



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**

**Commission for Public Health**

**ROY COOPER** • Governor

**MANDY COHEN, MD, MPH** • Secretary

**MARK T. BENTON** • Assistant Secretary for Public Health

Division of Public Health

**MEMORANDUM**

**DATE:** June 1, 2020

**TO:** Rulemaking Interested Persons

**FROM:** Virginia Niehaus, Rulemaking Coordinator, Commission for Public Health and Director of Regulatory and Legal Affairs, Division of Public Health

**RE:** Notification of Proposed Rule Actions: 15A NCAC 18A .2508 and .2543

Pursuant to G.S. 150B-21.2, this memorandum serves as the required notice to interested persons that the North Carolina Commission for Public Health (CPH) is proposing to amend rules 15A NCAC 18A .2508 and .2543. In compliance with SL 2019-88, CPH adopted temporary rules in November 2019 governing the construction and operation of artificial swimming lagoons. CPH is now proposing to adopt permanent rules to ensure that the requirements for the construction and operation of artificial swimming lagoons do not expire from the Code. CPH has submitted notice of its intent to make these rule changes to the NC Office of Administrative Hearings (OAH).

In accordance with G.S. 150B-21.4, a fiscal note was prepared for these proposed rules and approved by CPH. The changes will have an impact on state and local funds as well as a possible substantial economic impact. The fiscal note was approved by the NC Office of State Budget and Management (OSBM) on April 27, 2020.

The notice of text that was published in today's edition of the NC Register is attached to this memorandum and may be found on OAH's website at <https://www.oah.nc.gov/documents/nc-register>. The text of the proposed rules and the fiscal note may be found on CPH's website at <https://cph.publichealth.nc.gov/>.

A public hearing on these rules is scheduled for Friday, July 10, 2020 at 10:00 am. In an abundance of caution and to address protective measures to help prevent the spread of COVID-19, the public hearing will be held by teleconference. You may participate in the public hearing by dialing 919-715-0769 (no access code).

CPH is accepting public comments on the proposed rules and fiscal note from June 1, 2020 to July 31, 2020. You may submit comments by email to [cphcomment@lists.ncmail.net](mailto:cphcomment@lists.ncmail.net) or by mail to Virginia Niehaus, Rulemaking Coordinator, Commission for Public Health, 1931 Mail Service Center, Raleigh, NC 27699-1931. Comments will also be accepted at the public hearing. The proposed effective date of these rules is October 1, 2020.

Should you have questions related to this memorandum, the proposed rules, or the fiscal note, please contact Alice Isley, Program Manager in the Division of Public Health, Environmental Health Section at (252) 495-3612.

**NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH**

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609  
MAILING ADDRESS: 1931 Mail Service Center, Raleigh, NC 27699-1931  
www.ncdhhs.gov • TEL: 919-707-5000 • FAX: 919-870-4829

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

Attachment

cc: Dr. Ron May, Chair, Commission for Public Health  
Mr. Mark Benton, Assistant Secretary, Division of Public Health  
Mr. Larry Michael, Environmental Health Section Chief, Division of Public Health  
Mr. Shane Smith, Branch Head, Environmental Health Section, Division of Public Health  
Ms. Alice Isley, Program Manager, Environmental Health Section, Division of Public Health  
Ms. Kirsten Leloudis, Program Manager, Regulatory and Legal Affairs, Division of Public Health

**TITLE 15A – DEPARTMENT OF ENVIRONMENTAL QUALITY**

*Notice is hereby given in accordance with G.S. 150B-21.2 that the Commission for Public Health intends to amend the rules cited as 15A NCAC 18A .2508 and .2543.*

**Link to agency website pursuant to G.S. 150B-19.1(c):** <https://cph.publichealth.nc.gov/>

**Proposed Effective Date:** *October 1, 2020*

**Public Hearing:**

**Date:** *July 10, 2020*

**Time:** *10:00 a.m.*

**Location:** *In an abundance of caution and to address protective measures to help prevent the spread of COVID-19, this public hearing will be held by teleconference at 919-715-0769 (no access code).*

