

Wake County Department of Environmental Services Regulations Governing Swimming Pools

SECTION 1: SCOPE AND PURPOSE

These regulations supplement the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2500, and shall apply to all swimming pools within Wake County. Residential swimming pools as defined by these regulations, shall be exempt from all requirements except Section 10: Pool Fencing.

SECTION 2: DEFINITIONS

The definitions in the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2508 are hereby incorporated by reference. Additionally, the following definitions shall apply in these regulations:

- (a) "Director" means the Wake County Department of Human Services Director or authorized representative.
- (b) "Operator" means the certified pool operator (CPO) who is responsible for the daily operation of a public swimming pool.
- (c) "Owner" means the owner of the swimming pool, or the responsible management company.
- (d) "Pool Area" means the interior of the fenced area around a swimming pool including the swimming pool itself and the interior of all toilets, bathhouses, equipment enclosure, and chemical enclosures associated with the swimming pool.
- (e) "Residential Swimming Pool" means any swimming pool located on private property, the use of which is limited to swimming or bathing by members of his/her family or invited guests. The term shall not include facilities located inside a residence, storable pools designed for seasonal setup and use which are stored at the end of the swimming season, or spas installed on decks or porches if a fitted hard cover designed to prevent entry is maintained in place at all times when the spa is not in use.
- (f) "Swimming Pool" means any structure, basin, chamber or tank containing an artificial body of water which may be used for swimming, diving, wading, instructional purposes, or therapeutic bathing. The term as used herein shall include public swimming pools as defined in the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2508(2). The term shall include recreational attractions including, but not limited to water slides and wave pools and their auxiliary structures including buildings, appurtenances, and equipment used collectively by the public and operated by any person as owner, lessee, Operator, or concessionaire, regardless of whether a fee is charged for such use.
- (g) "Wake County Swimming Pool Operations Permit" means the Wake County permit required for the operation of a swimming pool in Wake County.
- (h) "Year-Round Pool" means any pool that is indoor or heated.

SECTION 3: APPROVAL OF PLANS AND POOL CONSTRUCTION

- (a) Construction beginning after the effective date of these regulations shall comply fully with the regulations herein.
- (b) No person shall construct, install, extend, or modify a swimming pool unless the plans and specifications for such work have been submitted to and approved in writing by the Director.
- (c) Application for approval of such plans and specifications shall be made on forms provided by the Director.
- (d) The applicant shall include all the following information at the time the application is submitted to the Department of Environmental Services. Plans shall be drawn to an acceptable architectural or engineer's scale.
 - (1) Site Plan, including pool, deck and any other appurtenant buildings.
 - (2) Plan and sectional view dimensions of both the pool and the area enclosed by the barrier fence.
 - (3) Plans and layouts for the bathhouse, the equipment room, and the chemical storage room.
 - (4) Manufacturer's specifications of all treatment equipment used and their layout in the equipment room.
 - (5) A piping schematic showing piping, pipe size, inlets, main drains, skimmers, gutter outlets, vacuum fitting and all other appurtenances connected to the pool piping system.
 - (6) Specifications for the water supply and wastewater disposal systems. This would include aspects such as well location, sewage disposal system location, and backwash water disposal where applicable.
 - (7) A fencing detail.
 - (8) A lighting schedule, if pool is open for night swimming.
- (e) The Director shall approve the plans and specifications when they comply with the standards of constructions, design, and equipment as required by these regulations and the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2500. The Director shall retain the plans showing the pool piping as approved and the as-built plans provided by the pool builder.
- (f) The swimming pool shall be constructed in accordance with the plans approved by the Director and shall be subject to all conditions and/or revisions noted as part of the written approval. Inspections at the construction site may be made as is necessary to assure that the construction is according to approved plans. Any modifications to approved plans must be submitted and approved prior to construction.
- (g) When construction of the pool is complete and the pool is ready for a Wake County Swimming Pool Operations Permit, the owner or representative shall request an inspection by the Department.

