Fiscal Note for Permanent Amendment of 15A NCAC 18A .2508 and .2545

Agency:	North Carolina Commission for Public Health Department of Health and Human Services Environmental Health Section Pools, Tattoos, and State Institutions Program
Rule Citations:	15A NCAC 18A .2508 Definitions 15A NCAC 18A .2545 Display Spa at a Temporary Event
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Rulemaking Authority:	S.L. 2021-77 G.S. 130A-280 G.S. 130A-282
Impact Summary:	State Government: Yes Local Government: Yes Private Sector: Yes Substantial Impact: No

Introduction and Purpose

In 2021, the North Carolina General Assembly passed Session Law 2021-77, which amended G.S. 130A-280 to include "spas operating for display at temporary events" in the definition of public swimming pools, effective July 1, 2022. This rule package updates the public swimming pool rules to regulate display spas at temporary events with a proposed effective date of July 1, 2022, in alignment with this Session Law.

Prior to S.L. 2021-77, display spas at temporary events were not subject to regulation and inspection by public health officials. In 2019, 136 confirmed cases of Legionnaires' disease and one confirmed case of Pontiac Fever were identified in attendees of the North Carolina Mountain State Fair (NC MSF) in Fletcher, NC. Ninety-six patients were hospitalized and four individuals died.[1] Legionnaires' disease and Pontiac Fever are types of pneumonia that are caused by exposure to legionella bacteria.[2] Whereas Pontiac Fever typically resolves without treatment, treatment for Legionnaires' disease often involves antibiotics and hospitalization and approximately 10% of people who contract Legionnaires' disease will die due to complications related to their illness.[3] An investigation determined the outbreak of Legionnaires' disease at the NC MSF was likely caused by exposure to legionella bacteria in aerosolized water from hot tubs that were on display during the fair. Hot tubs are a well-established source of aerosolized water exposure and have been linked to other outbreaks of Legionnaires' disease.[4] Temporary events, such as fairs, carnivals,

[1] North Carolina Department of Health and Human Services (NCDHHS), "NCDHHS Releases Final Report on 2019 Legionnaires' Disease Outbreak in Western North Carolina," available at: https://www.ncdhhs.gov/news/press-releases/2020/01/30/ncdhhs-releases-final-report-2019-legionnaires-disease-outbreak-western-north-carolina.
[2] United States Centers for Disease Control and Prevention (CDC), "Legionella: About the Disease," available at: https://www.cdc.gov/legionella/about/index.html.
[3] CDC, "Legionella: Diagnosis, Treatment, and Complications," available at: https://www.cdc.gov/legionella/about/diagnosis.html.
[4] CDC, "Legionella: Causes, How it Spreads, and People at Increased Risk," available at: https://www.cdc.gov/legionella/about/index.html.

circuses, festivals, and public exhibitions, often attract large numbers of visitors who can be exposed to legionella if the bacteria is present in the aerosolized water of hot tubs that are displayed for sale at the event. The 2019 outbreak in North Carolina speaks to the importance of regulating display spas that operate at temporary events to help prevent future outbreaks and protect the public's health.

In alignment with S.L. 2021-77, this rule package updates the public swimming pool rules to add requirements for display spas at temporary events. Display spas at temporary events can be regulated, in part, under existing requirements that apply to public swimming pools; however, display spas also have unique features, such as distinct construction standards and the unique purpose of being for display only, that are not contemplated in the existing public swimming pool rules. The proposed amendment to rule 15A NCAC 18A .2508 and proposed new rule 15A NCAC 18A .2545 establish a regulatory framework for display spas at temporary events that are tailored to these unique features, while also requiring these spas to meet the same water quality standards that apply to public swimming pools, which will protect against legionella. Please see the Appendix for the proposed rule text.

Description of Proposed Rules

15A NCAC 18A .2508

15A NCAC 18A .2508 is a definitions rule that describes the various types of swimming pools as established under G.S. 130A-280. The proposed amendment to the rule adds a definition for a "display spa at a temporary event" or "DSTE" and a definition for "temporary event."

15A NCAC 18A .2545

15A NCAC 18A .2545 is a new rule that sets out the regulatory framework for display spas at temporary events, including the permitting process, water quality standards and recordkeeping, protective coverings, signage, display of the permit, and reporting requirements related to DSTEs.