**Reason for Proposed Action:** *In compliance with SL 2019-88, the Commission for Public Health (CPH) adopted temporary rules in November 2019 governing the construction and operation of artificial swimming lagoons. Artificial swimming lagoon is defined as any body of water used for recreational purposes with more than 20,000 square feet of surface area, an artificial liner, and a method of disinfectant that results in a disinfectant residual in the swimming zone that is protective of the public health. CPH is now adopting permanent rules to ensure that the requirements for the construction and operation of artificial swimming lagoons do not expire from the Code.*

**Comments may be submitted to:** *Virginia Niehaus, CPH Rulemaking Coordinator, 1931 Mail Service Center, Raleigh, NC 27699-1931; email [cphcomment@lists.ncmail.net](mailto:cphcomment@lists.ncmail.net)*

**Comment period ends:** *July 31, 2020*

**Procedure for Subjecting a Proposed Rule to Legislative Review:** If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission after the adoption of the Rule. If the Rules Review Commission receives written and signed objections after the adoption of the Rule in accordance with G.S. 150B-21.3(b2) from 10 or more persons clearly requesting review by the legislature and the Rules Review Commission approves the rule, the rule will become effective as provided in G.S. 150B-21.3(b1). The Commission will receive written objections until 5:00 p.m. on the day following the day the Commission approves the rule. The Commission will receive those objections by mail, delivery service, hand delivery, or facsimile transmission. If you have any further questions concerning the submission of objections to the Commission, please call a Commission staff attorney at 919-431-3000.

**Fiscal impact. Does any rule or combination of rules in this notice create an economic impact? Check all that apply.**

- State funds affected**
- Local funds affected**
- Substantial economic impact (>= \$1,000,000)**
- Approved by OSBM**
- No fiscal note required**

**CHAPTER 18 - ENVIRONMENTAL HEALTH**

**SUBCHAPTER 18A – SANITATION**

**SECTION 2500 – PUBLIC SWIMMING POOLS**

**15A NCAC 18A .2508 DEFINITIONS**

The following definitions apply throughout this Section:

- (1) "Department" means North Carolina Department of Health and Human Services.
- (~~1~~)~~(2)~~ "Equipment replacement" means replacement of individual components of the hydraulic and disinfection systems such as pumps, filters, and automatic chemical feeders.
- (~~2~~)~~(3)~~ "Public swimming pool" means public swimming pool as defined in G.S. 130A-280. Public swimming pools are divided into five types:
  - (a) "Swimming pools" are public swimming pools used primarily for swimming.
  - (b) "Spas" are public swimming pools designed for recreational and therapeutic use that are not drained, cleaned, or refilled after each individual use. Spas may include units designed for hydrojet circulation, hot water, cold water mineral bath, air induction bubbles, or any combination thereof. Common terminology for spas includes "therapeutic pool," "hydrotherapy pool," "whirlpool," "hot spa," and "hot tub."

