**Swimming Pool Technical Advisory Committee / Electrical – Comments**

**7th Edition (2020) Florida Building Code, Building**

**SW-FBC -B- Ch. 4- Comment #1**

**From:** Vincent, Bob G [mailto:Bob.Vincent@flhealth.gov]   
**Sent:** Friday, February 28, 2020 7:45 PM  
**To:** Madani, Mo  
**Subject:** Public pools TAC

For the final Pool TAC meeting, please consider the two following edits to recent revisions, and one suggested definition change for a term in the building code:

*1)   This last sentence HIGHLIGHTED was left out of the 2020 code draft but was in the supplement.*

**454.1.2.8.1 Sun shelf dimensional requirements.** Sun shelf areas must be a minimum of 20 inches (508 mm) wide and provide a minimum of 10 square feet (0.93 m2) of horizontal surface adjoining on the edge of the pool (three sides of shelf must be surrounded by pool deck) over a distance of not less than 3 feet (914 mm).  The sun shelf edge that adjoins the pool edge must be continuous. The sun shelf floor shall be horizontal or shall a have uniform slope from a zero depth entry, and its maximum depth shall be between 8 inches (203 mm) to 12 inches (254 mm) below the water surface. In pools utilizing automatic recessed surface skimmers, there shall be at least one skimmer in each sun shelf area.

(SW8341 A1 only/SW7903)

*2)   This revision may contradict the DOH pool code.  DOH has a code requirement for a Safety/Lifeguard plan that we must approve for pools with climbable structures and for all water theme parks; in that plan, lifeguards typically cannot be replaced by non-lifeguard-certified attendants at a slide run out.  Added language suggested is highlighted.*

**454.1.9.2.2.4**

Attendants or lifeguards ~~Water park personnel~~ shall be provided at the top of the slides and at the run out in accordance with a safety/ lifeguard plan approved by DOH.

(SW7917)

*3)   The following definition of Swimming Pool in the FBC-Building code definitely contradicts for public pool Interactive Water Features where there is no water depth,  and for the Epsom salt float pools with only 10”-12” of water.  I suggest the definition be changed to better reflect one or both of the statutes’ definitions listed below.  I have added Under Lined phrases that may help with snips from the statutory and FBC definitions below:*

**SWIMMING POOL.**Any structure, basin, chamber or tank containing an artificial body of water for swimming, diving or recreational bathing located in a residential area serving four or fewer living units having a depth of 2 feet (610 mm) or more at any point as defined in s. 515.25, FS, or the body of water is a public pool as defined in s. 514.011, FS.

*The following are definitions in the Florida Statutes 514 and 515, and in the Building Code Chapter 4 at 454:*

**514.011 Definitions.**—As used in this chapter:

(2) “Public swimming pool” or “public pool” means a watertight structure of concrete, masonry, or other approved materials which is located either indoors or outdoors, used for bathing or swimming by humans, and filled with a filtered and disinfected water supply, together with buildings, appurtenances, and equipment used in connection therewith. A public swimming pool or public pool shall mean a conventional pool, spa-type pool, wading pool, special purpose pool, or water recreation attraction, to which admission may be gained with or without payment of a fee and includes, but is not limited to, pools operated by or serving camps, churches, cities, counties, day care centers, group home facilities for eight or more clients, health spas, institutions, parks, state agencies, schools, subdivisions, or the cooperative living-type projects of five or more living units, such as apartments, boardinghouses, hotels, mobile home parks, motels, recreational vehicle parks, and townhouses.

(3) “Private pool” means a facility used only by an individual, family, or living unit members and their guests which does not serve any type of cooperative housing or joint tenancy of five or more living units.

**515.25 Definitions.**—As used in this chapter, the term:

(9) “Public swimming pool” means a swimming pool, as defined in s. [514.011](https://www.flsenate.gov/Laws/Statutes/2018/514.011)(2), which is operated, with or without charge, for the use of the general public; however, the term does not include a swimming pool located on the grounds of a private residence.

(10) “Residential” means situated on the premises of a detached one-family or two-family dwelling or a one-family townhouse not more than three stories high.

