Rule Analysis

Fiscal Impacts of Proposed Amendments to Rule 15A NCAC 18A .2528

Public Swimming Pools

Commission for Public Health

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Impact Summary:
- State government: No
- Local government: Yes
- Federal government: No
- Substantial: Yes

Authorizing Statute: S.L. 2011-39

Purpose of Rules

The N.C. Rules Governing Public Swimming Pools 15A NCAC 18A.2500 are to protect the lives and health of citizens of and visitors to our state who use public swimming pools. They are adopted by the Commission for Public Health to regulate the design, construction, operation and inspection of public swimming pools by local health departments acting as agents of the Department of Health and Human Services. Rule .2528 FENCES is proposed for amendment to relieve owners of public swimming pools of the potential loss of use of their pools pending upgrades to meet current child safety fence standards. This rule change is required by S.L. 2011-39. See Appendix for proposed rule text.

Basic Economic Impact

There are 10,697 public swimming pools listed in the Environmental Health permit database. Most of the pools, including nearly all built since 1991 comply with current safety standards aimed at preventing small children gaining access to the pool. Current rules require all public swimming pools to meet the minimum safety standards. This requirement will remain unchanged by the law and proposed rule amendment. Many older pools have never complied with the rule due to the high cost of repairing fences. The Division estimates that roughly 20% of the pools might be in non-compliance with the current standards. The General Assembly and the Governor enacted Session Law 2011-39 to relieve public swimming pool owners of the potential loss of use of pools pending fence repairs. The law requires this conforming change to the rule, which is substantially the same as the law.

The impacts of the law and conforming amendment will be that the department will be unable to use the threat of pool closure to speed compliance, pool owners will not lose the use of their pools pending compliance, and the liability for operating the pool with a
non-compliant fence is shifted completely to the pool owner. There may be some cost to the public in terms of greater danger of child drowning.

**Cost to the Public**

Since the requirement for all pool owners to provide an approved child safety fences is unchanged, there is no change in the cost of providing a compliant fence. The statute and rule amendment will permit pools to operate out of compliance until the pool owner decides to repair the fence or until the majority of the fence is destroyed. This change will require entrances to public swimming pools to meet current safety requirements, while allowing existing fence materials that provide less safety for small children than fences built to current international standards. Specifically there may be gaps of greater than the four-inch maximum intended to prevent toddlers from squeezing through or under a fence, there may be footholds that may encourage small children climbing over the fence and fences may be shorter than the four-feet minimum height required around public swimming pools.

The potential cost from this legislation and rule is in terms of accidents or lives lost by small children gaining access to public swimming pools while not under adult supervision, as well as any financial liability that the pool owner would have to assume as a result of not following pool fence safety rules. This amendment does not change the requirements for safe fences, but only prevents the Department from taking any permit action to close a pool to enforce the fence safety requirements. Federal agencies (EPA, FDA, DOT) generally use a value of statistical live of about $6-7 million, based on the economic impact of lost productivity and consumer activities. Assuming that this value stays constant regardless of age, then the foregone benefit of potentially lowering the number of drowning cases in public swimming pools even by one can be significant. For every fatal drowning, there are probably three or four near drowning, a few of which may cause permanent damage. While the circumstances of many fatal drowning is unknown, the Department is aware of two fatalities (a three year old girl and a four year old boy) that are directly attributable to inadequate fences allowing toddlers access to public swimming pools. Two incidents in 22 years does not establish a trend, but it is reasonable to expect one more fence-related fatality may occur over the next 11 years if pools do not adhere to the new fence standards.

**Benefit to Public Swimming Pool Owners**

Session Law 2011-39 and this conforming change to the rules benefits small businesses, primarily lodging facilities, condominium homeowners’ associations and apartment communities by allowing them to use existing pool fences that were not built to international safety standards. The cost of compliance might range from $5,000 to $10,000 for pools with non-compliant fencing. Many fences have minor deficiencies that have little effect on pool safety, but replacement of the bulk of a barrier around pools with an unapproved style of construction quickly run into the thousands of dollars, particularly for large pools with long fences. A fence contractor conveyed that he had recently installed a fence around an average-sized pool for approximately $9,000. The Division estimates that about 2,000 pools (roughly 20% of licensed pools) might currently have fences that are not in compliance with the new requirements. Thus, the
The proposed rule change could have a benefit in the shape of a deferred cost of $10-20 million dollars over a number of years. This cost, while still required by law, can be deferred indefinitely without the loss of use to the pool.

It is difficult to estimate the value of being able to use a pool. For large swim clubs that depend on membership dues, the cost of not operating the pool can be in the range of $50,000 to $75,000 per season in lost economic activity. For small pools at motels and apartments the cost for loss of use of a pool would be much less, but could depress those businesses to some extent. Large pools make up about 15 percent of public swimming pools, with smaller pools at hotels, motels, condominiums and apartments making up the majority of public swimming pools.

**Impact on State Appropriations**
This amendment will not impact state appropriations, except to the extent it may protect the Department from tort claims liability for permitting public swimming pools to operate with non-compliant fences.