- (c) "Wading pools" are public swimming pools designed for use by children, including wading pools for toddlers and children's activity pools designed for casual water play ranging from splashing activity to the use of interactive water features placed in the pool.
- (d) ~~"Specialized water "~~"Water recreation attractions" are pools designed for special purposes that differentiate them from swimming pools, wading pools and spas. They include:
  - (i) water slide plunge pools and run out lanes, which transfer the kinetic energy of the users' velocity through friction to the slide;
  - (ii) wave pools;
  - (iii) rapid rides;
  - (iv) lazy rivers;
  - (v) interactive play attractions that incorporate devices using sprayed, jetted, or other water sources contacting the users and that do not incorporate standing or captured water as part of the user activity ~~area; and area;~~
  - (vi) training pools deeper than a 24 inch deep wading pool and shallower than a 36 inch deep swimming ~~pool; pool; and~~
  - (vii) artificial swimming lagoons as defined in G.S. 130A-280.
- (e) "Special purpose and therapy pools" are pools designed and used for therapeutic treatments or physical training and fitness outside of a licensed medical facility or practice of a licensed physical therapist. They include:
  - (i) float tanks used for float therapy in a salt brine solution;
  - (ii) swim spa training pools which use jetted water for stationary swimming against a water current;
  - (iii) exercise therapy and treadmill pools equipped for water resistance exercise therapy; and
  - (iv) scuba pools designed and used for training swimmers to use self-contained underwater breathing apparatus.
- ~~(3)(4)~~ "Registered Design Professional" means an individual who is registered or licensed to practice engineering as defined by G.S. 89C or architecture as defined by G.S. 83A.
- ~~(4)(5)~~ "Remodeled" means renovated in a manner requiring disruption of the majority of the pool shell or deck, changes in the pool profile, or redesign of the pool hydraulic system.
- ~~(5)(6)~~ "Repair" means returning existing equipment to working order, replastering or repainting of the pool interior, replacement of tiles or coping and similar maintenance activities. This term includes replacement of pool decks where the Department has determined that no changes are needed to underlying pipes or other pool structures.
- ~~(6)(7)~~ "Safety vacuum release system" means a system or device capable of providing vacuum release at a suction outlet caused by a high vacuum occurrence due to suction outlet flow blockage.
- ~~(7)(8)~~ "Splash zone" means the area of an interactive play attraction that sheds water to a surge tank or container to be recirculated.
- ~~(8)(9)~~ "Unblockable drain" means a drain of any size and shape that a human body cannot sufficiently block to create a suction entrapment hazard.
- (10) "Water feature" means any component within a public swimming pool that pumps, jets, or sprays water above the waterline.

*History Note: Authority G.S. 130A-280; 130A-282; S.L. 2019-88; Eff. May 1, 1991; Temporary Amendment Eff. June 1, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner; Amended Eff. April, 1, 2013; May 1, 2010; March 1, 2004; April 1, 1999; January 1, 1996; October 1, 1994. Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. July 20, 2019; Temporary Amendment Eff. December 3, 2019.*

#### **15A NCAC 18A .2543 WATER RECREATION ATTRACTIONS**

- (a) Water recreation attractions including water slides, wave pools, rapid rides, lazy ~~rivers~~ rivers, artificial swimming lagoons, and other similar features can deviate from the requirements of this Section with respect to pool profile, depth, freeboard, flow dynamics and surface skimming systems. The designing engineer or equipment manufacturer shall provide the Department with information design plans and technical specifications to justify such ~~deviation~~ deviation, ~~as necessary for the proper function of the attraction.~~ Water recreation attractions shall meet all other requirements of this Section.
- (b) Water slide landing pools with a capacity of less than 60,000 gallons shall have a circulation and filtration system capable of turning over the entire pool capacity every two hours. Where automatic chemical controllers are used the turnover time shall be no more than three hours. Landing pool dimensions shall be consistent with the slide manufacturer's recommendation.
- (c) When waterfalls are incorporated in water recreation attractions, they shall be constructed with no handholds or footholds to a height of four feet to discourage climbing.
- (d) Interactive play attractions shall be constructed and operated in accordance with the ~~rules of this section~~ Rules of this Section and shall comply with the following:
  - (1) The recirculation system shall contain a water capacity equal to at least three minutes of maximum flow of all feature pumps and filter circulation pumps combined and shall not be less than 1,000 gallons. Where the water capacity

exceeds 10,000 gallons, the minimum capacity shall be based on the lesser of three minutes of maximum feature flow or 7.5 gallons per square foot of splash zone watershed drained to the surge container.

