

## **Proposed Code Modifications**

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WITHOUT COMMENTS

# **TAC:** Swimming Pool

Total Mods for Swimming Pool in Approved as Submitted: 6

Total Mods for report: 6

# **Sub Code: Building**

SW7014 1

Date Submitted12/31/2015Section454...6.5.16.6ProponentCentera JohnChapter4Affects HVHZNoAttachmentsNo

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments No Alternate Language No

**Related Modifications** 

### **Summary of Modification**

Eliminates unnecessary and excessive UV requirements for lower risk facilities and specifies use for higher risk facilities

#### Rationale

UV equipment used in lower risk facilities such as swimming pools, quiet pools, and spas can utilize an NSF® 50 tested and certified UV system as a supplement to a properly permitted chlorination system, for purposes of reducing chlorine consumption, lowering chloramine levels, or providing additional disinfection. Under these applications no claim to crypto removal can be made.

### **Fiscal Impact Statement**

Impact to local entity relative to enforcement of code

No impact

## Impact to building and property owners relative to cost of compliance with code

Reduces costs for approval variances and equipment for lower risk facilities

### Impact to industry relative to the cost of compliance with code

reduces cots for approval variances and equipment for lower risk facilities

## Impact to small business relative to the cost of compliance with code

No impact

#### Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

No impact on health, welfare, and safety of the general public

## Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Improves code by making code compliance reasonable for lower risk facility owners by specifying UV compliance criteria for higher risk facilities

## Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not discriminate

### Does not degrade the effectiveness of the code

Does not degrade the code effectiveness

## **1st Comment Period History**

Proponentbob vincentSubmitted2/25/2016AttachmentsNo

Comment:

I agree that the new NSF 50-2014 standard for UV disinfection devices is a good certification standard for the supplemental UV devices. Pools listed here with high risk of infectious disease should include spa pools in addition to those mentioned, since numerous disease outbreaks, including fatalities have occurred in FL spa pools. The UV devices certified under NSF 50 have two categories, with one tested for Crypo. sufficiently close to the US EPA criteria that it should be allowed in code.

- **454.1.6.5.16.6** Ultraviolet (UV) light disinfectant equipment may be used as supplemental water treatment on public pools [and additional treatment on interactive water features (IWFs)] subject to the conditions of this paragraph and manufacturer's specifications. UV is encouraged to be used to eliminate or reduce chlorine-resistant pathogens, especially the protozoan cryptosporidium.
- 1..UV equipment and electrical components and wiring shall comply with the requirements of the *National Electrical Code* and the manufacturer shall provide a certification of conformance to the jurisdictional building department.
- 2..UV equipment shall meet UL standards and shall be electrically interlocked with recirculation pump(s) on all pools and with feature pumps(s) on an IWF such that when the UV equipment fails to produce the required dosage as measured by an automated sensor, the feature pump(s) are disabled so the water features do not operate.
- 3. UV equipment <u>used in higher risk facilities such interactive water features, wading pools, and activity pools</u>shall be validated by a capable party that it delivers the required and predicted UV dose at the validated flow, lamp power and water UV transmittance conditions, and has complied with all professional practices summarized in the *USEPA Ultraviolet Disinfectant Guidance Manual dated November 2006*, which is publication number EPA 815-R-06-007 available from the department at <a href="http://www.floridashealth.org/Environment/">http://www.floridashealth.org/Environment/</a> water/swim/index.html or at <a href="http://www.epa.gov/safewater/disinfection/lt2/">http://www.epa.gov/safewater/disinfection/lt2/</a> pdfs/guideit2 uvguidance.pdf.
- $4.~UV~equipment~shall~constantly~produce~a~validated~dosage~of~at~least~40~mJ/cm^{2~(millijoules~per~square~centimeter)}~at~the~end~of~lamp~life.$
- 5. The UV equipment shall not be located in a side stream flow and shall be located to treat all water returning to the pool or water features.

