other approved device. Sufficient flow area shall be provided so that the combined circulation and hydrotherapy full-flow velocity through the main drain grates does not exceed one and one-half feet per second (1½ f.p.s.). The main drains shall be spaced evenly and as far apart as possible in the deepest portion of the whirlpool floor.

- c.) Rules and Regulations. In addition to the minimum safety rules (see Safety, Sections (f) and (m), the following additional statements shall be required.
 - (1) "Elderly persons and pregnant women not allowed without written permission from their medical doctor."
 - (2) "Persons with any health condition not allowed without written permission from their medical doctor"
 - (3) "Persons under the influence of alcohol, drugs or stimulants not allowed in whirlpool."
 - (4) "Do not enter if water temperature exceeds 104 Degrees Fahrenheit" **Minimum 2" letters**.
 - (5) "Do not use for more than ten (10) minutes without exiting and "cooling down".
 - (6) "Enter and exit with caution."
- d.) Safety equipment. Whirlpools with surface areas less than two hundred and fifty square feet (250 s. f.) are exempt from the safety equipment requirements stated in Section "Safety" (d) for swimming pools. All whirlpools shall have the following equipment:
 - (1) A clock, with a minimum twelve-inch (12") face that shall be provided and mounted vertically so as to be clearly seen by all bathers in the whirlpool and whirlpool area.
 - (2) If used, the therapy or booster pump timer shall be mounted on a wall at normal switch height above the floor, at least four feet (4') away from the pool edge, equipped with a maximum timer limit of fifteen (15) minutes.

Sec. 13-206. Waterslides / splash pools.

a.) Application. All elements of this article for swimming pools shall apply to any pool used in whole or part as a splash pool for a waterslide(s) with the following additional provisions:

b.) *Construction*.

- (1) Design, construction and maintenance. All slides and slide components shall be constructed and maintained first in accordance with the manufacturer's specifications and this article so that they will not constitute a safety, physical or health hazard given its normal intended use and purpose. Design and materials used in construction shall be in accordance with proper structural engineering practice for providing a sound, durable structure.
- (2) Flume clearances. The distance between the side of a flume exit and a pool side wall shall be at least five (5') feet and the distance between sides of adjacent flume exits shall be at least six (6') feet, or in accordance with the slide manufacturer's recommendations, whichever is the greater distance. The distance between flume exits and the opposite side of the pool, excluding steps and handrails, shall be at least twenty feet (20') or, in accordance with the slide manufacturer's recommendations, whichever is the greater distance. If more than one waterslide or flume is present, then both flume terminals shall be constructed at least parallel to each other or to any pool sidewall or other pool structure.
- (3) *High-speed slides*. Special provisions, approved by the department, shall be made in flume exit design, pool depth and pool width as measured from the flume exit, to safely accommodate high-speed slides in accordance with the slide manufacturer's instructions.
- (4) Flume terminus. The flume shall terminate at a depth no greater than six inches (6") below nor greater than two inches (2") above the normal water surface level. The flume terminus shall be parallel with the vertical pool wall, or in accordance with the manufacturer's instructions.
- (5) Depths. The operating water depth of the splash pool at the end of a flume shall be three feet (3') or in accordance with the manufacturer's instructions, whichever is the greater depth. This depth shall be maintained in front of the flume for a distance of at least twenty feet (20').

- (6) Decks. Decks along the exit side of the splash pool and along at least one side of the splash pool shall be at least five feet (5') wide.
- (7) Access to slide. A surfaced walkway, steps or stairway shall be provided between the pool and the top of the flume. Ladders to the top of the slide, if approved, shall be constructed and installed in accordance with the manufacturer's instructions. The access to the top of the slide shall be slip resistant and not allow for standing water, be separated from the flume by a physical barrier, set back far enough from the operating flume such that it cannot be contacted by users on the way down the slide.
- (8) Lighting. For an outdoor water-slide used at night and for an indoor waterslide, adequate lighting shall be provided for all areas of the flume, in accordance with the Section, "Lighting."
- (9) Volume of pump reservoirs. The pump reservoirs shall have sufficient volume, in accordance with the manufacturer's instructions, to contain enough water to insure that the lower splash pool will maintain a constant water depth. An approved, automatic make-up water device, with backflow prevention, shall be provided for each reservoir.
- c.) Circulation system. A water circulation system consisting of pumps, piping, filters, water conditioning, and disinfection equipment and other accessory equipment shall be provided in order to clarify, condition and disinfect the pool volume of water. The equipment shall be operated on a twenty-four (24) hour basis to obtain the minimum one turnover every hour.
- d.) Main drains. If main drains separate from the circulation system's main drains are used for make-up water for the slide, they shall be located at a minimum of twenty feet (20') from the slide terminus and shall comply with the requirements for main drains in Sections "Circulation" and "Piping and Hydraulics." The circulation system main drains shall be located no less than five feet (5') and no more than ten feet (10') from the slide terminus.
- e.) Bathing load. The bathing load shall be calculated on the basis of one (1) person in the minimum required splash pool surface area, and a maximum of one (1) person for every thirty square feet (30 s. f.) of pool surface area in those areas of the splash pool that exceed the minimum required splash pool area. If the slide is a component of a pool other than a dedicated splash pool, then the bathing load is one (1) person in the minimum required splash pool area, and the remaining pool area shall comply with the Section, "Bathing Loads."