- (2) Access shall be provided to the surge water container.
  - (3) A filter circulation system shall be provided and shall be separate from the feature pump system except that both systems can draw water from a common drain pipe if the drain and pipe are sized to handle the flow of all pumps without exceeding the flow velocities specified in Rule .2518 of this Section.
  - (4) The filter circulation system shall draw water from the surge container through a variable height surface skimmer and a bottom drain located no more than 6 inches from the bottom of the container. ~~Custom skimming systems that do not comply with ANSI/NSF Standard 50 shall be approved where the operational requirements make it necessary to deviate from that standard.~~
  - (5) The filter circulation system shall filter and return the entire water capacity in no more than 30 minutes and shall operate 24 hours a day.
  - (6) Automatic chemical controllers shall be provided to monitor and adjust the disinfectant residual and pH of the water contained in the system.
  - (7) The disinfectant residual in interactive play attractions shall be maintained at a level of at least two parts per million of free chlorine. Chlorine feeders shall be capable of producing 12 parts per million of free chlorine in the filter circulation piping.
  - (8) Valves shall be provided to control water flow to the features in accordance with the manufacturers' specifications.
  - (9) Splash zones shall be sloped to drains sized and located to remove all feature water to the surge tank without water accumulating on the surface.
  - (10) Deck or walkway space is not required outside the splash zone.
  - (11) Dressing and sanitary facilities shall ~~not be provided.~~ required.
  - (12) Interactive play features shall not be required to have a fence except the wading pool fence requirements shall apply to interactive play features located inside a swimming pool enclosure.
  - (13) The safety provisions of Rule .2530 of this Section shall not apply except a sign shall be posted prohibiting pets and glass containers.
  - (14) Interactive play attractions built prior to April 1, 2004, that do not comply with these design and construction requirements shall be permitted to operate as built if no water quality or safety violations occur.
- (e) Training pools shall meet the requirements for swimming pools with the following exceptions:
- (1) Training pools shall be equipped with a filter circulation system that filters and returns the entire pool capacity in no more than two hours.
  - (2) The free chlorine residual in training pools shall be maintained at no less than two parts per million.
- (f) Artificial swimming lagoons shall meet the requirements for public swimming pools except as specified in this Rule:
- (1) Pool shells shall not be required. Liners shall meet the requirements of Rule .2514 of this Section.
  - (2) Underwater components of the artificial swimming lagoon or float lines with openings greater than one-half inch shall not be allowed in swimming zones.
  - (3) All swimming zone float rope components shall be a color contrasting with the pool liner. The location of the float rope may vary from the requirements of Rule .2523(e) of this Section regarding breakpoint and slope. A contrasting color band shall not be required on the liner under the rope.
  - (4) Each swimming zone and water feature shall meet water quality standards as required in Rule .2535 of this Section. If the water quality of a swimming zone or water feature does not meet the requirements of Rule .2535 of this Section, the operator shall close the swimming zone or water feature and post a sign at the entrance of the swimming zone with legible letters of at least four inches (10 cm) in height stating "ATTENTION: THE SWIMMING ZONE IS CLOSED. SWIMMING IN THIS AREA IS NOT PERMITTED AT THIS TIME." The swimming zone or water feature shall remain closed until the water quality in the swimming zone or water feature complies with the requirements of Rule .2535 of this Section.
  - (5) All non-swimming zones shall be maintained so the bottom of the lagoon is visible in all areas.
  - (6) A sign shall be posted at all entrances with legible letters of at least four inches (10 cm) in height stating "NOTICE – NO SWIMMING ALLOWED OUTSIDE OF DESIGNATED SWIMMING ZONES."
  - (7) Signage shall be provided indicating swimming zones.
  - (8) Depth markings and no diving markers shall be provided on decks in swimming zones as required in Rule .2523 of this Section. Signs shall be posted at all entrances to swimming zones with legible letters of at least four inches (10cm) in height stating "NO DIVING" and stating the maximum depth of the swimming zone in Arabic numerals and shall include the word "feet" or the symbol "ft" to indicate the unit of measure.
  - (9) Decks may vary from the minimum deck area requirements in Rule .2522 of this Section at zero entry areas located within swimming zones. Access to swimming zones shall be provided for emergency vehicles and personnel. No decks shall be required in non-swimming zones. The requirements of Rule .2515(g)(1) of this Section shall not apply to swimming zones and Rule .2515(g) of this Section shall not apply to non-swimming zones.
  - (10) Swimming zones shall meet all safety provisions as set out in Rule .2530 of this Section. Where swimming zones are separated by more than 75 feet, each swimming zone shall separately meet all safety provisions. Non-swimming zones are exempt from the requirements in Rule .2530 of this Section.
  - (11) A water treatment system that does not meet the requirements of Rules .2518 and .2519 of this Section shall be approved by the Environmental Health Section of the Department's Division of Public Health when the treatment

