# Pool Health & Safety 2018

ARE YOU READY?

# Welcome to Sacramento County EMD

- Cell phones on vibrate- feel free to take calls in hallway
- Restrooms and water fountain out the back of room, across hallway
- In case of emergency, please exit door at front of room by windows and follow trainer to back parking lot

# Pool Ownership

12-year-old caught in suction line in resort lazy river

Click here for video

A three-foot by three-foot grate covering the six-inch suction line that is part of the lazy river had been removed, the release said. According to state pool regulations, "outlet grates must be anchored with corrosion resistant screws that cannot be removed without the use of tools and slots must not be more than one-half inch wide."

# Pool Ownership

Drowning victim not found for hours due to cloudy pool

"We step into the shallow end of the pool. I'm walking across and looking down and this is the murkiest pool I've ever seen," Fleming said Tuesday. "You couldn't even see your hand 18 inches below the surface of the pool."

Fleming quickly got out, reported it to hotel staff, and went upstairs to change. It was on a trip to the front desk a few minutes later that he saw an employee fishing around in the water with a body recovery hook.

"These guys are standing there, saying 'our friend has to be in this pool,'" Fleming recalled. "I said, 'I'm here, I'm taller, my arms are longer,'" so he grabbed the pole and went to work.

"I finally heard a 'clunk' and it wouldn't move," he said. "I went back over to the pool and advised some parents: you need to get those kids out of there."

Seattle Fire responded and fished the body of 27-year old Tesfaye Girma Deboch out of the pool, said spokesman Kyle Moore.

# Pool Ownership

by KTVB.COM

KTVB.COM

## Kids contract skin infection after visit to YMCA pool

BOISE -- The West Family YMCA says it's working closely with the Central District Health Department to make sure its swimming pool is safe after five children, who played in the children's wading pool, contracted a skin infection.

The YMCA says staff cleaned and disinfected the pool immediately after being notified about the infection, which was caused by Mycobacterium abscessus, a bacteria found naturally in water and soil.

Symptoms of the skin infection include red bumps or blisters, usually found on hands and feet.

The infection can be serious and long-lasting if left untreated.

Five children developed skin infections caused by Mycobacterium abscessus after using the wading pool.

# Pool Maintenance... Why?

- **Keeps People Happy And Healthy**
- **Prevents Accidents**
- **Prevents Injuries**
- **Prevents Death**
- **Prevents Lawsuits**

# Recreational Water Illnesses (RWI)

## BESIDES ACCIDENTS, WHY CAN THE POOL BE DANGEROUS?

**Contaminated pool water can make you sick.**

**RWIs are illnesses that are spread by swallowing, breathing, or having contact with water contaminated with:**

- **SPUTUM,**
- **MUCUS, and/or**
- **FECES**

# Recreational Water Illnesses

Most common causes of waterborne illnesses are ***Crypto*** and ***Giardia***, which cause long term diarrhea and gastrointestinal problems

***Otitis externa / Swimmers Ear -*** Can occur a few days after contaminated water enters the ear canal

***Psuedomonas aeruginosa / Folliculitis*** - Occurs within a few days of swimming in poorly maintained spas and pools

# Recreational Water Illnesses

## HOW CAN WE HELP PREVENT RECREATIONAL WATER ILLNESS?

- By properly maintaining pool filtration and disinfectant at the appropriate levels so pathogenic microorganisms cannot survive.
- By educating swimmers

# Recreational Water Illnesses

Click here for video

# Recreational Water Illnesses

## EDUCATE STAFF AND SWIMMERS

- Don’t swim when you have diarrhea.
- Don’t swallow the pool water.

- Take a shower before swimming and wash your hands after using the toilet or after changing diapers.

# Recreational Water Illnesses

## EDUCATE STAFF AND SWIMMERS

- Take your kids on bathroom breaks or check diapers often.

- PLEASE change diapers in a bathroom and not at poolside.

- PLEASE wash your child thoroughly (especially the rear end) with soap and water before swimming.

# Recreational Water Illnesses

## POOP IN THE POOL?

*See handout*

**“Loose” Stool**

1. **Tell swimmers to get out of pool**
2. **Remove fecal matter**
3. **Take the following actions if the pH is at 7.5 or lower and the pool temperature is 77F or higher.**
4. **Raise the free available chlorine concentration to 20 ppm for at least 12.75 hours. If the pool contains a chlorine stabilizer the pH shall be lowered to 6.5, the free chlorine concentration raised to 40 ppm and maintained for at least 30 hours.**
5. **Backwash filter to sanitary sewer.**
6. **Reopen after free chlorine falls below 10 ppm.**