SECTION 4: DESIGN DETAILS

Any type of water device or feature, which sprays or discharges water onto the surface of a swimming pool where the depth exceeds 18 inches, is prohibited. This does not include wading pools designed to have water recreation attractions, areas in a pool under a waterslide, fill

spouts or competition diving pools where water is discharged on the surface for a diver's reference point.

SECTION 5: PERMITS TO OPERATE

- (a) A Wake County Swimming Pool Operations Permit shall be required for the operation of a swimming pool in Wake County.
- (b) A Wake County Swimming Pool Operations Permit shall be issued when an inspection of the swimming pool by the Director indicates the facilities are in compliance with these regulations and the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2500. A Wake County Swimming Pool Operations Permit shall be valid for a period of no more than 12 months and shall be subject to provisions as noted on the permit form governing any operational limitations necessary to assure full compliance with these regulations.

SECTION 6: INSPECTIONS AND REPORTS

- (a) The Director is authorized to enter upon and make inspections of the premises at any reasonable time. The Operator shall assist in any reasonable way with such inspections.
- (b) The Director shall make inspections, surveys, and investigations, collect samples of water and other substances found on the premises of public swimming pools, and make or cause to be made such laboratory analysis as may be necessary to determine that every swimming pool complies with the standards and requirements set forth in this ordinance. Owners and/or Operators shall maintain and furnish to the Director such records and information as may be required by the Director for ascertaining compliance with these regulations.

SECTION 7: RESPONSIBILITIES OF OWNERS AND OPERATORS

- (a) The Owner shall ensure that the pool has an Operator, and that the Operator is properly trained and capable of operating the swimming pool in compliance with these regulations.
- (b) Operators of swimming pools shall undergo and satisfactorily complete a certified pool operators' course licensed by the Pool & Hot Tub Alliance (PHTA) or an equivalent course as determined by the Director and possess a valid certificate.
- (c) All Operators shall be certified by the Wake County Department of Environmental Services. To obtain certification, the Operator must pass a test administered by the Department. (Effective 2002) The certificate will be valid for five years from the date of issuance. Violations of local or state rules may result in suspension or revocation of the Wake County certification by the Director. If the Wake County certification is suspended or revoked, the Operator shall not operate a pool in Wake County.
- (d) The Operator shall maintain and furnish to the Director such records as may be required for ascertaining compliance with these regulations. Records shall be kept onsite at all times and accessible for inspection. If records are not onsite or not properly kept, the pool shall be closed. Records shall include at least the following:
 - (1) Daily readings of the measurement of disinfectant residuals and pH levels taken at least two times each day of operation. The time, date, and

collector's initials of each measurement shall be clearly legible when recorded. The two daily readings and recordings of the disinfectant residuals and pH levels shall be taken a minimum of six hours apart. The Operator shall read and record at least one measurement of the disinfectant and pH level daily;

- (2) Recordings of all activities pertaining to the operation of the pool, including hyperchlorination and the addition of all chemicals necessary for proper maintenance of the water quality standards;
 - (3) Daily recordings of temperatures of heated pools and spas;
 - (4) A checklist of maintenance guidelines to be provided by the Department of Environmental Services (CPO checklist). The Operator shall complete this form daily during the permitted period; and
 - (5) Current certifications of the Operator from Wake County and PHTA or an equivalent course as determined by the Director.
- (e) The Operator of a swimming pool shall physically inspect a pool daily and complete the CPO checklist. When the Operator is temporarily unable to inspect the pool, it shall be the responsibility of the Owner or Operator to provide an alternate Operator. The alternate Operator shall meet all the requirements of the Operator, including Section 7 (b) and (c).
- (f) The Owner shall notify the Department immediately upon the termination of the Operator. The pool shall be closed until an Operator is employed or contracted.
- (g) An Operator of a pool shall register annually with the Department and list all pools under the Operators' responsibility.

SECTION 8: WATER QUALITY TEST EQUIPMENT

- (a) A water quality testing device shall be provided at each public swimming pool and shall be certified, listed, and labeled to NSF/ANSI 50 by an ANSI-accredited certification organization. The water quality testing device shall be able to measure the chemical constituents as specified in 15A NCAC 18A .2535.
- (b) All pools equipped to be heated shall have a metal stem or shatter protected thermometer capable of measuring water temperature to at least 110°F with a range of accuracy of not greater than ± 2 degrees F.