**Impact on Local Governments**
This amendment will not impact local government expenditures except to the extent municipal pools with non-compliant pool fences will be permitted to continue operation without fence repairs. That may impact around 50 municipal pool fences, which could benefit from postponing fence related cost of $250,000-500,000. This amendment will relieve the Department and county health departments of potential liability for allowing public swimming pools to operate with non-compliant fences.

**Risks**
There are a number of unknowns that make difficult to estimate the costs and benefits in this analysis. First, it is unclear whether by enforcing the pool fence safety standards across the board, the number of drowning or any related accidents would have decreased. This creates difficulties with estimating any foregone benefits for enforcement.

In terms of the cost savings, it could be the case that due to the new rule the cost of repair and potential revenue losses would be merely postponed rather than deferred indefinitely. It is not unknown, however, at what rate older pool fences would deteriorate enough to require replacement with fences that comply with the new requirements. To the extent that the fence deteriorates faster, the benefit from this rule change would be much smaller. For example, if a pool would have to pay $5,000 for repairs next year as opposed to the current year due to the new rule, the savings would only be about $300, which is the difference between paying $5,000 in the current year as opposed to the next year (assuming a discount rate of 7%). Some pools may be able to perform the repairs in the off season, so their revenues might not be impacted, while other may have to close the pool for a year. To the extent pool owners can defer the closure of a pool for at least one year, they could save between $3,000-5,000 (assuming a discount rate of 7%).

Also, it is unclear how the savings would be spread across the years since the Division cannot predict the rate at which pool fences would deteriorate enough to require
replacement. Additionally, it is unclear how many pools would find the cost prohibitive and would not seek a license at all if it were not for the exemption proposed in this rule.

**Alternatives**
The alternative of closing public swimming pools that fail to meet the requirements of the International Building Code and North Carolina Rules Governing Public Swimming Pools was rejected as too costly for small businesses and was prevented from being enforced through denial of public swimming pool operation permits. The Department still has the ability to seek an injunction if a swimming pool fence poses an imminent hazard. Injunctive relief, however, is unlikely to be an effective tool for gaining compliance with pool fence requirements.

Another alternative to the rule would be to allow a grace period for older pools to achieve compliance with the new fence requirements, such as 3 or 5 years. This alternative would have provided a much shorter deferral of costs for the pool owners and was disconsidered in favor of the proposed rule.
APPENDIX

15A NCAC 18A.2528 is proposed for amendment as follows:

15A NCAC 18A .2528 FENCES

(a) Public Swimming pools shall be completely enclosed by a fence, wall, building, or other enclosure, or any combination thereof, which encloses the swimming pool area such that all of the following conditions are met:

1. The top of the barrier shall be at least 48 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be two inches measured on the side of the barrier that faces away from the swimming pool;

2. Openings in the barrier shall not allow passage of a four-inch-diameter sphere and shall provide no external handholds or footholds. Solid barriers that do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints;

3. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between the vertical members shall not exceed four inches. Where there are decorative cutouts within the vertical members, spacing within the cutouts shall not exceed 1.75 inches in width;

4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between the vertical members shall not exceed 1.75 inches in width. Where there are decorative cutouts within the vertical members, spacing within the cutouts shall not exceed 1.75 inches in width;

5. Maximum mesh size for chain link fences shall be a 2.25 inch square unless the fence is provided with slats fastened at the top or the bottom that reduce the openings to no more than 1.75 inches;

6. Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be no more than 1.75 inches;

7. Access gates shall comply with the dimensional requirements for fences and shall be equipped to accommodate a locking device. Effective April 1, 2011, pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device except where a gate attendant and lifeguard are on duty. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches from the bottom of the gate, the release mechanism shall require the use of a key, combination or card reader to open or shall be located on the pool side of the gate at least three inches below the top of the gate,
and the gate and barrier shall have no openings greater than 0.5 inch within 18 inches of the release mechanism; and

(8) Ground level doors and windows opening from occupied buildings to inside the pool enclosure shall be self-closing or child protected by means of a barrier or audible alarm.

(b) Public swimming pool fences constructed prior to May 1, 2010 may vary from the provisions of Paragraph (a) of this Rule as follows:

(1) the maximum vertical clearance between grade and the bottom of the barrier may exceed two inches, but shall not exceed four inches;

(2) where the barrier is composed of vertical and horizontal members and the space between vertical members exceeds 1.75 inches, the distance between the tops of the bottom horizontal member and the next higher horizontal member may be less than 45 inches, but shall not be less than 30 inches;

(3) gates other than pedestrian access gates are not required to have self-latching devices if the gates are kept locked; and

(4) gates may swing towards a pool where natural topography, landscape position or emergency egress requirements prevent gates from swinging away from the pool.

(c) Public swimming pools permitted prior to April 1, 2010 with existing fences that do not comply with the dimensional requirements of paragraphs (a)(1) through (a)(6) and (b)(1) through (b)(2) shall not be denied an operation permit solely due to the preexisting non-compliance. Operation permits shall be denied to an owner or operator that fails to comply with these provisions when:

(1) at least fifty percent (50%) of the fence has been damaged or destroyed; or

(2) the owner or operator elects to replace the fence.

History Note: Authority G.S. 130A-282;