# Recreational Water Illnesses

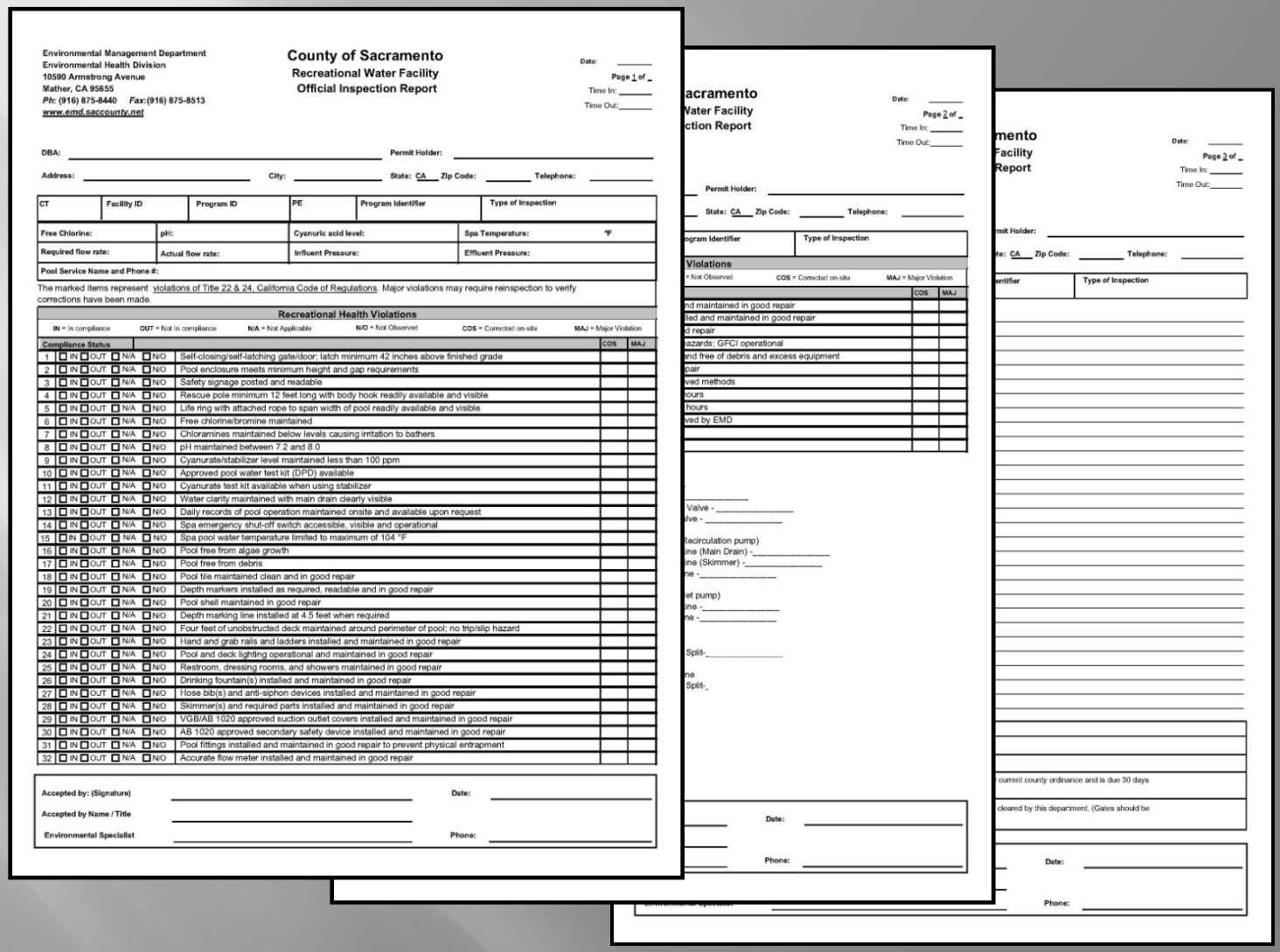
## POOP IN THE POOL?

*See handout*

### Solid Stool

1. **Tell swimmers to get out of pool**
2. **Remove fecal matter**
3. **Raise the free available chlorine residual to 2 ppm for at least 25 minutes**

# The Inspection Report



Environmental Management Department
Environmental Health Division
10590 Armstrong Avenue
Mather, CA 95655
*Ph:* (916) 875-8440 *Fax:*(916) 875-8513
www.emd.saccounty.net

**County of Sacramento**
**Recreational Water Facility**
**Official Inspection Report**

Date:
Page 1 of _
Time In:
Time Out:

DBA: Permit Holder:

Address: City: State: CA Zip Code: Telephone:

| CT | Facility ID | Program ID | PE | Program Identifier | Type of Inspection |
|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| Free Chlorine: | pH: | Cyanuric acid level: | Spa Temperature: °F |
| Required flow rate: | Actual flow rate: | Influent Pressure: | Effluent Pressure: |
| Pool Service Name and Phone #: | | | |

The marked items represent violations of Title 22 & 24, California Code of Regulations. Major violations may require reinspection to verify corrections have been made.