SW7062 2

Date Submitted1/1/2016Section454.2.6.1ProponentJennifer HatfieldChapter4Affects HVHZNoAttachmentsNo

TAC Recommendation Approved as Submitted Commission Action Pending Review

**Comments** 

General Comments No Alternate Language No

### **Related Modifications**

7060, 7061, and 6991

## **Summary of Modification**

Updates titles of conformance standards.

#### Rationale

Updates the NSPI 3 standard reference with the new edition title of ANSI/APSP/ICC 3 and updates the APSP 7 standard name as well. This proposal goes with the reference standard proposal to update these two standards to the latest editions.

#### **Fiscal Impact Statement**

#### Impact to local entity relative to enforcement of code

None. Updates existing standards to reflect the titles of the latest editions.

### Impact to building and property owners relative to cost of compliance with code

None. Updates existing standards to reflect the titles of the latest editions.

### Impact to industry relative to the cost of compliance with code

None. Updates existing standards to reflect the titles of the latest editions.

### Impact to small business relative to the cost of compliance with code

None. Updates existing standards to reflect the titles of the latest editions.

## Requirements

## Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Yes, keeps up with the latest editions of national consensus standards.

## $Strengthens\ or\ improves\ the\ code,\ and\ provides\ equivalent\ or\ better\ products,\ methods,\ or\ systems\ of\ construction$

Yes, proposal updates standards to latest edition.

## Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No, does not discriminate, simply updates standards to latest edition.

## Does not degrade the effectiveness of the code

No, does not degrade the effectiveness of the code. Change updates standards to latest edition.

**454.2.6.1 Conformance standard**. Design, construction and workmanship shall be in conformity with the requirements of ANSI/<u>APSP/ICC</u><del>NSPI</del> 3, ANSI/APSP/ICC 4, ANSI/ APSP/ICC5, ANSI/APSP/ICC 6, and ANSI/APSP/ICC 7.

**454.2.6.2 Required equipment.** Every swimming pool shall be equipped complete with approved mechanical equipment consisting of filter, pump, piping valves and component parts.

**Exception:** Pools with a supply of fresh water equivalent to the volume of the pool in the specified turnover time will be allowed.

**454.2.6.3** Water velocity. Pool piping shall be designed so the water velocity will not exceed 10 feet per second (mm/s) for pressure piping and 8 feet per second (mm/s) for suction piping, except that the water velocity shall not exceed 8 feet per second (3048 mm/s) in copper tubing. Main suction outlet velocity must comply with ANSI/APSP/ICC 7.

Exception: Jet inlet fittings shall not be deemed subject to this requirement.

**454.2.6.4 Piping to heater.** Water flow through the heater, any bypass plumbing installed, any back-siphoning protection, and the use of heat sinks shall be done in accordance with the manufacturer's recommendations.

**454.2.6.5 Piping installation.** All piping materials shall be installed in strict accordance with the manufacturer's installation standards.

**Exception:** Primer and glue on exposed above-ground piping not required to be colored.

**454.2.6.6** Entrapment protection for suction outlets shall be installed in accordance with requirements of ANSI/APSP 7/ICC.

SW7072 3

Date Submitted1/1/2016Section454.1.9.6.3ProponentJennifer HatfieldChapter4Affects HVHZNoAttachmentsNo

TAC Recommendation Approved as Submitted Commission Action Pending Review

**Comments** 

General Comments No Alternate Language No

**Related Modifications** 

**Summary of Modification** 

Inserts the word "feet"

Rationale

Addresses a typo in the 2010 Code that said 7 inches, the Supplement online only said "7" therefore, this code change simply adds in "feet" to make the clarification.

**Fiscal Impact Statement** 

Impact to local entity relative to enforcement of code

None

Impact to building and property owners relative to cost of compliance with code

None

Impact to industry relative to the cost of compliance with code

None

Impact to small business relative to the cost of compliance with code

None

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

It does not.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction Yes by making clarification.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities It does not discriminate.

Does not degrade the effectiveness of the code

It does not degrade the effectiveness of the code.

