

Madani, Mo

To: Vincent, Bob G
Subject: RE: Dec. statement request DS 2018-040 dated May 22, 2018

From: Vincent, Bob G [mailto:Bob.Vincent@flhealth.gov]
Sent: Tuesday, July 17, 2018 12:04 PM
To: Madani, Mo
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Mo, Here is my updated version after our discussion; I added the first three sentences and made a few clarifying edits:

The pool Sizing section of the FBC at 454.1.1.1 requires only the cumulative total GPM (and the water volume) of all swimming pools be used to determine compliance with the Sizing section, and only this section excludes the spas, wading pools and interactive water features in the Sizing calculation.

The pool Required Fixtures section of the FBC at 454.1.6.1.1 describes the plumbing fixture counts based upon square footage of the pools (and no pools are excluded) and this section is not related to the previous pool Sizing section. The pool's bathing load is not directly related to the pool surface area, since the depth and flows created by pool designers can vary substantially.

Review of older DOH rules shows that the pool sizing requirements in the DOH public pool rule were first promulgated in October, 1984.

In the 1962 rule 170C-3.20, FAC, and the 1975 & 1977 10D-5 FAC rules, DOH assigned the restroom fixture counts based upon the actual bathing load assigned to the pools.

The sizing of the pool for a facility was written "size shall be adapted to the anticipated bather load" in the 1962, 1975, 1977 and 1979 rules. The 1977 rule also had a minimum pool size of 15'x30'.

The 1979 10D-5 FAC rule required a 15' pool width, no specified pool length, but at least 450 sq. ft. of surface area, and bathing loads were calculated at 5 GPM per bather, and instead of fixtures determined by bathing load, restroom fixture sets were then required per the square footage of the pool.

The 1984 10D-5 FAC rule was the first to size pools based upon number of living units calculating the minimum GPM and pool water volume. The restroom fixture sets used larger pool size square footage bins than the previous rule.

The 1993 10D-5 FAC rule changed the fixture counts for women increasing them per the new potty-parity statute using the 3:2 ratio for female: male water closets plus urinals.

The 2009 64E-9 FAC rule added the following explanation of the GPM flow sizing: "For properties with multiple pools, this requirement includes the cumulative total GPM of all swimming pools except spas, wading pools and IWFs". This rule also added the words "for swimming pools" to the phrase "The filtration system for swimming pools shall be capable of meeting all the other requirements of these rules while meeting a flowrate of at least one gallon per minute for each living unit...".

Unrelated to these pool flow and volume sizing requirements, and grammatically and legally not linked to the sizing statement, in the Sanitary Facilities section of the 64E-9 FAC rule, the following restroom requirements were added in 2009: "The allowable use of unisex restrooms for up to 40 bathing load", and the statement for the fixture count table: "The fixture count on this chart is deemed to be adequate for the pool and the pool deck area that is up to three times the area of the pool surface provided".

These statements were all adopted into the 2010 FBC.

In the petitioner's Declaratory Statement section VI. Analysis, section A submitted, please note that the minimum sizing of the pool in volume and flow has been the traditional state rule method of assuring that the main swimming pool has a sufficient recirculation flow and water volume to support the anticipated bathing load population generated by the known number of living units. For pool sizing, the Department nor the FBC have included the spas, wading pools, and

Interactive Water Features (IWF) in the calculations for the minimum volume and flow of a conventional pool since 2009.

In the VI. Analysis, section B, the underlined statement is not correct, as our offices nor the FBC code have ever considered the bathing load the actual number of persons in the entire pool area. The bathing load definition in 454.1 is clear on this. The petitioner's statement that "the inclusion of an IWF does not add to the bathing load" is not correct either, as explained below.

The Exhibit B Sand Lake Sound IWF site the petitioner includes has a recirculation of 150 GPM, so this is a bathing load of 30. The accompanying pool has a 140 GPM flow, so a bathing load of 28, or a 58 bathing load total. The proposed use of the <2,500 sq. ft. row of the fixture count pool chart would require the restrooms with 1 lavatory and 1 WC for both men and women, plus an added urinal in the men's room, and this not sufficient for 58 bathers.

The Exhibit A Watergrass Parcel Community Park IWF site the petitioner proposed does not show the recirculation flow, nor the bathing load. The 49 parking spaces planned for the 4 acre park would predict at least, and perhaps many more than, 98 people with each car should they bring a parent and a child.

We have seen many changes in the nature of aquatic venues during the last decade, with wading pools and spas frequently being left off the residential and commercial aquatic projects, and adding instead the essentially drown-proof IWFs, with some of these IWFs having a capacity of 100 or more children. To ignore or eliminate the restroom needs of these children and their guardians would be a public health mistake, and would very likely result in disease transmission due to water quality degradation from bathers using the aquatic venue for a restroom.

Rather than determining this code topic via a Declaratory Statement, I suggest that a proposal for an FBC revision be drafted and entered into the next 3-year code cycle. In the interim, a variance from the code can be requested for fewer restroom fixtures than the summed square footage of all the available pools requires.

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