**Recreational Health Violations**

IN = In compliance OUT = Not In compliance N/A = Not Applicable N/O = Not Observed COS = Corrected on-site MAJ = Major Violation

| | Compliance Status | | COS | MAJ |
|---|---|---|---|---|
| 1 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Self-closing/self-latching gate/door: latch minimum 42 inches above finished grade | | |
| 2 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool enclosure meets minimum height and gap requirements | | |
| 3 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Safety signage posted and readable | | |
| 4 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Rescue pole minimum 12 feet long with body hook readily available and visible | | |
| 5 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Life ring with attached rope to span width of pool readily available and visible | | |
| 6 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Free chlorine/bromine maintained | | |
| 7 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Chloramines maintained below levels causing irritation to bathers | | |
| 8 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | pH maintained between 7.2 and 8.0 | | |
| 9 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Cyanurate/stabilizer level maintained less than 100 ppm | | |
| 10 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Approved pool water test kit (DPD) available | | |
| 11 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Cyanurate test kit available when using stabilizer | | |
| 12 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Water clarity maintained with main drain clearly visible | | |
| 13 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Daily records of pool operation maintained onsite and available upon request | | |
| 14 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Spa emergency shut-off switch accessible, visible and operational | | |
| 15 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Spa pool water temperature limited to maximum of 104 °F | | |
| 16 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool free from algae growth | | |
| 17 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool free from debris | | |
| 18 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool tile maintained clean and in good repair | | |
| 19 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Depth markers installed as required, readable and in good repair | | |
| 20 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool shell maintained in good repair | | |
| 21 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Depth marking line installed at 4.5 feet when required | | |
| 22 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Four feet of unobstructed deck maintained around perimeter of pool; no trip/slip hazard | | |
| 23 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Hand and grab rails and ladders installed and maintained in good repair | | |
| 24 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool and deck lighting operational and maintained in good repair | | |
| 25 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Restroom, dressing rooms, and showers maintained in good repair | | |
| 26 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Drinking fountain(s) installed and maintained in good repair | | |
| 27 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Hose bib(s) and anti-siphon devices installed and maintained in good repair | | |
| 28 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Skimmer(s) and required parts installed and maintained in good repair | | |
| 29 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | VGB/AB 1020 approved suction outlet covers installed and maintained in good repair | | |
| 30 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | AB 1020 approved secondary safety device installed and maintained in good repair | | |
| 31 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Pool fittings installed and maintained in good repair to prevent physical entrapment | | |
| 32 | ☐ IN ☐ OUT ☐ N/A ☐ N/O | Accurate flow meter installed and maintained in good repair | | |

Accepted by: (Signature) Date:

Accepted by Name / Title

Environmental Specialist Phone:

# 1. Self-Latching Gate/Door

**Gate should swing closed and latch when opened to body width**

**If there are multiple gates, all gates to the Pool and Spa should be functional**

**Gate handle/knob must be 42”-44” above ground**

**Violation: Gate padlocked and hardware missing**

# 1. Self-Latching Gate/Door

**Unsupervised child going through unlatched gate – photo taken during inspection**

**Do Not allow residents to prop gates open – explain the risks.**

# 1. Self-Latching Gate/Door

## Parents of twin toddlers who drowned in pool sue Deerfield property owner

0 Tweet | Submit | 2 +1

May 2, 2014 | By Lisa J. Huriash, Sun Sentinel

The parents of twin toddlers who drowned in their Deerfield Beach apartment complex pool have filed a lawsuit against the property owners, alleging they were negligent in failing to secure the gate at the pool.

The parents' attorney, Boca Raton-based Andrew Yaffa, said the tragic April 8 deaths should never have happened at Tivoli Park apartments in the 600 block of Siesta Key Circle.

Click for video

"This was totally preventable," Yaffa said. "Residents [who live there] said you just needed to push on the gate and it would open. Imagine a doorknob that didn't work. It was there for show. All you needed to do was push on the gate and it would open wide open."

The lawsuit, which seeks unspecified damages, was filed Thursday in Broward Circuit Court against James and Marta Batmasian, SK Venture Holdings LLC and Tivoli Park Master Association Inc.