(11) “Swimming pool” means any structure, located in a residential area, that is intended for swimming or recreational bathing and contains water over 24 inches deep, including, but not limited to, in-ground, aboveground, and on-ground swimming pools; hot tubs; and nonportable spas.

Snipped From FBC 454.2:



Bob Vincent, R.S., M.P.A., Environmental Administrator, Water Programs, Bureau of Environmental Health, Division of Disease Control and Health Protection, Florida Dept. of Health,  Office phone 850.245.4578, Fax 850.487.0864, 4052 Bald Cypress Way, Bin A-08, Tallahassee, FL 32399-1710  Email: [Bob.Vincent@flhealth.gov](mailto:Bob.Vincent@flhealth.gov)  Webpage: <http://www.floridahealth.gov/healthy-environments/index.html>

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**TAC Recommendation:**

**Commission Action:**

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**Commission Action:**

**SW-FBC-B-Ch. 4- Comment #2**

**From:** Dallas Thiesen [mailto:Dallas@floridapoolpro.com]   
**Sent:** Friday, February 28, 2020 6:13 PM  
**To:** Madani, Mo  
**Cc:** Bob Vincent (Bob.Vincent@flhealth.gov); Michael Weinbaum; KHebrank@carltonfields.com  
**Subject:** FSPA Comments 1st Integration Draft 2.28.2020

Good evening Mo,

The below comments and edits represent the work of FSPA and the Florida Public Pool Coalition with specific participation by Bob Vincent from the Florida Department of Health and Aquatic engineer Michael Weinbaum (both cc’d on this e-mail).

**454.1.1.1 Sizing**

*Explanation: To clarify the new sizing requirements language adopted by the Commission, the clauses of 454.1.1.1 have been rearranged to establish a base line minimum bathing load depending on the facility capacity, then providing the sizing formula. Additionally, language requiring the addition of automated controllers has been added to ensure proper sanitation for pools with high turnover rates under the sizing formula. The blow edits reflect the proposed edits.*

**454.1.1.1 Sizing**

The pools provided at a transient facility shall be able to accommodate one bather per five living units, while the bathing load at a non-transient facility shall be at least one bather per seven living units. Recreational vehicle sites, campsites and boat slips designated for live-aboards shall be considered a transient living unit. For properties with multiple pools, this requirement includes the cumulative total ~~gpm~~ bathing load of all swimming pools, ~~excluding~~ spas, wading pools and interactive water features. The bathing load for conventional swimming pools, wading pools, interactive water features, water activity pools ~~less than 24 inches (610 mm) deep~~ and special purpose pools shall be computed either on the basis of one person per 5 gpm (0.32 L/s) of recirculation flow, or one person per each 20 square feet (~~0.9~~ 1.9 m2) of surface area, whichever is less. The bathing load for spa type pools shall be based on one person per each 10 square feet (0.9 m2) of surface area. ~~The filtration system for swimming pools shall be capable of meeting all other requirements~~ ~~of these rules while providing a flow rate of at least 1 gpm (0.06 L/s) for each living unit at transient facilities~~ ~~and 3/4   gpm (0.04 L/s) at nontransient facilities.~~ ~~The pools provided at a transient facility shall be able to accommodate one bather per five living units, while the bathing load at a non-transient facility shall be at least one bather per seven living units. Recreational vehicle sites, campsites and boat slips designated for live-aboards shall be considered a transient living unit. For properties with multiple pools, this requirement includes the cumulative total gpm bathing load of all swimming pools, excluding spas, wading pools and interactive water features.~~ All other types of projects shall be sized according to the anticipated bathing load and proposed uses.~~,~~ ~~For the purpose of determining minimum pool size only, the pool turnover period used cannot be less than~~ ~~3 hours.  except pools serving non-transient residential developments of 1,000 units or more can be sized based on 2.5 hours.~~ Where a pool’s turnover rate is calculated to be less than 3 hours, that pool shall comply with Section 454.1.7.9 for automated controllers.