f.) Safety. At least one person responsible for the operation of the slide shall monitor and be stationed at the bottom of the slide at all times the slide is open for use. If that person's view of the slide's entry is obscured at any point, then a second slide operator shall monitor and be stationed at the slide's entry point, or if the length of the slide or flume exceeds thirty feet (30') in length. Approved signage shall be posted that state; that at any time, only one (1) bather, or device with bathers such as a raft, shall be allowed on the slide after the previous user or raft has exited the splash pool or run-out; only one bather or device with bathers, such as a raft, shall be allowed on the platform to the slide; and only one bather or device with bathers such as a raft shall be allowed in the splash pool. Slide monitors shall enforce these rules. A key-operated, properly grounded switch to operate the pump supplying water to the slide shall be installed on the deck near the slide. An emergency cut-off switch for the slide shall be readily accessible to the slide monitor.

Sec. 13-207. Zero-depth entry pools.

- a.) *Application*. All elements of this article for swimming pools shall apply to zero-depth entry pools with the following additional provisions:
- b.) Construction. A zero-depth entry pool shall be designed and constructed so that the pool and the deck surface meet at a maximum slope of one foot in twelve feet (1':12'), continuing to the deepest portion of the pool or slope break. Where the water depth in these pools is less than one and one-half feet (1½'), floor inlets shall be provided and spaced uniformly at a distance no greater than twenty feet (20') apart and located not further than twenty feet (20') from the point where the pool bottom intersects the deck, and not more than twenty feet (20') from any wall. A grated gutter, as described in the Section "Skimmers and Overflow Gutters," or other suitable, approved skimming system, shall be installed along the entire zero-depth entry at the normal water level, and shall be designed and constructed to accommodate variations in the normal water level.

Sec. 13-208. Indoor-outdoor pools.

a.) *Application*. All elements of this article for swimming pools shall apply to indoor-outdoor pools with the following additional provisions:

b.) Construction.

- (1) Separations. Removable, underwater separations between indoor-outdoor pools shall be constructed of a clearly marked, solid barrier made of plastic, such as Lucite, or other approved material approved by the department. The barrier shall be smooth, unbreakable, and shall not have any openings except an opening to allow bathers to swim through.
- **(2)** Connecting Channels. The connecting channel at the separation or barrier for bathers to swim through shall be a minimum of three feet (3') in depth and three feet (3') in height, as measured from the pool water's normal level, and a minimum of four feet (4') in width as measured at the normal water level. The edges of the opening for bathers to swim through shall be smooth and rounded, or have an approved, permanently installed protective sleeve along the entire edge. If the separation between the indoor-outdoor pools extends below the normal water level, then an approved, protective sleeve shall completely encase the entire edge of the separation at a minimum height of twelve inches (12"). The protective sleeve and the separation or barrier combined shall extend below the normal water level less than twelve inches (12").
- (3) Separate pools. If each pool is designed to be physically separated, then each portion of an indoor-outdoor pool shall be considered as a separate pool, and each portion or pool shall be designed and constructed with its own, separate circulation system, appurtenances, decking, safety equipment, and other required equipment in accordance with this article.
- (4) Ingress and Egress. The pools, deck and the physical separation between the two pools shall be designed and constructed to enable ready access and egress. If the deck-to-deck distance at the separation or barrier exceeds six feet (6'), then an approved, taut, secured safety rope or handrail shall be attached to the entire length of the separation or barrier, except for the opening that bathers pass through. The rope or handrail shall be installed above, and within, six inches (6") of the normal water level.