SECTION 9: WATER QUALITY STANDARDS

- (a) The chemical quality of the water shall be maintained in an alkaline condition at all times with the pH between 7.2 and 7.8.
- (b) When chlorine is used as a disinfectant, a free chlorine residual of at least one part per million shall be maintained throughout the pool whenever it is open or in use. For wading pools and spas, a free chlorine residual of at least two parts per million shall be maintained. Refer to chart in paragraph (j).
- (c) When bromine or compounds of bromine are used as the disinfectant, a free bromine residual of at least two parts per million shall be maintained throughout the pool whenever it is open or in use.

- (d) Violation of the bacteriological quality and water chemistry standards of this ordinance or the failure to maintain the minimum level of disinfectant in the pool water as prescribed in these regulations shall be grounds for the immediate suspension of the Wake County Swimming Pool Operations Permit.
- (e) The bacteriological or chemical quality of the pool water shall not cause undue irritation of the eyes or skin of bathers or have any objectionable physiological effect on bathers.
- (f) Floating scum and debris shall not be allowed to accumulate in the pool.
- (g) Water shall be maintained at such clarity so that the main drain cover located in the deepest part of the pool is clearly visible from the pool deck. Failure to maintain such clarity shall be grounds for the immediate suspension of the Wake County Swimming Pool Operations Permit.
- (h) When silver/copper ion systems are used, the copper concentration in the pool water shall not exceed one part per million.
- (i) A pool shall be closed by the Operator or by suspension of the Wake County Swimming Pool Operations Permit for any of the following violations of the water quality standards:
 - (1) Presence of algae;
 - (2) No measurable presence of disinfectant; and/or
 - (3) *Presence of fecal material.

For violation of (1)-(2), the pool shall be closed and superchlorinated in accordance with recommended guidelines from the PHTA, and shall remain closed until the water chemistry is in compliance with Section 9 (j) below, at which time the Operator shall call the Department for re-inspection if the Wake County Swimming Pool Operations Permit was suspended by the Director.

*For violation (3), refer to the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2535 (13).

If fecal material is introduced into a wading pool or spa, it is to be drained and disinfected. When the wading pool or spa is refilled and meets the water quality requirements of paragraph (j) below, the pool may be reopened.

- (j) Free chlorine, combined chlorine, bromine and pH values shall be continuously maintained within the following ranges:

Pools	Minimum	Maximum
Free Chlorine	1.0ppm	10.0ppm
Combined Chlorine	None	0.5ppm
Bromine	2.0ppm	20.0ppm
pH	7.2	7.8

Wading Pools and Spas	Minimum	Maximum
Free Chlorine	2.0ppm	10.0ppm
Combined Chlorine	None	0.2ppm
Bromine	2.0ppm	20.0ppm
pH	7.2	7.8

SECTION 10: RESIDENTIAL POOL FENCING

- (a) All residential swimming pools shall be protected by a fence, wall, building or other enclosure, or any combination thereof, which completely encloses the swimming pool area such that all the following conditions are met:
- (1) Constructed to afford no external handholds or footholds. However, the use of wire mesh fences with a mesh size of two and one-fourth inches or less is permitted;
 - (2) A four foot minimum height (measured from the outside approach) is provided entirely around the swimming pool area;
 - (3) The horizontal space between vertical members of the enclosure shall not exceed four inches; where the horizontal space between vertical members exceeds one and three-quarters inches there shall be at least 30 inches between any horizontal bottom rail or stringer and the next horizontal rail or stringer;
 - (4) The height of any opening under the bottom of the enclosure shall not exceed four inches;
 - (5) All gates leading to the pool area shall be equipped with self-closing, and positive self-latching mechanisms. Release of the latch on the self-latching mechanism shall be activated at a height no less than 54 inches above the bottom horizontal rail of a picket or ornamental access gate or on the pool side of the gate at a distance of no more than three inches below the top of the gate. If the latch is located on the pool side of the gate there must be an 18 inch shield protecting the latch so no one can reach through the fence to reach the latch; and
 - (6) Utility gates used for vehicular traffic do not have to meet paragraph (5) if, locked at all times except while being used, and is attended to prevent young children and other unwary persons from entering the pool area.
- (b) Temporary fencing of all excavation sites during construction of a swimming pool is required.
- (c) All residential pool enclosures shall be completed at the time the pool is allowed to contain water.
- (d) The requirements of this section apply to fencing for all residential swimming pools constructed prior to July 1, 2008. Fencing for residential swimming pools constructed after July 1, 2008 is governed by the applicable North Carolina residential building code.