Permitting Process

Once these rules are in effect, DSTEs shall not operate without a permit. The applicant will be required to submit a permit application to the local health department (LHD) that serves the county where the temporary event is taking place at least 15 days before commencing operation of the DSTE. The applicant will submit one application per DSTE and include the following information:

- applicant's name, address, and phone number;
- name of the temporary event;
- street address of the temporary event;
- proposed operating dates; and
- signature of the applicant.

The applicant will be required to pay the permitting fee, established by the LHD, at the time the application is submitted.

Water Quality Standards

Water quality standards for DSTEs are set out in Item (3) of Rule .2545. These standards protect against the risk of spreading illness through contaminated DSTE water by preventing the development of pathogens, such as legionella bacteria, which thrive in untreated water at elevated temperatures. DSTEs are required to meet the water quality standards of public swimming pools, as set out in 15A NCAC 18A .2535, with a few exceptions.

The requirements around disinfection concentrations and residuals are focused on maintaining continuous disinfection of the DSTE water; however, not all DSTEs are equipped with an automatic chemical feeder. Many DSTEs are instead supplied with a free-floating chemical feeder which allows the disinfectant to erode as the water passes through the device. To accommodate for this, the Rule increases the starting disinfectant level and requires a daily check to ensure that disinfectant levels are maintained.

The requirement to maintain the proper pH of the DSTE water allows the disinfectant, usually bromine or chlorine, to be effective at oxidizing pathogens which may have been introduced into the DSTE through the water supply or other sources. As the DSTEs are not used for full body immersion (which would result in water contact with eyes or mucous membranes), the pH range can be safely increased to 7.0-7.8, which results in an even better efficacy rate.

Maintaining Daily Records
Rule .2545(3)(b) also requires the applicant to maintain daily written records of the water pH, disinfectant levels, and type and amount of chemicals added. These daily records document compliance with the water quality standards set out in Rule .2545. Under Item (6), these written records are required to be kept onsite during the event, maintained for six months, and made available to the local health department that issued the DSTE permit and NCDHHS upon request. Written records serve as an aid in the event of a disease report or outbreak. DSTEs are limited to a maximum of 21 days of operation in one location and are drained between events; therefore, only information about the disinfectant concentration, pH, and added chemicals is required to be recorded.

Protective Coverings
Because of the risk of accidental drowning and exposure to pathogens, Rule .2545 requires the use of a cover that can be secured in place when the applicant is not available to supervise the DSTE and whenever the DSTE water does not meet the Rule's water quality standards. Rule .2545 does not subject DSTEs to the fence requirements set out for other types of swimming pools in Rule 15A NCAC 18A .2528. Requiring fencing around DSTEs would not be practical due to the transient nature of the events where DSTEs are likely to be used and would create a significant cost for private industry. The requirement to use coverings that latch or lock whenever the applicant is not supervising the DSTE or whenever the water quality does not meet the standard set forth in Rule .2545 is a lower-cost approach that is also protective of the public's health and safety. Pool chemicals are also required to be kept in water resistant, covered containers away from the public.

Signage Requirement
Rule .2545 requires the use of signage to prevent full body immersion in a DSTE. Preventing body immersion in a DSTE is important for reducing the risk of drowning and avoiding full body exposure to water which meets modified water quality standards, not intended for immersion. Signage stating "DISPLAY SPA- ONLY HANDS AND FOREARMS ALLOWED IN WATER" advises the public these are for display only, not body immersion.

Similarly, Rule .2545 requires that the applicant post a sign that says "SPA CLOSED" whenever the DSTE water does not meet DSTE water quality standards. The posting of this sign advises the public that the DSTE is closed and, along with a protective cover, prevents the public from attempting to access the DSTE and becoming exposed to potentially contaminated DSTE water.

Display of DSTE Permit
The 2019 legionella outbreak associated with the NC MSF generated media attention and public concern. The requirement in Rule .2545 to post the DSTE permit in a visible spot is intended to increase the public's confidence in the safety and regulation of DSTEs. The presence of a DSTE permit will also help the public make more informed decisions about the safety of spas displayed at temporary events, as a permit will indicate that a DSTE has been inspected and met regulatory requirements.

