

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



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Vision: To be the Healthiest State in the Nation

November 22, 2022

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Department of Business & Professional Regulation
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Subject: Request to provide mod amendments recommended for individual consideration

The Department of Health pool engineering and compliance staff have participated in submitting and reviewing the swimming pool code modifications heard by the technical advisory committee. We request that the following mods be taken off the consent agenda for their consideration for improvement beyond the final version that was approved by the TAC. And we request that certain modification edits presented by others for consideration be improved with better clarity to avoid confusion by regulated industries and code implementers upon promulgation; we have provided those improvements. The Department believes that several modifications to be presented for approval by the Florida Building Commission at their December meeting may be unfavorable to the health, safety or welfare of patrons; and that some mods will not comply with current code, or will not provide any improvement for patrons or for regulated industries if applied to the 2020 swimming pool code section 454.1.

Please contact me should you need anything at 850.245.4578 or by email: bob.vincent@flhealth.gov

Thank you for your consideration.

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11/22/2022 Florida Dept. of Health FBC Amendments:

SW 9863

Department of Health additions are proposed for this recent Commission proposal by Martin Aquatic that are critical to enhance their safety for use by specifying new code language for Swimming Pool Slides:

“Swimming pool slide” is a slide designed by its manufacturer to discharge over the sidewall of a swimming pool, is certified under the CPSC standard for pool slides- CFR Part 1207, or under the ASTM standard for water slide systems- ASTM F2376, and which uses no more than 30 gallons per minute of water to carry the riders.

454.1.3.3.5

Swimming pool slides shall be installed in accordance with manufacturer’s specifications and sound engineering practice, to include water depth, height above water, distance from pool structure, and isolation of landing area from other pool patrons. If an unenclosed ladder is used, it shall have handrails beginning at the bottom step and be no taller than 6 feet. Pools with slides designed for swimming pools are not required to satisfy those of slide plunge pools in Section 454.1.9.2.1.

SW 9868

Water features such as waterfalls & fountains consume chlorine rapidly due to constant agitation of the water. Where these exceed using 20% of the design flow rate, the pool needs to be monitored and chemically adjusted with an automated controller for disinfectant and pH control as is code-mandated for other non-conventional pools (wade pools, spa pools and interactive water features).

DOH suggested addition to the end of section 454.1.6.5.17:

Where a pool’s feature flow is greater than 20 percent, that pool shall comply with Section 454.1.7.9 for automated controllers, and with Section 454.1.9.2.7 for 12 mg/L disinfectant capacity by the halogen feeder equipment.

SW 9942

Obstructions in a pool are currently prohibited with exceptions only for permanent engineered benches, swimouts, stairs, fountains and sun shelves. These new obstructions cannot meet the

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existing code criteria that exists now and has for decades. These new obstructions contradict the existing code:

“454.1.2.6 Obstructions.

The pool water area shall be unobstructed by any type structure unless justified by engineering design as a part of the recirculation system. **Engineering design and material specifications shall show that such structures will not endanger the pool patron, can be maintained in a sanitary condition and will not create a problem for sanitary maintenance of any part of the pool, pool water, or pool facilities.”**

Movable seating with furniture in pools will:

- Create injury risks for children by entrapment
- Provide new growth surfaces for biofilm & algae in pools
- Collect floating debris accumulating on furniture instead of removal from pool
- Allow any number and density of seating because it is not specified by code
 - Will be an operational condition impossible to resolve during routine inspections
- UV-resistant and Inert material properties must be certified
- After an unknown degree of wear or end of life expectancy, the seats must be trashed

UV-resistant and inert plastic statement proposed does not require a standard for these two aspects as code above requires, nor does it state when a seat no longer meets the criteria. UV resistance standard should be cited in the FBC. Inert plastic has a standard for potable water piping and materials, found in ANSI/NSF Std 61, materials for contact with potable water; plumbing and pool codes cite the pW logo that certifies potable water pipe.

Summary from the Cole-Palmer website UV Properties of Plastics: Transmission and Resistance from Cole-Parmer (coleparmer.com) : ***If a product is to be exposed to direct sunlight, the designer or engineer must specify suitable testing standards and make sure the plastic has appropriate formulation to maintain the desired long-term properties....***

SW 10187

This mod presents a hazard to children in shallow wade pools and water activity pools. The Department is not in favor of this mod; it allows for all pools less than 24” deep to have floors and walls in any color, and where dark colors are used, a hazard exists. Florida has over 1,300 of these 2 types of pools now.