SECTION 11: SANITARY FACILITIES

Sanitary facilities shall be provided at all pools. Dressing and sanitary facilities shall be located near the pool. The minimum criteria for the sanitary facilities shall be based on the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2526 (b) through (m).

SECTION 12: EQUIPMENT AREAS

- (a) Chlorinators, brominators, filters, and pumps and other electrical equipment shall be sheltered and protected in a weatherproof enclosure.
- (b) A permanent means of access, such as stairway or ramp, shall be provided to all equipment areas. The entrance to the equipment enclosure shall be kept locked at all times.

- (c) Minimum ceiling height of the enclosure shall be seven feet. Adequate clearance between the walls, ceilings, and floor, and each piece of equipment shall be provided to allow for inspection, maintenance, and repair operations.
- (d) Floor drainage, which drains to sanitary sewer, shall be provided in the equipment enclosure and interior surfaces of the enclosure shall be kept free of any accumulation of water. Where needed, landscaping shall be such that surface drainage does not allow flooding of the equipment area.
- (e) Artificial lighting shall be provided so that all gauges and valves are clearly visible.
- (f) Natural cross draft or continuous forced ventilation is required away from pool deck area.

SECTION 13: CHEMICAL STORAGE AREAS

- (a) Chemical storage shall be provided at all installations in a dry, weatherproof enclosure, which shall be separate from the enclosure provided for pumps and other electrical equipment with a permanent means of access.
- (b) The interior surfaces of the enclosure shall be kept free of any accumulation of water.
- (c) Chemicals shall be stored on shelving or platforms and at least 12 inches above floor. Adequate shelving shall be provided to allow for separate spacing of non-compatible chemicals.
- (d) The entrance shall not open to the pool area and shall be locked.
- (e) Artificial lighting shall be provided.
- (f) Natural cross draft or continuous forced ventilation is required away from pool deck area.
- (g) This room shall be for the storage of pool chemicals only.

SECTION 14: MAINTENANCE OF THE POOL AND POOL AREA

- (a) All parts of the pool shall be maintained in good repair and kept clean, sanitary, and free of litter, broken glass or other hazardous items. The pool floor and walls shall be kept free from cracks and other defects, and painted or otherwise treated to maintain cleanable surfaces.
- (b) Pool equipment shall be maintained in good repair. The Operator of a swimming pool shall immediately close the pool, if at any time the filter equipment, chemical feed system, or pump becomes inoperative, or if the main drain cover has been removed or is broken. Failure to close the pool under these circumstances shall be grounds for immediate suspension of the Wake County Swimming Pool Operations Permit.
- (c) Pool decks shall be kept in good repair and free from cracks and other defects and shall be maintained so as not to allow standing water on the deck. Decks shall be structurally sound and shall be maintained free of trip hazards or offsets greater than one half inch resulting from deterioration or changes from the original deck profile. Decks shall be kept clean, sanitary, and free of litter.
- (d) Floors, walls, and ceilings of pool bath houses, equipment enclosures, and chemical storage enclosures shall be maintained in a manner to be slip resistant and in good repair.

- (e) Fences and gates shall be kept in good repair. All pool entrances shall be self-closing and self-latching.