Reporting Requirements
Finally, the proposed text of Rule .2545 requires that DSTE applicants or their designees report to the LHD any deaths, serious injuries, and complaints of illness that are attributed to their DSTE in accordance with Rule 15A NCAC 18A .2540, so that these may be investigated.

Impact Analysis

State Government Impact

The proposed rules are expected to have a small impact on state government. Applicants seeking permits for DSTEs will not be required to submit pool construction plans for review, which is a part of the permitting process for other types of public swimming pools. Therefore, there will not be any new costs to the state related to plan review. The proposed rule language establishes requirements that largely mirror existing rules with very slight differences, but there will need to be some training provided by state staff to registered environmental health specialist (REHS) staff at LHDs. In addition to providing training, the state will need to develop a new inspection checklist tailored to DSTEs. The state will not take in any fees related to the regulation of DSTEs.

The average salary for the state-level REHS program staff involved in this work is $56,452.[5] Using this figure, as well as an estimate of the value of fringe benefits, we have calculated the hourly rate of a state REHS staff member at $37.50. The time spent by state-level REHS staff will be an opportunity cost, as we do not intend to hire any additional staff to help do this work.

Table 1: Average Hourly Pay Rate for State REHS

Salary and Fringe Benefits[6]		
Salary/Benefit	% of Salary	Total Value
Salary	100	$56,452
FICA	7.65	$4,318.58
Retirement, Death, and Disability Benefit	19.70	$11,121.04
Health Insurance	10.81	$6,104
Hourly Rate Calculation		
Total Salary + Fringe	Hours Worked / Year	Hourly REHS Rate
$77,995.62	2080	$37.50

As previously noted, state-level REHS staff will need to develop and deliver training for local health department REHS staff and develop a new inspection checklist for DSTEs. Based on our familiarity with the subject matter and past experience developing training, we expect this to be a one-time effort requiring eight hours of work by state REHS staff. State REHS staff will present the training at annual district education and supervisor meetings. It is expected to take four hours to provide this training at each of these meetings. State-level REHS staff already attend these meetings to provide updates and trainings, so using these existing meetings as the vehicle for DSTE training does not represent a new expense for state government. We also anticipate that it will take state-level REHS staff four hours to develop a new inspection checklist for DSTEs. All of this work will be a one-time opportunity cost, as we do not expect to hire new staff to assist with this work.

[5] This value was provided by the Division of Public Health, Environmental Health Section and was calculated using information available as of April 2, 2020.

[6] The benefits listed were identified using the North Carolina Office of State Human Resources "Total Compensation Calculator," which is available at https://oshr.nc.gov/state-employee-resources/classification-compensation/total-compensation-calculator. In using this tool, we did not account for years of service, which may increase an employee's annual paid sick and vacation days, which are capped at 12 and 26 days, respectively, after 20 years of qualifying service to the State.

Table 2: Impact on State Government- Opportunity Costs

REHS Training Development (One-Time)		
Number of Hours to Complete	REHS Hourly Rate	Cost to State Government
8	$37.50	$300.00
REHS DSTE Inspection Sheet Development (One-Time)		
Number of Hours to Complete	REHS Hourly Rate	Cost to State Government
4	$37.50	$150.00

Summary of Impact

Estimated REHS Staff Time to Develop Training ……. $300.00
Estimated REHS Staff Time to Develop Inspection Checklist …….. $150.00

TOTAL ESTIMATED IMPACT ……..…….. $450.00
(one-time opportunity cost)

Local Government Impact

The proposed rules are also expected to have an economic impact on local government. LHDs will be responsible for inspection and permitting of DSTEs. This work will be carried out by REHSs who are employed by the LHDs and whose work regularly involves conducting inspections for public swimming pools. The average salary for an REHS employed by a LHD is $48,057.[7] Using this figure, as well as an estimate of the value of fringe benefits, we have calculated the hourly rate of a LHD-employed REHS at $31.81. Although we cannot know for certain, we expect that the time spent by REHS staff will likely be an opportunity cost, as we do not expect that LHDs will hire additional staff to help with this work.