# 2. Pool Enclosure

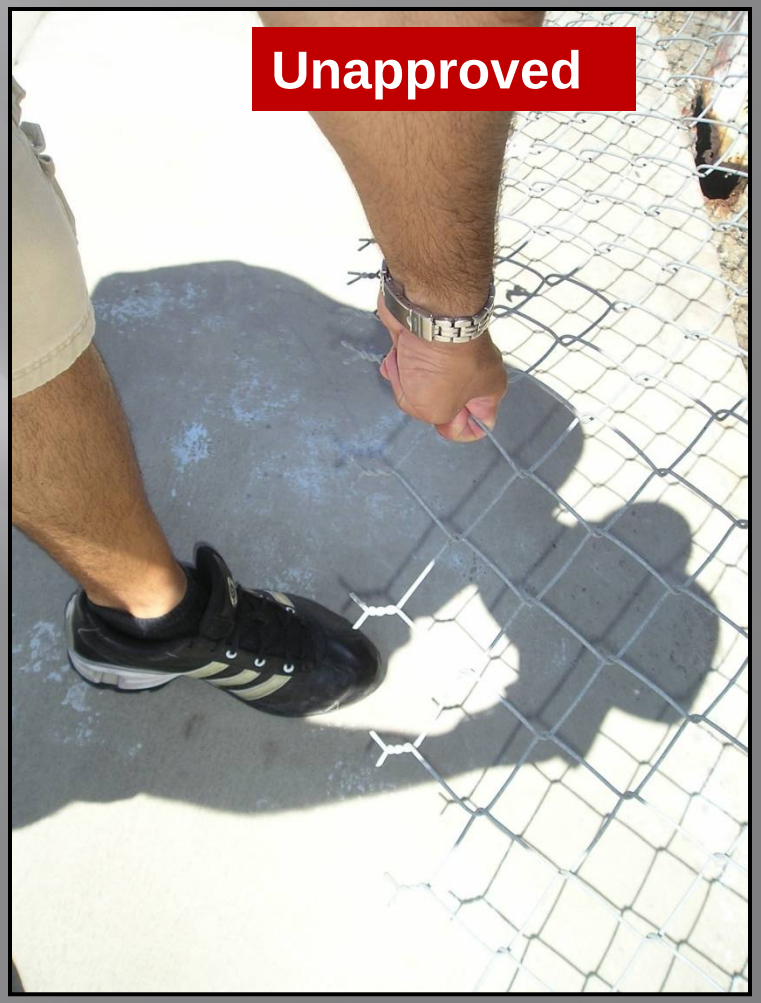
**Built before July 1994:  4 ft min height**
**Built after July 1994: 5 ft min height**

# 2. Pool Enclosure

**No openings or gaps in fencing exceeding 4 inches**

**Bottom of fencing enclosure shall not exceed 2" above landscaping or < 4” above hardscape**

# 2. Pool Enclosure




**Chain link fences**

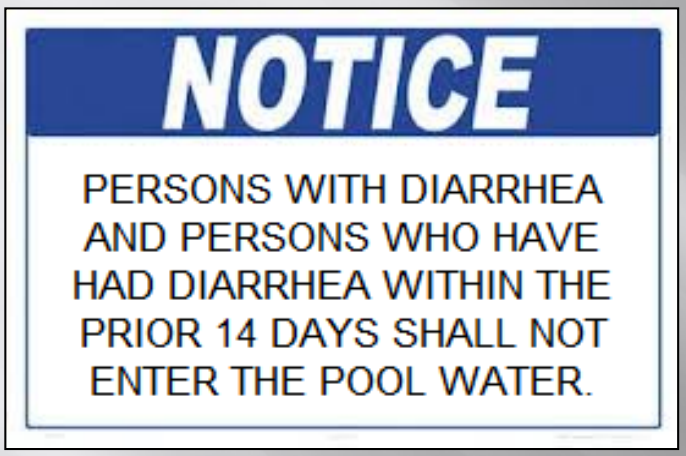
# 3. Safety Signs Must be Posted and Readable

**Signage for new and existing pools shall have clearly legible letters or numbers at least 4 inches high, unless otherwise noted.**

**No use after dark**. For pools that were constructed without lighting, a sign shall be posted at each pool entrance on the outside of the gate(s)

**Keep Gate or Door closed.** A sign shall be posted on the exterior side of gates and doors leading into the pool enclosure area.

# 3. Safety Signs Must be Posted and Readable




**Diarrhea**. A sign in letters at least 1 inch high and that is posted at the entrance area visible from the gates of a public pool.

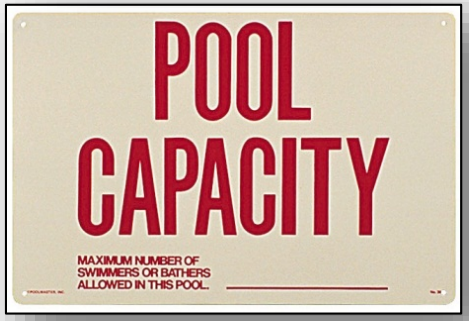
**Emergency sign**.