SW7060 4

Date Submitted1/1/2016Section35ProponentJennifer HatfieldChapter35Affects HVHZNoAttachmentsNo

TAC Recommendation Approved as Submitted Commission Action Pending Review

**Comments** 

General Comments No Alternate Language No

### **Related Modifications**

#6991

## **Summary of Modification**

Updates the APSP-3 and APSP-7 referenced standards to the new editions, as well as corrects title of APSP-6 standard.

#### Rationale

Updates nationally recognized consensus standards to the latest editions available, along with correcting the title of another standard.

### **Fiscal Impact Statement**

## Impact to local entity relative to enforcement of code

None. Updates existing standards to latest editions.

### Impact to building and property owners relative to cost of compliance with code

None. Updates existing standards to latest editions.

#### Impact to industry relative to the cost of compliance with code

None. Updates existing standards to latest editions.

## Impact to small business relative to the cost of compliance with code

None. Updates existing standards to latest editions.

#### Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Yes, keeps up with the latest editions of national consensus standards.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, keeps up with the latest editions of national consensus standards.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No, does not discriminate, simply updates standards to latest edition.

## Does not degrade the effectiveness of the code

No, does not degrade the effectiveness of the code. Change updates standards to latest edition.

## APSP Association of Pool and Spa Professionals

2111 Eisenhower Avenue, Suite 500

Alexandria, VA 22314

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reference number	Title	section number
ANSI/ <u>APSP/ICC</u> NSPI 3— <u>14</u> 99	American National Standard for	Permanently
	Installed Residential Spas and S Spas454.2.6.1	wim_
ANSI/APSP/ICC 4—12	American National Standard for	Aboveground
	/Onground Residential Swimmi454.2.6.1	ng Pools .
ANSI/APSP/ICC 5-11	American National Standard for	Residential
	Inground Swimming Pools454.2.	6.1
ANSI/APSP/ICC 6—13	American National Standard for	Residential
	Portable Spas <u>and Swim</u> <u>Spas</u> 454.2.6.1	
ANSI/APSP <u>/ICC</u> 7—13	American National Standard for	Suction
	Entrapment Avoidance in Swim Pools,	ming
	Wading Pools, Spas, Hot Tubs,	and Catch
	Basins	454.2.6.1,
ANSI/APSP 16—11	American National Standard for	Suction Fittings
	for Use in Swimming Pools, Wa Pools, Spas,	ading
	and Hot Tubs5.10.2	454.1.6.

## Sub Code: Residential

SW7061

5

Date Submitted	1/1/2016	<b>Section</b> 4501.6.1	Proponent	Jennifer Hatfield
Chapter	45	Affects HVHZ No	Attachments	No
TAC Recommenda	ation Approved as Submi	tted		

Commission Action

Pending Review

Comments

General Comments

No

Alternate Language

No

**Related Modifications** 

6991, 7060

**Summary of Modification** 

Updates titles of conformance standards.

Rationale

Updates the NSPI 3 standard reference with the new edition title of ANSI/APSP/ICC 3 and updates the APSP 7 standard name as well. This proposal goes with the reference standard proposal to update these two standards to the latest editions.

**Fiscal Impact Statement** 

Impact to local entity relative to enforcement of code

None. Updates existing standards to reflect the titles of the latest editions.

Impact to building and property owners relative to cost of compliance with code

None. Updates existing standards to reflect the titles of the latest editions.

Impact to industry relative to the cost of compliance with code

None. Updates existing standards to reflect the titles of the latest editions.

Impact to small business relative to the cost of compliance with code

None. Updates existing standards to reflect the titles of the latest editions.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Yes, keeps up with the latest editions of national consensus standards.

 $Strengthens\ or\ improves\ the\ code,\ and\ provides\ equivalent\ or\ better\ products,\ methods,\ or\ systems\ of\ construction$ 

Yes, proposal updates standards to latest edition.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No, does not discriminate, simply updates standards to latest edition.