SECTION 15: POOL SAFETY

- (a) No glass containers of any type will be permitted in the pool area at any time. Whenever broken glass is introduced into a pool, wading pool or spa, it shall be closed, drained, the glass removed, and the water quality standards in Section 9 (j) must be met prior to reopening. Whenever food or garbage is introduced into a pool, wading pool or spa, it shall be closed, the food or garbage removed, and the water quality standards in Section 9 (j) must be met prior to reopening. Failure to comply shall result in suspension of the Wake County Swimming Pool Operations Permit.
- (b) Pets and other animals shall not be allowed to enter the water or the pool area.
- (c) No person having a communicable disease or condition shall be employed by or utilize a pool when it would represent a threat to the public health.
- (d) Pools shall have a working telephone permanently affixed to a location on the pool deck area. The telephone shall have a permanent electrical connection, with no line extensions or switchboard operator. Direct dial 911 phones shall not be allowed (phones that have no dial pad). A sign shall be posted at the phone stating, "EMERGENCY DIAL 911" along with the phone number and physical address of the pool. Emergency Services shall be able to detect the physical location of the caller. The emergency phone shall be capable of receiving calls with an audible ringer.
- (e) All drain covers shall be in good condition and securely attached. These covers must be physically secured, such that the covers may not be removed without tools. A professional engineer or architect currently registered in North Carolina shall certify compliance in writing with the American National Standard ASME/ANSI A112.19.8-2007 standard and subsequent amendments or rule changes to this standard.
- (f) Heaters shall be equipped with thermostatic controls capable of assuring that the maximum operating temperature of spa water does not exceed 104°F (40°C), and that the maximum operating temperature of the pool water does not exceed 90°F (32°C).
- (g) Swimming pools shall have a unit of lifesaving equipment conspicuously and conveniently on hand at all times. A unit of lifesaving equipment shall include the following:
 - (1) A pole not less than 12 feet long, with a body hook securely attached. The pole attached to the body hook shall be non-telescoping, non-adjustable, and non-collapsible.
 - (2) A minimum one quarter inch diameter throwing rope as long as one and one-half times the maximum width of the pool or 50 feet, whichever is less, to which has been firmly attached to a U.S. Coast Guard approved ring buoy. A rescue tube or rescue can shall be accepted as a substitute for the ring buoy where it is accompanied by a lifeguard who has been trained to use it properly.
- (h) Two units of lifesaving equipment must be provided for any pool which exceeds 3,000 square feet of total surface area.

- (i) When a public swimming pool does not have at least one lifeguard on duty, a sign shall be posted which has clearly legible letters of at least four inches in height stating: "WARNING NO LIFEGUARD ON DUTY". In addition, there shall be signs clearly legible from all bather entrances with a minimum letter size of one inch stating: "CHILDREN SHOULD NOT USE THE SWIMMING POOL WITHOUT ADULT SUPERVISION" and: "ADULTS SHOULD NOT SWIM ALONE". Wading pools which do not have a lifeguard inside the wading pool enclosure shall have a sign stating: "WARNING NO LIFEGUARD ON DUTY" in four inch letters. Such signs shall be mounted permanently.
- (j) A sign prohibiting pets and glass containers in the pool area shall be posted.
- (k) All spas that have a hydrotherapy turbulence system shall provide a timer switch with a maximum of 15 minutes.
- (l) In a spa, where the temperature exceeds 90°F, a caution sign shall be mounted adjacent to the entrance to the spa. It shall contain the warnings in letters at least one-half inch in height, as stated in the North Carolina Rules Governing Public Swimming Pools, 15A NCAC 18A .2532 (15).
- (m) Pool ladders with non-skid tread and stair railings shall be maintained and securely fastened to pool deck. Pool ladders shall be flush to the pool wall. Contrasting color bands at least two inches wide shall be applied and maintained on the leading edge of stair treads, and any other underwater protuberance.
- (n) All swimming pools where diving is not allowed, or where the pool depth is less than five feet, shall provide notice on the deck which states: "NO DIVING", in clearly legible letters of at least four inches in height and in contrasting color to the deck. Such notices shall be employed at intervals of not more than 25 feet.

SECTION 16: FACILITY CLOSURE

Any public swimming pool left in a state of disrepair or out of service for one or more swimming season(s) shall be drained and secured so as not to create a hazard or nuisance. If a public swimming pool is to be permanently closed, the pool shall be filled in or removed and the water and drainage connections removed.