Sec. 13-209. Interactive play devices.

- a.) Construction. The interactive play device's design and construction shall provide for a safe and sanitary recreational environment for its users. The design and construction of the devices or play equipment shall be in accordance with this article, approved by the department and complies with the standards of the American Society of Testing and Materials (ASTM) or other, similar certified agency. Installation of interactive play devices shall be in accordance with the manufacturer's instructions and approved by the department. Interactive play devices shall be designed, installed, and maintained so that the surfaces are smooth, non-toxic and easily cleanable. The devices shall not pose a health or safety hazard to users or bathers, and shall not interfere with the circulation or disinfection of the water.
- b.) Circulation. Any apparatus, device or equipment that discharges water into the pool or that uses the pool as a source of water for the operation of the device shall either use only water that has been filtered and disinfected prior to being discharged into a pool, or shall have a separate disinfection system for the device approved by the department. If water for the device is not taken directly from the pool, then the water for the device shall be circulated through a separate system consisting of pump(s), filter(s), disinfection equipment, and other appurtenances, as required by the department and this article. This includes, but is not limited to, spray guns, "mushrooms," buckets, water wheels, and other similar devices. Any water being discharged into pool water, or that makes contact with users or bathers, shall have the same minimum level of disinfection that is required for the type of pool that the device is installed within, as required in the section, "Disinfection and chemical feeders."

Sec. 13-210. Special purpose pools.

- a.) Application. All elements of this article for swimming pools shall apply to special purpose pools with the following additional provisions:
- b.) Construction. The design and construction of these special purpose pools shall be based on their intended purpose and use and upon sound public health and engineering principles, and shall not pose a health or safety hazard to the users. Special purpose pools shall be reviewed by the department on an individual basis for intended use and construction. Therefore, unique or special features may be permitted, such as a ramp to allow physically challenged individuals access and egress from the pool in lieu of steps or a ladder. The bathing load may be limited and shall be determined by the department, based on the purpose or intended use of the pool. The purpose of the pool shall be clearly stated on the plans when submitted to the department. A sign, with minimum one inch (1") high, black letters on a white background, stating the purpose of the pool and the bathing load, shall be conspicuously posted at the entrance to the pool area.
- c.) *Operation*. Special purpose pools are prohibited for general recreational use, without prior written approval from the department.

Sec. 13-211. Multi-purpose pools.

- a.) *Application*. All elements of this article that apply to swimming pools shall apply to multi-purpose pools with the following additional provisions:
 - (1) Design, Construction and Operation. The design, construction and operation of each portion of a multipurpose pool shall comply with the pertinent section(s) of this article concerning Construction Approval, Piping and Hydraulics, Filters, Disinfection and Chemical Feeders, Lighting, and Safety.
 - (2) *Circulation*. The turnover rate for multi-purpose pools shall be a minimum of four (4) hours.

Sec. 13-212. Wave pools.

- a.) *Application*. All elements of this article that apply to swimming pools shall apply to special purpose pools with the following provisions:
 - (1) Operation. The generation of waves more than three (3') feet in height above the normal, calm water level, regardless of the depth of the pool, shall not continue for more than fifteen (15) minutes at a time, with a minimum of three (3) minutes of calm water or no waves between each 15 minute period.
 - (2) *Circulation*. The turnover rate for wave pools shall be a minimum of three (3) hours.
 - (3) Access. Bathers must gain access to a wave pool only at the shallow end. The sides of the pool must be guarded from unauthorized entry into the pool by an approved barrier.
 - (4) *Handholds*. Each wave pool must be provided with approved handholds at the static water level. Handholds must be self-draining and must be installed so that their outer edge is flush with the pool wall. The design of handholds must ensure that body extremities will not become entangled.

- (5) *Life jackets*. Life jackets must be provided free for use by bathers upon request.
- (6) *Lifeguard*. Qualified lifeguard(s) shall be stationed at the wave pool during operation per the American Red Cross Guidelines.
- (7) Shut-off switch. A clearly labeled emergency shut-off switch for control of wave action shall be installed and readily accessible to each of the required lifeguard(s) on duty.
- (8) *Warning system.* An audible and visible warning system must be provided at the wave pool area to alert users of the beginning of wave generation and sufficient time before the beginning of wave generation for bathers to exit the pool.
- (9) Stepholes and handrails. Stepholes and handrails must be provided at one or more locations along the wall of the wave pool. The stepholes and handrails must extend down the pool wall so they will be accessible during wave generation at the lowest water level. The distance between the handrail and the pool wall must not exceed six inches (6").