Does not degrade the effectiveness of the code

No, does not degrade the effectiveness of the code. Change updates standards to latest edition.

R4501.6.1 Conformance standard. Design, construction and workmanship shall be in conformity with the requirements of ANSI/APSP/ICCNSPI 3; ANSI/APSP/ICC 4; ANSI/APSP/ICC 5; ANSI/APSP/ICC 6; and ANSI/APSP/ICC 7.

R4501.6.2 Required equipment. Every swimming pool shall be equipped complete with approved mechanical equipment consisting of filter, pump, piping valves and component parts.

**Exception:** Pools with a supply of fresh water equivalent to the volume of the pool in the specified turnover time will be allowed.

R4501.6.3 Water velocity. Pool piping shall be designed so the water velocity will not exceed 10 feet per second (3048 mm/s) for pressure piping and 8 feet per second (2438 mm/s) for suction piping, except that the water velocity shall not exceed 8 feet per second (2438 mm/s) in copper tubing. Main suction outlet velocity must comply with ANSI/APSP/ICC 7.

Exception: Jet inlet fittings shall not be deemed subject to this requirement.

**R4501.6.4 Piping to heater.** Water flow through the heater, any bypass plumbing installed, any back-siphoning protection, and the use of heat sinks shall be done in accordance with the manufacturer's recommendations.

R4501.6.5 Piping installation. All piping materials shall be installed in strict accordance with the manufacturer's installation standards.

**Exception:** Primer and glue on exposed aboveground piping not required to be colored.

**R4501.6.6** Entrapment protection. Entrapment protection for suction outlets shall be installed in accordance with requirements of ANSI/APSP/ICC 7.

SW6991 6

Date Submitted1/1/2016Section46ProponentJennifer HatfieldChapter2712Affects HVHZNoAttachmentsNo

TAC Recommendation Approved as Submitted Commission Action Pending Review

**Comments** 

General Comments No Alternate Language No

### **Related Modifications**

Submitting same for Chapter 35-Reference Standards of Building

## **Summary of Modification**

Updates the APSP-3 and APSP-7 referenced standards to the new editions, as well as corrects title of APSP-6 standard.

#### Rationale

Updates nationally recognized consensus standards to the latest editions available, along with correcting the title of another standard.

### **Fiscal Impact Statement**

## Impact to local entity relative to enforcement of code

None. Updates existing standards to latest editions.

### Impact to building and property owners relative to cost of compliance with code

None. Updates existing standards to latest editions.

## Impact to industry relative to the cost of compliance with code

None. Updates existing standards to latest editions.

#### Impact to small business relative to the cost of compliance with code

None. Updates existing standards to latest editions.

#### Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Yes, keeps up with the latest editions of national consensus standards.

## Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, keeps up with the latest editions of national consensus standards.

## Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No, does not discriminate, simply updates standards to latest edition.

## Does not degrade the effectiveness of the code

No, does not degrade the effectiveness of the code. Change updates standards to latest edition.

Standard

## APSP Association of Pool and Spa Professionals

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reference number	Title	section number	
ANSI/ <u>APSP/ICC</u> NSPI 3— <u>14</u> 99	American National Standard for Permanently		
	Installed Residential SpasR4501.6.1	Spas and Swim	
ANSI/APSP/ICC 4—12	American National St	andard for Aboveground	
	/Onground Residentia PoolsR4501.6.1	•	
ANSI/APSP/ICC 5—11	American National St	andard for Residential	
	Inground Swimming Pools	R4501.6.1	
ANSI/APSP/ICC 6—13	American National St	andard for Residential	
	Portable Spas and Sw Spas	<del></del>	
ANSI/APSP <u>/ICC</u> 7— <u>13</u> <del>06</del>	American National St	andard for Suction	

Entrapment Avoidance In Swimming

Wading Pools, Spas, Hot Tubs, and

Basins......R4501.6.1, R4501.6.3, R4501.6.6

Pools,

Catch

Referenced in code