1. Emergency telephone number 9-1-1, and
2. The number of the nearest emergency services: SAC METRO, and
3. Name and street address of the pool facility shall be posted.

# 3. Safety Signs Must be Posted and Readable

No Lifeguard and no kids under 14 w/out adult

If deep end is < 6 feet deep




<u>Pool:</u> 1 person/20 sq.ft. of surface area

<u>Spa:</u> 1 person/10 sq.ft. surface area

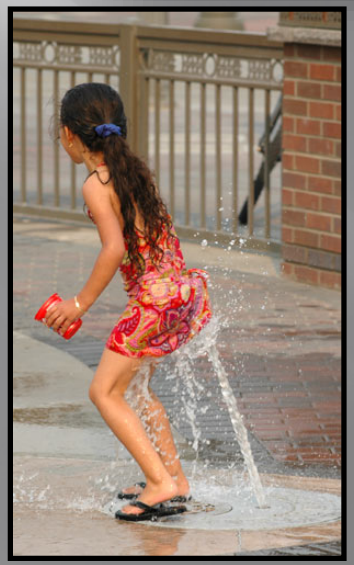
Diagrammatic Rescue Breathing and CPR

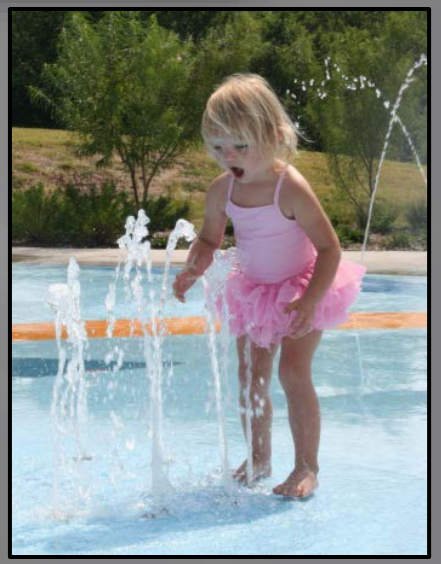
# 3. Safety Signs Must be Posted and Readable

**Additional signs for spas**

# 3. Safety Signs Must be Posted and Readable

**Additional sign for spray grounds and splash pads**





# 3. Safety Signs Must be Posted and Readable

**Is this sign ok?**

- ✓ No Lifeguard
- ✓ Capacity
- ✓ No Diving
- ✓ Spa Caution
- ✓ Gate closed

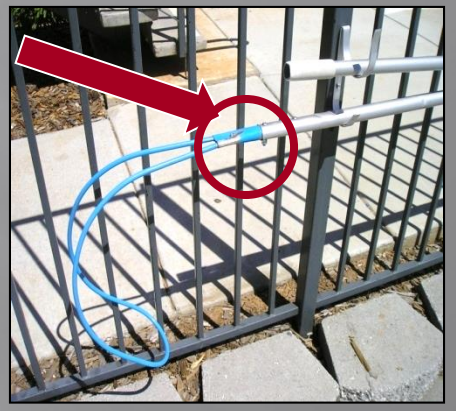
**Additional signs needed:**

- No use after dark
- Diarrhea
- Artificial resp. – but no CPR
- 911 (no address)

