To: The Honorable Mayors of Broward County  
From: Chair, Broward County Board of Rules and Appeals  
Sent: March 9, 2015 via e-mail  
Subj: Swimming Pool Safety

We wanted to update you on our local pool safety legislation, which now requires low voltage for underwater light fixtures, and ask that your jurisdiction assist in our efforts to enhance pool safety awareness.

By way of background, in 2014, a boy by the name of Calder Sloan died by electrocution in a private residence pool in Miami-Dade County. Sadly, there have been other similar events. In order to provide for a safer installation, Broward and Miami-Dade County adopted countywide laws for new construction limiting underwater pool lighting to 15 volts (effective October 20, 2014, in Broward) although this specific change to 15 volt, had it been in effect, would not have changed the outcome of this tragic event.

The Board of Rules and Appeals Electrical and Swimming Pool Technical Advisory Committees have been meeting on this and related topics and recently decided to expand the idea of the 15 volt pool limit to a more general discussion of how to enhance pool safety. For the goals of promoting pool safety and educating the public, we have produced the following three (3) pool safety brochures, (electrical, plumbing and structural, copies attached), which we will soon be distributing to your building departments. In addition, Chris Sloan, the father of Calder Sloan, is promoting State of Florida legislation to deal with this topic.

We ask that your jurisdiction support the efforts to educate the public to make swimming pools safer for everyone in ways described in the brochures and help get the word out in other ways that you may determine. By way of illustration, a person attempting to buy a house in a community will most likely have little knowledge about the voltage of their pool, what to look for, or how to go about changing from 120 volts to 15 should they desire. The electrical brochure educates the public in that regard; all three brochures address other pool safety concerns.

Thank you for your consideration in these matters. If you would like additional information, please contact me at your earliest convenience at info@ritewaypools.com 954-565-5562 or have your staff contact Board of Rules and Appeals staff at jdipietro@broward.org 954-765-4500 x9892.

Sincerely,

Ron Burr, Chair
Broward County Board of Rules and Appeals

Attachments: (brochures)

c.c.: All Managers/Administrators in Broward County (or City Clerks)  
Board of Rules and Appeals Members  
James DiPietro, Administrative Director  
Charles M. Kramer, Esquire – Board attorney
One example of a pool alarm.

- Make sure bottom of ladders remain tight to wall.
- Install alarms that meet Statute and Code requirements, on all windows and doors which lead into the pool area.
- Make sure that all doors leading directly to the pool area are also self-closing and self-latching.

In addition to these measures, pool safety experts remind us that supervision of children and emergency preparedness are also essential to pool safety.

The above type “child barrier” needs to meet similar requirements to that of a fence.

These are just a few recommendations.

A licensed swimming pool contractor should be contacted to review your individual pool safety features.

Is your pool as safe as it could be?
Did you know that drowning is the leading cause of death among children ages 1-4 in Florida?

(Approximately 66% of all drowning’s occur in residential pools)

Did you know that, by State Law and the Florida Building Code, all new residential pools built after October 1, 2000, require safety barriers?

Barriers are intended to prevent a young child from crawling under, squeezing through, or climbing over such to gain access to the pool.

If your pool was built prior to October 1, 2000, here are some things that the new law now requires and you should consider doing:

- Add a yard fence, minimum 4’ high, with self-closing, self-latching gates that swing out from the pool area.

  (This may need to be combined with other elements, such as the wall of the house to form the complete barrier)

- Install an approved pool cover, pool net or child safety fence which needs to be in place at all times the pool is not in use.
There has been a lot of press recently about the “dangers” of pool drain suction. Unfortunately, most people cannot picture a pool main drain, skimmer, and vacuum pool fitting.