Table 3: Average Hourly Pay Rate for Local REHS

Salary and Fringe Benefits[8]		
Salary/Benefit	% of Salary	Total Value
Salary	100	$48,057.00
All Benefits	37.7	$18,117.49
Hourly Rate Calculation		
Total Salary + Fringe	Hours Worked / Year	Hourly REHS Rate
$66,174.49	2080	$31.81

REHSs employed by LHDs will be responsible for reviewing the DSTE permit application and conducting the inspection under the proposed rules. REHSs will need to receive training from the state on implementation of the proposed DSTE rules. REHS staff employed by LHDs will receive the training at annual district education and supervisor meetings, which is expected to take four hours. REHS staff

[7] The average REHS salary was estimated from the UNC School of Government's 2019 County Salary Survey, which is available at: https://www.sog.unc.edu/publications/reports/county-salaries-north-carolina-2019.

[8] The value of benefits was identified using the U.S. Bureau of Labor Statistics' latest available figures from December 2019 on employer costs for employee compensation for state and local government workers, which is available at: https://www.bls.gov/news.release/ecec.t03.htm.

employed by LHDs are already required to attend these events for education and training, so the short training that will be provided on DSTEs is not expected to result in a cost to local governments.

As previously noted, in contrast to other types of swimming pools, there is no plan review requirement for DSTEs. There is also not a requirement for LHD REHS staff to complete a Drain Safety Data Sheet for DSTEs. This reduces the overall time spent by a REHS to review DSTE applications and conduct inspections. Based on our experience, we estimate it will take one REHS 15 minutes to review an application. In addition to reviewing the paperwork, an REHS will have to conduct an on-site inspection of the DSTE. Based on our experience, we estimate that a REHS will spend 15 minutes completing the inspection and 15 minutes educating the operator on water quality standards for DSTEs and answering questions. Mileage and travel time to and from the temporary event will vary depending on the location of the event, parking accessibility, traffic, and distance within the county, and are therefore challenging to quantify; however, mileage and travel time are expected to be minimal and within the county that the LHD serves, and the REHS will often have other duties at these temporary events. Based on these facts, we anticipate that costs associated with mileage and travel time will be minimal.

Because of the limited operational timeframe for DSTEs, only one inspection is required for each DSTE permit application received. If an applicant submits multiple DSTE permit applications for the same temporary event, then the time spent will be less due a decrease in time spent traveling and educating.

In addition to application review, inspections, and education, the proposed rules will have an impact on local government that stems from the collection of permitting fees for DSTEs. Under the existing public swimming pool rules, LHDs charge a pool permit fee. Fee amounts are set at the local level and may vary by jurisdiction; however, pursuant to G.S. 130-39(g), LHDs are limited to imposing "cost-related fees for services performed." Because there is no precedent for LHDs regulating and issuing permits for DSTEs, and because of unique factors like the volume of temporary events in certain counties and travel-associated costs, it is challenging to estimate the fee amount that each LHD will establish.

However, we anticipate that the DSTE permitting process will take less time and fewer resources than permitting a swimming pool. This is due, in part, to the smaller size of DSTEs compared to swimming pools and a simpler permitting process for DSTEs (e.g., no plan review). As a result, we expect that the costs to LHDs related to permitting a DSTE, and consequently the fees set by LHDs to recoup those costs, will be lower than the costs and fees for permitting a swimming pool. For illustrative purposes, the current swimming pool permitting fee in Henderson County, where the NC MSF was held, is $100 per pool and $200 for multiple pools in the same location. This tiered approach to permitting fees that the Henderson County Department of Public Health has implemented for swimming pools is an example of one approach that LHDs could choose to adopt for permitting DSTEs, when one applicant submits multiple applicants for the same event.

Finally, an additional challenge in estimating the impact to local government is anticipating the number of DSTE permit applications that each LHD will receive. Some LHDs may never receive an application for a DSTE permit, whereas other LHDs – particularly those that serve counties with regular fairs and other temporary events – may receive many more. As previously noted, LHDs may also choose to establish a standard fee per DSTE or may adopt a tiered approach to DSTE permitting fees. We have therefore calculated the estimated costs to local government to permit one DSTE, with the understanding that numerous factors will inform the actual impact to local governments. Ultimately, because permitting fees set by LHDs in accordance with G.S. 130A-39(g) are cost-based, this new requirement is expected to be cost neutral for local government.