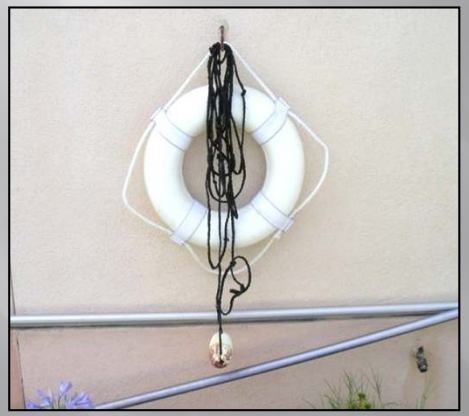
***Some of the lettering is too small**

# 4. Safety Equipment

Body Hook



Hook permanently attached to pole



Life Ring

Inaccessible

# 5. Restrooms, Dressing rooms, Showers

BAD

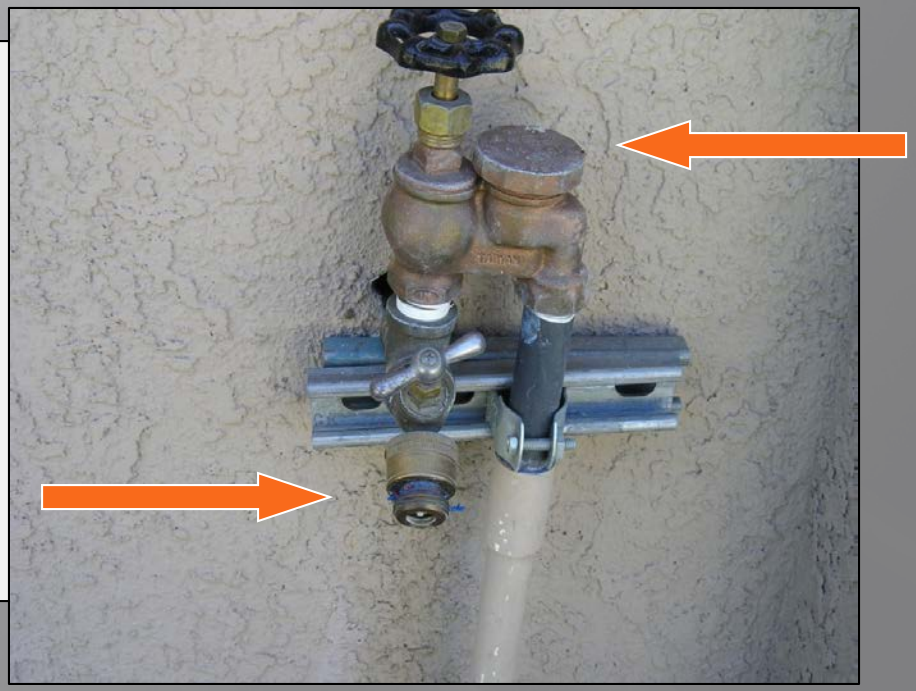
GOOD

## Restroom Requirements

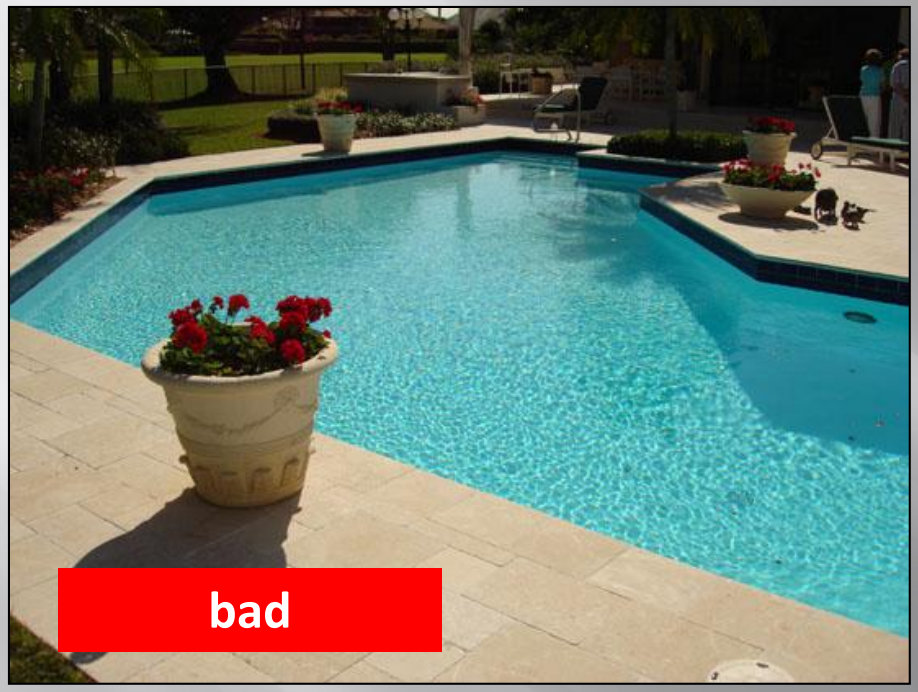
- Clean
- Soap
- Paper towels or hand dryer
- Toilet paper

# 6. Hose bib

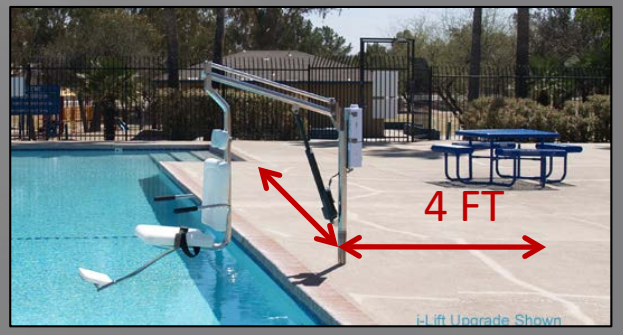
**Faucet must have a vacuum breaker**



# 7. Unobstructed Deck



Maintain 4ft of unobstructed deck around the perimeter of the pool (also 4 ft clearance around lift)