**454.1.9.2.6.2 Filter Performance / 454.1.1 “Plunge Pools” / 454.1.9.2.6.1 Recirculation Rates**

*Explanation: The language of 454.1.9.2.6.2 has been edited to clarify the section and accomplish the goals of the adopted modifications. Furthermore, edits to the “Plunge Pool” definition (454.1.1) and the recirculation rate for waterslides (454.1.9.2.6.1) have been edited to ensure that the filter performance requirements can be meet and proper water sanitation can be maintained where are waterslide is present at a swimming pool.*

**454.1.9.2.6.2                   Filter                   ~~areas~~ performance                  .** ~~Minimum filter area requirements shall be twice the filter areas specified for the recirculation rates stipulated in Section 454.1.6.5.5.1. This exception is only applicable to conventional pool recreational slides.~~ The filtration system shall be capable of returning the pool water turbidity to 5/10ths (0.50) NTU within 8 hours or less after peak bather load. A continuous readout/electronic recording in-line turbidity meter shall be installed and used to determine compliance with this NTU criteria ~~whenever the filter area size is optionally not doubled in size.~~ , otherwise the turnover rate in the plunge pool’s total water volume, as defined in 454.1.9.2.6.1, must be 1 hour or less.

**454.1.1**

“Plunge pool” means the receiving body of water located at the terminus of a recreational water slide and is dedicated solely for that purpose. ~~Conventional public s~~Swimming pools that are not dedicated as plunge pools that include a recreational water slide as part of the design shall meet the requirements of Sections ~~454.1.9.2~~ 454.1.1 through 454.1.6.5 and 454.1.9.2 with the exception of Sections 454.1.9.2.1.6.1, 454.1.9.2.3~~, and a portion of 454.1.9.2.6.2, which are deemed optional only for conventional pool recreational slides~~.

**454.1.9.2.6.1 Recirculation rate.** The recirculation-filtration system of water slides shall recirculate and filter a water volume equal to the total water volume of the facility in a period of 2 hours or less. For swimming pools that are not dedicated as plunge pools, but include a recreational water slide as part of the design, ~~T~~the total water volume shall include the water in the plunge pool dimensions stipulated by code, plus the slide water.

Best,

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Dallas J. Thiesen

Government Affairs Manager

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**TAC Recommendation:**

**Commission Action:**

**SW-FBC-B-Ch. 4 - Comment #3**

**From:** Jennifer Hatfield [mailto:jhatfield@phta.org]   
**Sent:** Friday, February 28, 2020 5:07 PM  
**To:** Madani, Mo  
**Subject:** written comments

Mo – in reviewing the latest action by the Pool TAC and Commission, found on the Post-Workshop February 11, 2020 documents, we understand that the language as it stands now for the following section would read as follows:

454.1.9.8.6.3

In lieu of Section 454.1.9.8.6.1, the recirculation system must be designed to continuously return 100 percent of the water to the collector tank after all (100 percent) of the water is first filtered and treated with disinfectant and pH adjustment chemicals; the final treatment shall be provided by a validated UV disinfectant unit described in Section 454.1.6.5.16.6, on each feature pump, before any of this treated water is piped to the water features.(Note: UV flow capacity must meet the feature pump(s) flow capacity).

We believe there may have been an error in that the disinfectant treatment is done prior to the UV treatment, which is opposite of the order in 454.1.9.8.6.1.  The final language on that code change we understand reads as follows:

454.1.9.8.6.1

All (100 percent) of the water from the collector tank must be first filtered, treated ~~with~~ by an NSF Standard 50 certified UV disinfection unit with a minimum 40 mJ/cm2 dose, and then final treatment provided by disinfectant ~~and pH~~ adjustment chemicals~~, and then final treatment provided by an NSF Standard 50 certified UV disinfection unit with a minimum 40 mJ/cm2 dose~~ before any of this treated water is piped to the water features.