Table 4: Impact on Local Government- Opportunity Costs and Fee Income

REHS Permit Application Review (Per DSTE)		
Number of Hours to Complete	REHS Hourly Rate	Cost to Local Government
0.25	$31.81	$7.95
REHS Permit Inspections (Per DSTE)		
Number of Hours to Complete	REHS Hourly Rate	Cost to Local Government
0.25	$31.81	$7.95
REHS Educating Operator (Per DSTE)		
Number of hours to complete	REHS hourly Rate	Cost to Local Government
0.25	$31.81	$7.95

* Table does not include costs associated with REHS mileage and travel.

Summary of Impact

Estimated Costs per DSTE Permit

REHS Review of Permit Application ……..…$7.95
REHS Conduct Permit Inspection ……...…$7.95
REHS Education of Operator……. $7.95
REHS Travel and Mileage……..Unknown at this time

Total Estimated Cost per DSTE Permit……. $23.85 + travel and mileage

Estimated Income per DSTE Permit

Fee Income per Permitted DSTE ……..……. Unknown at this time; will be established relative to cost incurred by the LHD to permit the DSTE

TOTAL ESTIMATED IMPACT…….....…… Costs and benefits expected to balance

Private Sector Impact

Portable Spa Industry

The total impact of the proposed rules on the private sector, and particularly the impact on the portable spa industry, is challenging to quantify. The costs associated with meeting the requirements of the proposed rules will consist of the cost of reusable items, such as signage and chemical storage containers, consumable items, such as chemicals and chemical test kits, and the permit fee that must be paid per DSTE permit application. It is also difficult to determine how many DSTEs will be permitted after the proposed rules become effective, as DSTEs have not previously been regulated in the manner proposed and, to our knowledge, data about DSTEs has not historically been collected by state or local government. Therefore, rather than calculate costs per DSTE operator or applicant, we have estimated the cost to industry per permitted DSTE.

Display spas are required to have two signs, one of which states “SPA CLOSED.” This type of sign is commonly used in the hot tub and pool industry and can be purchased pre-made and online for between

$12 and $15. The second sign must state "DISPLAY SPA- ONLY HANDS AND FOREARMS ALLOWED IN WATER," which the DSTE operator or applicant will need to make themselves or have commercially made as a custom product. Based on our experience, the costs associated with making this second sign are estimated to range between $20 and $45. For the purpose of this analysis, we have used the average estimated costs for both required signs, which are $13.50 and $32.50, respectively, or $46 in total. These signs will be one-time purchases and can be used repeatedly for multiple temporary events; therefore, although we have used $46 for the purpose of this analysis, the actual cost per permitted DSTE application is expected to be lower.

DSTE permit applicants will also need to obtain a chemical test kit and chemicals. These kits vary widely in price, between $5 to several hundred dollars; however, since the test kits are only required to test for disinfectant and pH levels, an inexpensive kit will meet the requirement of the rule. Therefore, for the purpose of this analysis, we estimate that DSTE applicants will incur a cost of $20 for a boxed chemical test kit per vendor. Although DSTE permits authorize the operation of the DSTE for 21 days, some DSTEs may operate for shorter periods of time and at multiple temporary events. In these scenarios, one test kit may last for multiple temporary events and the actual cost of a test kit per DSTE may be lower. Additionally, the chemical reagents can be ordered separately as needed at a lower cost.

DSTE permit applicants will also need to provide appropriate chemicals to maintain water quality. This is likely already a cost incurred by most applicants who operate DSTEs if they are knowledgeable about water quality and safety. The DSTE permit applicant will incur a cost related to the purchase of these chemicals, but the cost per permitted DSTE can vary significantly depending on the condition of the water used to fill the spa, whether the spa is also exposed to UV light, the volume of the spa, and the length of time that the DSTE is in operation. Given these factors, it is challenging to estimate the cost of these chemicals. For the purpose of the fiscal note, and based on our experience and input from industry, we estimate the average chemical cost will be less than $1.00 per day per DSTE.

The chemicals that are used to maintain water quality must be stored in covered, water-resistant containers. DSTE permit applicants have a diversity of options for meeting this requirement, but based on our experience, the industry regularly uses five-gallon plastic buckets with lids, which can be purchased at a hardware store for $10. Although we have used $10 for this analysis, five-gallon buckets can be reused and can be used to store chemicals for more than one spa, which means that the actual cost associated with chemical storage is expected to be lower.