Sec. 13-213. Watercourse pools.

- a.) *Application*. All elements of this article that apply to swimming pools shall apply to special purpose pools with the following provisions:
 - (1) *Handrails, steps, stairs, booster inlets.* Handrails, steps, stairs, and booster inlets for watercourse pools must not protrude into the watercourse.
 - (2) Shape. The watercourse must not be narrower than twelve feet (12') and not deeper than three and one half feet $(3\frac{1}{2})$ at any point.
 - (3) Egress. An approved method of exiting the watercourse must be provided at least every two hundred feet (200') along the watercourse.
 - (4) *Deck.* An approved deck must be provided along at least one side of the entire watercourse according to the Construction, Decking section.

- (5) *Circulation*. The turnover rate for watercourse pools shall be a minimum of four (4) hours.
- (6) *Velocity*. The design velocity of the water in the watercourse must not exceed two miles per hour (2 m.p.h.).

Sec. 13-214. New Equipment, Construction and Materials.

The department may allow test grants, conditional construction permits or conditional permits for new designs, new equipment, new materials, or new processes proposed for use or installation in new or existing pools, if satisfactory proof is submitted to the department that sound engineering and public health principles are complied with as determined by the department. Performance guarantees shall be required. Conditional permits shall require satisfactory performance in the field for a defined time to be established by the department before a final permit is issued. The department reserves the right to revoke any temporary permit if satisfactory performance cannot be demonstrated in accordance with the current policy and procedures addressing new products and processes and this article. A fee shall be required for each evaluation in accordance with the department's current fee schedule.

Sec. 13-215. Grandfathering and Upgrade Provisions

The requirements of this article shall apply to all new pools approved for construction and/or major modifications or renovation after the date of enactment of this article. For existing pools, the following requirements shall become effective on January 1, 2007: disinfection standards, main drain requirements, depth, no diving requirements, certifications, storage, rules, signage, life-saving equipment and emergency action plans. For existing pools, all other requirements of this article shall be required to be implemented if any major modification of the pool is undertaken, or shall be implemented if a particular item or piece of equipment is in need of repair.

This ordinance shall become effective ninety (90) days after adoption by the Board of Commissioners and approval by the Chief Executive Officer.

Sec. 13-216. Procedural Due Process Rights

As required by O.C.G.A. § 31-40-4, any person substantially affected by any final order of the Board of Health denying, suspending, revoking or refusing to grant or renew any permit provided under this article may secure review by appeal to the Georgia Department of Human Resources in accordance with the hearing requirements of O.C.G.A. § 31-5-1 et seq., and as may be hereafter be amended.

Sec. 13-217. Violations

It shall be unlawful for any person, firm, or entity to violate any of the provisions of this article or any other applicable provisions of this Code.

Sec. 13-218. Enforcement and Penalties

- a.) The provisions of this article shall apply to all matters affecting or related to the regulation of swimming pools in DeKalb County. Where, in any specific case, different sections of this Code specify different materials, methods of construction, or other requirements, the most restrictive requirement shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.
- b.) The Board of Health, its officers, agents, and employees are responsible for the administration and enforcement of this article.
- c.) Any person who violates the provisions of this article shall be guilty of an ordinance violation of this article, and upon conviction in a court of competent jurisdiction shall be subject to a fine and/or imprisonment in accordance with Section 1-10. Where any offense continues from day to day, each day's continuance thereof shall be deemed a separate offense.

PART II. EFFECTIVE DATE

This ordinance shall become effective ninety (90) days after adoption by the Board of Commissioners and approval by the Chief Executive Officer.

PART III. SEVERABILITY

Should any section or provision of this ordinance be declared by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not effect the validity of the ordinance as a whole nor any part thereof other than the part so declared to be invalid or unconstitutional. All ordinances or resolutions, or parts thereof, which conflict with this ordinance, are repealed.