If the above language is not how these sections would currently read in the 7th edition, please provide the correct language as it may make this comment for the Commission’s consideration a moot point.  But to ensure the opportunity to provide what we see as a correction in order, the Pool & Hot Tub Alliance provides the following for consideration by the Commission:

454.1.9.8.6.3

In lieu of Section 454.1.9.8.6.1, the recirculation system must be designed to continuously return 100 percent of the water to the collector tank after all (100 percent) of the water is first filtered, treated by a NSF Standard 50 certified UV disinfection unit with a minimum 40mJ/cm2 dose described in Section 454.1.6.5.16.6, on each feature pump, and then final treatment ~~treated~~ with disinfectant and pH adjustment chemicals; ~~the final treatment shall be provided by a validated UV disinfectant unit described in Section 454.1.6.5.16.6, on each feature pump,~~ before any of this treated water is piped to the water features. (Note: UV flow capacity must meet the feature pump(s) flow capacity).

**Reasoning for the proposed change:** If you treat with disinfectant and then UV, the question is do you have sufficient residuals in the tank for the water feature. It is safer to require the UV first and chemicals/disinfectant last.  This is the order required in Section 454.1.9.8.6.1 of the Code.

Please let me know if you need anything further and thank you for the opportunity to comment.

Best,

Jen

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|  |  | **Jennifer Hatfield** Director, Government Affairs [jhatfield@phta.org](mailto:jhatfield@phta.org) | 941.345.3263 [www.APSP.org](http://www.APSP.org)  **Pool & Hot Tub Alliance** 2111 Eisenhower Ave., Ste. 500    4775 Granby Circle Alexandria, VA 22314                      Colorado Springs, CO 80919 |  |

**TAC Recommendation:**

**Commission Action:**

**SW/E-FBC-B- Ch. 4 - Comment #4**

**From:** Hall, John (RER) [mailto:John.Hall2@miamidade.gov]   
**Sent:** Friday, February 14, 2020 12:20 PM  
**To:** Madani, Mo  
**Cc:** Goolsby, Michael L. (RER)  
**Subject:** Comment on the draft 7th Edition (2021) Florida Building Code

Good morning Mo,

Following the January 28, 2020 Swimming Pool TAC meeting and discussions with FSPA representatives, I am respectfully submitting the following comment to the 6th Edition (2017) Florida Building Code, Building Section 454.1.4.2.5 for inclusion in the 7th Edition (2021) Florida Building Code, Building as follows.

**454.1.4.2.5** Voltage limitation. Underwater lighting, or lighting that may be exposed to nozzle-directed pool water, shall not exceed 30 volts DC or 15 volts AC. Such lights shall be installed in accordance with manufacturer’s installation instructions ~~specifications~~ and be listed by a Nationally Recognized Testing Laboratory ~~approved for such use by UL or NSF~~.

The rational for the comment is:

* The section was lacking a title.
* Equipment is to be installed in accordance with manufacturer’s “installation instructions” not specifications.
* Approval is a function of the Authority Having Jurisdiction, not third-party testing laboratories.
* Both UL and NSF are among nineteen Nationally Recognized Testing Laboratories. The *Code* should not be usurping OSHA’s role of recognizing appropriate laboratories for product testing and evaluation.

Thank you for your consideration in this matter.

Sincerely,

**John T. Hall**

**Board and Code Administration Division**

**Senior Code Officer (Electrical)**

**Miami-Dade County Department of Regulatory and Economic Resources**

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**From:** Holland, Bryan [mailto:Bryan.Holland@nema.org]   
**Sent:** Friday, February 14, 2020 3:08 PM  
**To:** Hall, John (RER); Madani, Mo  
**Cc:** Goolsby, Michael L. (RER)  
**Subject:** RE: Comment on the draft 7th Edition (2021) Florida Building Code

Thank Mr. Hall,

I fully support this comment to further revise/correct the language used in Section 454.1.4.2.5 of the FBC-B…

TAKE CARE,

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| --- |
| Bryan |
| |  |  | | --- | --- | |  | **Bryan P. Holland, MCP, AStd.**  **Southern Region Field Representative** | | 130 Duxbury Avenue  Port Charlotte, FL 33952 | | **Office Phone:** 941.613.6802  **Mobile Phone:** 972.358.0543  **Email:** [Bryan.Holland@NEMA.org](mailto:Bryan.Holland@NEMA.org)  [www.NEMA.org/Technical/FieldReps](http://www.nema.org/Technical/FieldReps) | |

**TAC/SW Recommendation/SW:**

**TAC/E Recommendation:**

**Commission Action:**