SECTION 17: SUSPENSION AND REVOCATION OF PERMITS

- (a) The Director may summarily suspend or revoke a Wake County Swimming Pool Operations Permit issued in accordance with these regulations upon finding that a violation of the applicable provisions of these regulations or a condition imposed upon the permit has occurred. A Wake County Swimming Pool Operations Permit may also be suspended or revoked upon a finding that its issuance was based upon incorrect or inadequate information that materially affected the decision to issue the Wake County Swimming Pool Operations Permit.
- (b) The Operator shall affix a notice stating, "POOL CLOSED," at all entrances when the Wake County Swimming Pool Operations Permit has been suspended or revoked. The Operator shall prohibit the use of the pool until the Wake County Swimming Pool Operations Permit has been restored.

SECTION 18: APPEAL PROCEDURES

Appeals concerning the interpretation and enforcement of these regulations shall be conducted in accordance with the Wake County Human Services Board Rules of Appeal as amended and in compliance with North Carolina General Statutes 130A-24 as amended.

SECTION 19: PENALTIES

If any person shall willfully violate any of these regulations or shall willfully fail to perform any acts required by these regulations, he/she shall be guilty of a misdemeanor and shall be subject to punishment as provided in NCGS 130-25 and revocation or suspension of any permit issued pursuant to these regulations.

SECTION 20: ADMINISTRATIVE PENALTIES

(a) Definitions, as used in this section, the term:

- (1) "Delegate" means any person to whom the Director has delegated authority in writing to act in relation to administrative penalties;
- (2) "Hearing Officer" means the Director or Director's authorized representative;
- (3) "Respondent" means the person against whom a penalty has been assessed.

(b) Administrative Penalties

The following rules concern the imposition of administrative penalties imposed by the Director.

(c) Who May Assess Penalties

Administrative penalties may be assessed by the Director.

(d) When Penalties May Be Assessed

Administrative penalties may be assessed against any person for violations of the Wake County Department of Environmental Services Regulations Governing Swimming Pools, and/or any condition imposed upon a permit issued under these regulations.

(e) Amount of Penalty Assessment

- (1) The penalty shall not exceed one hundred dollars (\$100.00) per day.
- (2) Each day of a continuing violation shall constitute a separate violation.
- (3) Each violation of a specific provision of Article 8 of GS Chapter 130A, or of these regulations adopted by the Board of Human Services, or a condition imposed upon a permit issued by Wake County, shall be a separate violation.

(f) Procedure for Assessment

- (1) A notice of assessment shall be sent to the respondent by registered or certified mail. If the registered or certified notice is refused or unclaimed by the respondent at his/her last known legal address, first class mail to the respondent at his last known address will be lawful and sufficient service under these regulations. The notice shall describe the nature of the violation with reasonable particularity, state the amount of the penalty for each violation, advise that each day of a continuing violation constitutes a separate violation, advise that the penalty is now due or continues to accrue, and advise the respondent of his rights of appeal as specified in Section 18.
- (2) The Director may modify a penalty upon finding that additional or different facts should have been considered in determining the amount of the assessment.

SECTION 21: INJUNCTIONS

If any person violates any of these regulations or if any person hinders or interferes with the proper performance of duties by the Director, the Director may institute an action in the Superior Court of Wake County for injunctive relief as provided in NCGS 130A-18.

SECTION 22: PRIOR ORDINANCES/REGULATIONS SUPERCEDED

All provisions of the Swimming Pool Regulations heretofore adopted by the Wake County Human Services Board governing swimming pools in Wake County which are in conflict with the provision of these regulations are hereby repealed and superseded.

SECTION 23: SEVERABILITY

If any provisions of these regulations or the application thereof to any person or circumstances is held invalid, the remainder of the regulations and the application of such provisions to other persons or circumstances shall not be affected thereby.

SECTION 24: EFFECTIVE DATE

These amended regulations adopted by the Wake County Board of Human Services on July 23, 2020, shall be in force and effect from and after July 23, 2020, and supersede all prior Wake County regulations Governing Swimming Pools.

DocuSigned by:
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