APPENDIX

Figure #1

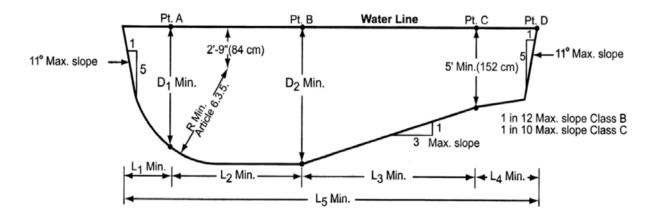


Figure 1 – Construction dimensions for water envelopes for Class B and Class C pools

#7.

APPENDIX

Figure #2

 $Table\ 2-Minimum\ water\ envelopes$

Pool	Minimum Dimensions							Minimum Width of Pool at:			
Type	D_1	D_2	R	L_1	L_2	L_3	L_4	L_5	Pt. A	Pt. B	Pt. C
VI	7'-0"	8'-6"	5'-6"	2'-6"	8'-0"	10'-6'	7'-0"	28'-0"	16'-0"	18'-0"	18'-0"
	(213cm)	(259cm)	(168cm)	(76cm)	(244cm)	(320cm)	(213cm)	(853cm)	(488cm)	(549cm)	(549cm)
VII	7'-6"	9'-0"	6'-0"	3'-0"	9'-0"	12'-0"	4'-0"	28'-0"	18'-0"	20'-0"	20'-0"
	(229cm)	(274cm)	(183cm)	(91cm)	(274cm)	(366cm)	(122cm)	(853cm)	(549cm)	(610cm)	(610cm)
VIII	8'-6"	10'-0"	7'-0"	4'-0"	10'-0"	15'-0"	2'-0"	31'-0"	20'-0"	22'-0"	22'-0"
	(259cm)	(305cm)	(213cm)	(122cm)	(305cm)	(457cm)	(61cm)	(945cm)	(610cm)	(671cm)	(671cm)
IX	11'-0"	12'-0"	8'-6"	6'-0"	10'-6"	21'-0"	0	37'-6"	22'-0"	24'-0"	24'-0"
	(335cm)	(366cm)	(259cm)	(183cm)	(320cm)	(640cm)	(0cm)	(11.4 m)	(671cm)	(732cm)	(732cm)

Note – For the definition of pool types, see Glossary

APPENDIX

Figure #3

DWELLING/LIVING UNITS VS MINIMUM BATHING LOAD REQUIRED

Swimming Pools With Transient Bathers ¹

No. of Units ³	Bathers/Unit
0100	0.60
101250	0.40
251500	0.10
501+	0.05

Swimming Pools With Non-Transient Bathers ²

No. Of Units ³	Bathers/Unit
0100	0.75
101—200	0.60
201300	0.40
301—500	0.15
501+	0.10

APPENDIX

Figure #4

POOL SURFACE AREA VS. NUMBER OF SKIMMERS

Area (square feet)	Number of skimmers
500 - 999	2
1000 - 1499	3
1500 - 1999	4
2000 - 2249	5
2250 - 2499	6
2500 - 2749	7
2750 - 2999	8
3000 - 3249	9
3250 - 3499	10
3500 - 3749	11
3750 - 3999	12
4000 - 4249	13
4250 - 4499	14
4500 - 4749	15
4750 - 5000	16

- 1. Motels, hotels and health clubs or other non residential.
- 2. Apartment complexes, condominiums, subdivisions or other residential.
- 3. Use of table in calculating the bathing load shall be cumulative.

Example: for a 360 unit apartment complex,

 $Bathing\ load = 184$

ADOPTED by the DeKalb June, 2006.	County Board of Commissioners, this 20 day of
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	BURRELL ELLIS
	Presiding Officer
	Board of Commissioners
	DeKalb County, Georgia
APPROVED by the Chief E	executive Officer of DeKalb County, this 20 day of
Tuno	day of
, 2006.	
	\/1.12
	Vilman Jones
	VERNON JONES
	Chief Executive Officer DeKalb County, Georgia
2	Dekalo County, Georgia
ATTEST: (JB)	
MICHAEL J. BELL	
Ex-Officio Clerk	And the second s
Board of Commissioners and	
Chief Executive Officer	
DeKalb County, Georgia	
APPROVED AS TO FORM:	APPROVED AS TO SUBSTANCE:
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STEPHEN E. WHITTED	S. E. BOUCHELION, M. D., M.B.A.
Sr. Assistant County Attorney	Director, DeKalb County
DeKalb County, Georgia	Board of Health