Finally, industry will have to pay the permitting fee to the LHD for each DSTE application and spend time filling out the application and submitting the application and fee to the local health department. As previously noted, under the existing public swimming pool rules, LHDs charge a pool permit fee. Fee amounts are set at the county level and may vary by jurisdiction; however, pursuant to G.S. 130-39(g), LHDs are limited to imposing "cost-related fees for services performed." Because there is not precedent for LHDs regulating and issuing permits for DSTEs, and because of unique factors like the volume of temporary events in certain counties and travel-associated costs, it is challenging to estimate the fee amount that each LHD will establish. As previously explained, we anticipate that the fees established for permitting a DSTE will be lower than the fees for permitting swimming pools. Based on the type and amount of information that will be collected on permit applications under the proposed rules, we anticipate that completion of a permit application will require approximately 10 minutes of an applicant's time. Applicants will be required to submit one permit application per DSTE.

The proposed rules create a regulatory environment that has not previously existed; however, the rules have been written to contemplate the unique features of DSTEs and to avoid any unnecessary regulatory burden. This approach is expected to enable the private sector to more easily use DSTEs to generate portable spa sales, which is a benefit to industry, while still ensuring that the public's health and safety are protected. The creation of new rules and a permitting requirement for DSTEs may bring additional benefits to the portable spa industry, as attendees at temporary events who were previously concerned about the safety of

display spas may feel more comfortable visiting DSTE booths and therefore be more likely to purchase a portable spa.

Temporary Event Organizers and Attendees

Outbreaks of Legionnaires' disease and Pontiac Fever that have resulted from exposure to aerosolized, contaminated water have garnered attention and concern. Regulation of DSTEs will reduce the risk that organizers and attendees will contract water-borne illnesses from display spas, such as Legionnaires' disease and Pontiac Fever, and increase public confidence in the safety of these events. The new requirements are expected to result in a reduction of illness-related healthcare costs and missed days of work due to illness. This may also positively impact ticket sales and attendance at events.

The healthcare costs associated with diagnosing and treating Legionnaires' disease and Pontiac Fever vary based on the severity of disease, the type of care provided, and the diagnosing and treating healthcare facilities' fee schedules, which makes it challenging to estimate the illness-related healthcare costs that may be avoided under the proposed rules. However, according to the CDC, treatment of Legionnaires' disease often requires antibiotics and hospitalizations, and approximately 10% of people who contract Legionnaires' disease will die from complications related to their illness. Pontiac Fever, which is also caused by legionella bacteria, typically resolves without treatment.[9] These facts suggest that the public health benefit associated with reducing the risk of Legionnaires' disease, in particular, is significant.

Table 5: Private Sector Impact

Cost per Permitted DSTE	
Item	Cost
DSTE signage	$46.00
Chemical test kit	$20.00
Water quality chemicals	$21.00 (21 days max per permit)
Chemical storage container	$10.00

Summary of Impact

Estimated Costs per Permitted DSTE

Signage, Test Kit, and Storage Container ……..…$76.00 (one-time costs)
Water Quality Chemicals ……..…… $21.00 (consumable item)
Permit Fee……. Unknown at this time

Estimated Income and Benefits

Public Health Benefit (Reduction in Legionella-Related Outbreaks and Associated Healthcare Costs, Missed Work, and Deaths) …….. Not quantifiable
Public Perception Benefit (Increased Public Confidence in Safety of DSTEs, Spa Sales, and Temporary Event Attendance)…….. Not quantifiable

TOTAL ESTIMATED IMPACT ….....…….……. $97 in costs to the portable spa industry plus the DSTE permit fee and time spent on permit applications, with unquantifiable benefits from reduced public health risk and improved public perception of DSTE safety

[9] CDC, "Legionella: Diagnosis, Treatment, and Complications," available at: https://www.cdc.gov/legionella/about/diagnosis.html.

Summary

The proposed amendment to Rule 15A NCAC 18A .2508 and the proposed adoption of the new Rule 15A NCAC 18A .2545 have been developed in alignment with S.L 2021-77 with a proposed effective date of July 1, 2022 to regulate spas operating for display at temporary events for the protection of public health. Importantly, the proposed rules are expected to reduce the risk of sickness and death caused by DTSE-related illnesses such as Legionnaires' disease and Pontiac Fever, as well as the costs associated with use of the healthcare system and missed days of work due to such illness. Additionally, the proposed rules are expected to have an impact on state government that stems from the development of training on the new rules and a new inspection checklist. An impact to local government is also expected and will revolve around the DSTE permit application review, DSTE inspection process, and generation of fee-based income. Finally, an impact to the private sector is expected and will include costs related to meeting the requirements of Rule .2545 and completing the permitting process but will also include the benefit of increasing public confidence in the safety of display spas, which may translate into greater attendance at events and increased comfort visiting display spa booths.