Suggested replacement for sentence in TAC-approved mod to better specify exactly the slide landing types and areas that can be color exempt:

454.1.2.4 Color

~~... Floors and walls in slide landing areas are exempt from this color requirement. ...~~

... Slide plunge pools, slide runout lanes and water activity pool slide landing area cushion pads are exempt from this color requirement. ...

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SW 10202

Department recommends slight edits to proposed language. The words “non skid” is not used in the FBC, and should be replaced with the words “slip resistant”, which is defined in the FBC at section 454.1.

454.1.9.10.4

The vanishing edge length shall not exceed 65 feet (19 812 mm) or 40 percent of the pool perimeter, whichever is less. The maximum vertical distance from the top of the vanishing edge wall to the trough or catch basin cover or adjacent grade shall be 36 inches (914 mm). The maximum water depth in the pool at the vanishing edge wall shall be 4 feet (1219 mm). The vanishing edge wall shall not be considered as a perimeter deck obstruction. Water line tile at the top of the edge wall as required by 454.1.2.1(a) is not required to be non-skid-slip resistant.

Also, vanishing edge is not defined in swimming pool FBC, this is proposed for addition to the mod below (modified from definition in the CDC Model Aquatic Health Code 2018).

“**Vanishing Edge**” means a pool wall structure and adjacent perimeter deck that is designed in such a way where the top of the pool wall and adjacent deck are not visible from certain vantage points in the pool or from the opposite side of the pool. Water from the pool flows over the edge and is captured and treated for reuse through the normal pool recirculation system. They are often also referred to as “infinity edge” and “perimeter overflowing edge”.

SW 10241

The revision details provided to this sub section leaves the engineer or contractor with the decision to make regarding if a non-NSF certified UV disinfection device is adequate for use, with out a national standard. This is not consistent with code and therefore should be remedied by return of the US EPA UV validation protocol used commonly by the manufacturers of high-rate UV disinfection systems. Please note the difference of definitions in the 2018 CDC Model Aquatic Health Code:

“Secondary Disinfection Systems” means those disinfection processes or systems installed in addition to the standard systems required on all aquatic venues, which are required to be used for increased risk aquatic venues.

“Supplemental Treatment Systems” means those disinfection processes or systems which are not required on an aquatic venue for health and safety reasons. They may be used to enhance overall system performance and improve water quality.

The Department proposes the following change to the mod:

454.1.6.5.16.6

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4. UV equipment that is not certified for secondary disinfection per NSF 50 – 2020 shall be installed and configured to constantly produce a validated dosage of at least 40 mJ/cm² (millijoules per square centimeter) at the end of lamp life, and other third party validation criteria in accordance with USEPA Ultraviolet Disinfectant Guidance Manual dated November 2006, publication number EPA 815-R-06-007 whenever these devices are used in high risk pools for secondary disinfection.

SW 10315

Department of Health concurs with this edit for slip resistant tile ending at depth of 3 plus feet, as does the CDC Model Aquatic Health Code concur.

SW 10465

Department of Health prefers our original DOH submittal that was approved by the TAC at meeting number 1.

However, if the Commission chooses to deny the entire mod, the Department would rather see the proposed amendment strike-through approved.

SW 10509

Department recommends a change to the original submitted mod. Pools and spas built with ADA access points have been designed such that the remainder of the pool perimeter violates code with a seating area as high as 19" above the hard deck. This code change will better instruct design of primarily spa pools, and will prevent after-construction mitigations necessary to protect patron safety. Proposed language for satisfaction of commenter's request:

454.1.2.5.6 Disabled access.

Permanent or portable steps, ramps, handrails, lifts or other devices designed to accommodate handicapped individuals in swimming pools may be provided. Excluding all ADA pool access area(s) and their clear deck area(s), the height of the pool wall above wet deck around the remainder of pool perimeter shall comply with sections 454.1.3.1.2. or 454.1.8.5. Lifts mounted into the pool deck shall have a minimum 4-footwide (1219 mm) deck behind the lift mount.