- system performs in a manner equal or superior to the systems described in Rules .2518 and .2519 of this Section in terms of water clarification, disinfection, and removal of debris, and results in a disinfectant residual and pH level as required in Subparagraph (f)(4) of this Rule.
- (12) The requirements of Rule .2529 of this Section and Rule .2526(e)–(h) of this Section shall not apply. Sanitary facility requirements shall comply with the 2018 North Carolina State Building Code: Plumbing Code, which is incorporated by reference, including any subsequent amendments or editions and available free of charge at: <https://codes.iccsafe.org/content/NCPC2018>.
- (13) Bacteriological samples shall be collected by the operator in non-swimming zones and tested weekly. One sample shall be collected for every 250 feet of shoreline, with no more than 300 feet and no less than 25 feet between any two sampling locations. The samples shall be collected at least one foot below the surface, in at least three feet of water. The samples shall be analyzed by a laboratory accredited by the North Carolina Drinking Water Laboratory Certification Program, the North Carolina Wastewater/Groundwater Laboratory Certification Program, or the National Environmental Laboratory Accreditation Program. The test results shall be maintained as part of the records required in Rule .2535(11) of this Section.
- (14) When the result of any test required by Subparagraph (f)(13) of this Rule exceeds the standards in Rule .3402(a) of this Subchapter, the operator shall:
- (A) notify the permitting agency and resample the water within 24 hours of receipt of the result from the laboratory; and
- (B) close all non-swimming zones and post a sign at all non-swimming zone entrances with legible letters of at least four inches (10 cm) in height stating "ATTENTION: ALL NON-SWIMMING ZONES ARE CLOSED. RECREATIONAL ACTIVITIES IN THIS AREA ARE NOT PERMITTED AT THIS TIME." This sign shall remain posted until resampling determines that bacterial levels do not exceed the standards in Rule .3402(a) of this Subchapter.
- (15) Non-swimming zones shall not be required to comply with the lighting requirements of Rule .2524 of this Section. When night swimming is allowed, the operator shall provide lighting in swimming zones as required for public swimming pools.
- (16) The requirements of Rule .2537(b)(16) of this Section shall not apply. Submersible pumps or mechanical pool cleaning equipment shall not be used in swimming zones or within 25 feet of swimming zones when a swimming zone is open to bathers. If submersible pumps or mechanical pool cleaning equipment are used in non-swimming zones when a non-swimming zone is open to users, the following conditions shall apply:
- (A) A registered design professional shall provide design plans or technical specifications that demonstrate that any underwater suction outlets perform in a manner that is equally protective or more protective than the Pool and Hot Tub Alliance's ANSI/APSP/ICC-7 2013 Standard for Suction Entrapment Avoidance in Swimming Pools, which is incorporated by reference, including any subsequent amendments or editions, and available for a fee of one hundred sixty-five dollars (\$165.00) at <https://www.apsp.org/store1>; and
- (B) All floating components of submersible pumps or mechanical pool cleaning equipment shall be labeled with a sign above the water line with legible letters of at least four inches (10 cm) in a contrasting color stating: "DANGER: MECHANICAL EQUIPMENT IN USE. STAY BACK 25 FEET."
- (17) The requirements of Rule .2521 of this Section shall not apply to non-swimming zones.

*History Note:* Authority G.S. 130A-280; 130A-282; S.L. 2011-39; S.L. 2019-88;  
Eff. April 1, 1999;  
Amended Eff. March 1, 2004;  
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. July 20, 2019;  
Temporary Amendment Eff. December 3, 2019.