Appendix

15A NCAC 18A .2508 DEFINITIONS

The following definitions apply throughout this Section:

(1) "Department" means North Carolina Department of Health and Human Services.

(2) "Equipment replacement" means replacement of individual components of the hydraulic and disinfection systems such as pumps, filters, and automatic chemical feeders.

(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) "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;

    (vi) training pools deeper than a 24 inch deep wading pool and shallower than a 36 inch deep swimming 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.

(f) "Display spa at a temporary event" or "DSTE" is a portable, above ground spa that contain water but is not used for body immersion and is displayed at a temporary event.

(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.

(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.

(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.

(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.

(8) "Splash zone" means the area of an interactive play attraction that sheds water to a surge tank or container to be recirculated.

(9) "Temporary event" means a transitory fair, carnival, circus, festival, or public exhibition.

~~(9)~~(10) "Unblockable drain" means a drain of any size and shape that a human body cannot sufficiently block to create a suction entrapment hazard.

~~(10)~~(11) "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; S.L. 2021-77;*
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;
Amended Eff. October 1, 2020.
Amended Eff. July 1, 2022.

15A NCAC 18A .2545 DISPLAY SPA AT A TEMPORARY EVENT

A display spa at a temporary event (DSTE) shall not be required to comply with the Rules of this Section except as specified in this Rule.

(1) A DSTE shall not operate without a permit that has been issued by the local health department that serves the county in which the temporary event is located. The duration of a permit for a DSTE shall be no more than 21 consecutive calendar days. The applicant may apply for additional permits to operate a DSTE for multiple 21-day periods at the same temporary event.

(2) One permit application shall be submitted for each DSTE. The applicant shall submit the application for a permit at least 15 calendar days before commencing operation of a DSTE. The application form shall be submitted to the local health department that serves the county in which the temporary event is located and shall include the following information:
  (a) applicant's name, address, and phone number;
  (b) name of the temporary event;
  (c) street address of the temporary event;
  (d) proposed operating dates; and
  (e) signature of the applicant.

(3) A DSTE shall meet the requirements of Rule .2535 of this Section, except as follows:
  (a) automatic chemical feeders shall not be required;
  (b) written records shall only be required to include disinfectant concentration, pH, and the type and amount of chemicals added to the DSTE;
  (c) disinfectant residual shall be measured every day before opening the DSTE to the public;
  (d) disinfectant concentrations shall be maintained at or above 4 ppm free chlorine or 8 ppm free bromine; and
  (e) pH shall be maintained between 7.0- 7.8.

(4) A sign shall be posted on each permitted DSTE that states: "DISPLAY SPA – ONLY HANDS AND FOREARMS ALLOWED IN WATER." The text on the sign shall be at least 2 inches in height.

(5) When the water in a DSTE does not meet the water quality standards set out in the Rules of this Section, the DSTE shall be kept closed with a latched or locked cover that prevents the public from coming into contact with the DSTE water. The applicant shall post a sign on the DSTE that states: "SPA CLOSED." The text on the sign shall be at least 2 inches in height.

(6) The applicant shall keep water quality records on site during the temporary event and for six months after the completion of the temporary event. The applicant shall provide water quality records to the local health department that issued the DSTE permit and the Department upon request.

(7) All pool chemicals stored on-site at the temporary event shall be stored in a water resistant, covered container in an area that is not used by the public.

(8) When the applicant or applicant's designee is not available to supervise a DSTE, the DSTE shall be kept closed with a latched or locked cover that prevents the public from coming into contact with the DSTE water.

(9) The permit for each DSTE shall be posted for the duration of the temporary event in a location that is visible to the public.

(10) The applicant or the applicant's designee shall report any death, serious injury, or complaint of illness attributed to the applicant's DSTE in accordance with Rule .2540 of this Section.

History Note: Authority G.S. 130A-280;130A-282; S.L. 2021-77;
Eff. July 1, 2022.