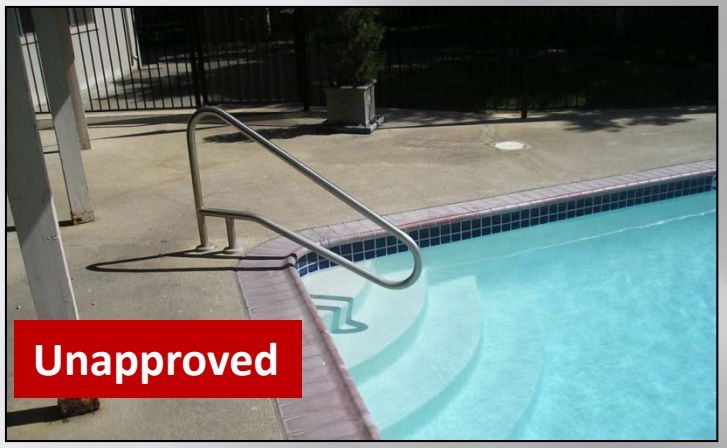
# 7. No Slip/Trip Hazards

**Note: Prior to re-decking, check with EMD for updated code requirements**

# 8. Pool and Deck Lighting

- **Does lighting work? Is it on after dark?**
- **Operator should spot check lighting throughout operating season**

# 9. Hand rails



- Must extend from deck to top of bottom step
- Must be <u>secure</u> with no sharp edges
- <u>Top</u> of stair rail shall be min 28-36" above edge of deck

**Current code requires 2 handrails on spas*

# 10. Free Chlorine/Bromine

## Free Chlorine is required to be at least:

| | Free-Chlorine Residual | | | | Bromine Residual | |
|---|---|---|---|---|---|---|
| | Without Stabilizer | | With Stabilizer | | | |
| | Min | Max | Min | Max | Min | Max |
| **Public Pools** | 1.0 ppm | 10.0 ppm | 2.0 ppm | 10.0 ppm | 2.0 ppm | -- |
| **Public Spas, Wading Pools and Spray Grounds** | 3.0 ppm | 10.0 ppm | 3.0 ppm | 10.0 ppm | 4.0 ppm | -- |

**Pools with chlorine concentration below 0.5 and above 15 ppm will be closed.**

# 11. Chloramines- *removed from code*

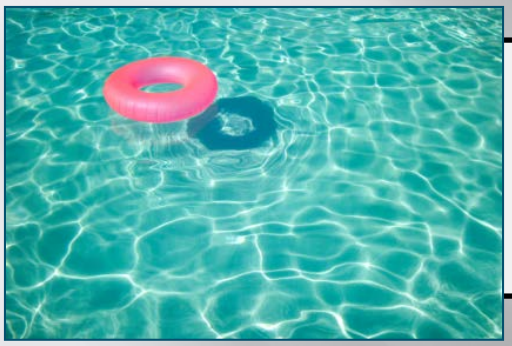
~~Maintain chloramines at or below 0.4~~

*(indoor pools are most problematic)*

***65531. Chemical Quality of Pool Water.***

*Chemical quality of water in the pool shall not cause irritation of eyes or skin of the bathers, or have other objectionable physiological effects on bathers.*

# 12. pH Maintained 7.2-7.8



**pH 7.2-7.8 = in compliance**
***the type of sanitizer used, will affect the pH**

| Tri-chlor 2.8-3.5 | Di-chlor 7.0 | Cal-Hypo 8.5-11 | Liquid chlorine 13 |
|---|---|---|---|

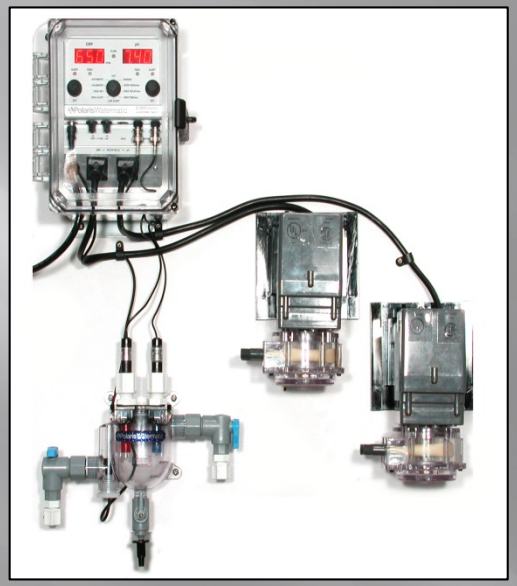
# 13. Cyanuric Acid Maintained Below 100ppm

## Cyanuric Acid is also known as stabilizer

- Keep cyanuric acid below 100 ppm
- Di-chlor and Tri-chlor have built-in stabilizer – it will build up
- Cal-hypo and liquid chlorine have no built in stabilizer