There are five types of suction entrapment:

- **Hair entrapment.** Hair knotted or snagged in an outlet cover
- **Limb entrapment.** A limb inserted or sucked into an outlet opening with a broken or missing cover, resulting in a mechanical bind or swelling
- **Body suction entrapment.** Suction applied to a large portion of the body, resulting in entrapment
- **Evisceration/disembowelment.** Suction applied directly to intestines through an unprotected sump or suction outlet with a missing or broken cover
- **Mechanical entrapment.** Jewelry, swimsuit, hair decoration, finger or toe, etc. caught in the opening of an outlet or cover

It is suggested that you contact a licensed pool contractor to review entrapment prevention in your pool or spa.

Here is a child who was entrapped by a main drain in a swimming pool.
Main drain entrapment, or being suctioned down to the main drain of a pool or spa, has fatal consequences for swimmers.

There are 5 methods of correcting a hazardous situation from dedicated main drain lines.

1. Abandon the Main Drain Line.
2. Install a Vacuum Release System.
3. Install Dual Main Drains.
4. Install an approved main drain cover that meets American National Standards Institute (ANSI/APSP 7) for pools with one main drain.
5. Depending on each pool or spa situation, multiple methods may be required.

Another area for suction problems is the vacuum line for pool cleaners.

The vacuum line should have a self-closing, self-latching fitting when not in use.

Swimmers should never be in the pool when it is being vacuumed.

It is recommended that the vacuum line is piped and valved so it can be turned off when not in use.

There are very inexpensive safety face plates that can be purchased to make the skimmer harder for hands to reach.

In most above or on-the-ground pools and spas there is a wall skimmer that sucks the water out of the pool and spa and back to the filter.

The skimmer has a protective basket that sits on top of the actual intake at the bottom of the skimmer.

However, it is not unusual for someone to remove the basket for cleaning and forget to put it back in the skimmer.

Making this a dangerous suction place in the pool deck.

Skimmer lids should have vent holes.
Don't Swim with Shocks: Electrical Safety In and Around Pools

What is the problem?

The Consumer Product Safety Commission has reports of 14 deaths related to electrocutions in swimming pools from 2003 to 2014. Hot tubs and spas may present the same electrical hazards as swimming pools.

What is electrocution?

Electrocution is death by an electrical shock. Wet skin or wet surfaces, such as grass or a pool deck, can greatly increase the chance of electrocution when electricity is present.

Where would I find electricity around pools, hot tubs and spas?

- Underwater lights, handrails
- Electric pool equipment -- pumps, filters, vacuum, etc.
- Extension and power cords
- Electrical outlets or switches
- Radios, stereos, TVs and other electrical products
- Overhead power lines

How do I know if I or someone else may be receiving an electrical shock?

- Swimmers may feel a tingling sensation, experience muscle cramps, and/or not be able to move
- Panic, unusual actions, observed by swimmers
- Lack of motion in swimmers
Dangerous Items to Look For

- Discolored light fixtures
- Broken or rusted electrical boxes
- Loose, broken and unattached wiring around pool equipment, screening, and decking
- Broken switch or receptacle plates in the pool area
- Overhead power lines

Things not to do.

- Never swim alone
- Do not use electrical extension cords around pools
- Do not touch anything electrical when you are wet.
- Do not allow a unqualified person to do electrical work on your pool

Things you can do.

- Locate and label all power switches to be turned off in case a shock occurs
- Use and test GFI receptacles around pool
- Learn CPR
- Have a fiberglass Shepherd’s Hook nearby for rescue purposes
- Only use battery powered appliances near pools

Contact a licensed Electrical Contractor to inspect for electrical safety of your pool.

Note: Your home may have a 120 volt light fixture installed in your pool. It is recommended that you change the pool light fixture voltage from 120 volts to 12 volts. The Broward County Board of Rules and Appeals has amended our local code for new construction where all lighting for pools shall be 12 Volts.

Above is a photo of a typical low voltage (12 Volt) lighting transformer. It should not be rusted, have electrical wires coming out of it, or covers missing. If so, you need immediate use of a licensed electrical contractor to maintain the electrical safety in your pool.

This brochure is for informational purpose only, Other information can be obtained by looking at the following.

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