** New Products may be available on the market to reduce stabilizer without draining the pool.*

# 13. Repeat Cyanuric Acid Violation



**Pools with three consecutive cyanuric acid violations on routine inspections will be required to replace their tri-chlor feeder with a liquid or cal-hypo feeder.**

# 14. Pool Water Test Kit (DPD)

## Approved Pool Water test kit should be available at all pool sites

Approved DPD test kit with Cyanuric acid test

**Unapproved test kit:**
Test uses OTO
Only accurate for combined chlorine. Results are yellow

# 14. Cyanurate Test Kit

**Cyanuric Acid test kit should be available on site and testing should be completed monthly**

*Comes with kit – or buy separately.*

# Break Time

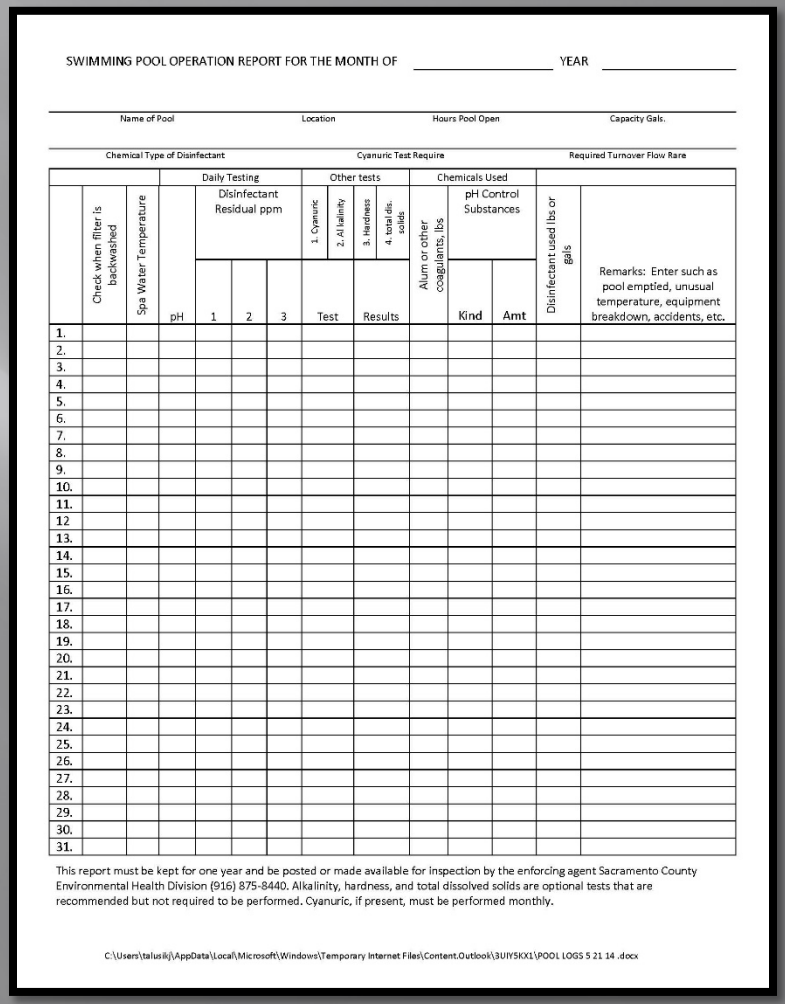
## Break Time

## Test Kit Demonstration

Click for Video

# 15. Daily Record Chart

- ✓ **Chlorine - daily**
- ✓ **pH – daily**
- ✓ **Heated Pool Temperature – daily**
- ✓ **Cyanuric Acid - monthly**
- ✓ **Filter Cleaning / Backwashing**
- ✓ **Adjustments made to balance pool water**
- ✓ **Retain records for 2 years.**



SWIMMING POOL OPERATION REPORT FOR THE MONTH OF _____ YEAR _____

Name of Pool | Location | Hours Pool Open | Capacity Gals.

Chemical Type of Disinfectant | Cyanuric Test Require | Required Turnover Flow Rare

| | | | Daily Testing | | | | Other tests | | | | Chemicals Used | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Check when filter is backwashed | Spa Water Temperature | pH | Disinfectant Residual ppm 1 | 2 | 3 | 1. Cyanuric Test | 2. Alkalinity Results | 3. Hardness | 4. total dis. solids | Alum or other coagulants, lbs | pH Control Substances Kind | Amt | Disinfectant used lbs or gals | Remarks: Enter such as pool emptied, unusual temperature, equipment breakdown, accidents, etc. |
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This report must be kept for one year and be posted or made available for inspection by the enforcing agent Sacramento County Environmental Health Division (916) 875-8440. Alkalinity, hardness, and total dissolved solids are optional tests that are recommended but not required to be performed. Cyanuric, if present, must be performed monthly.

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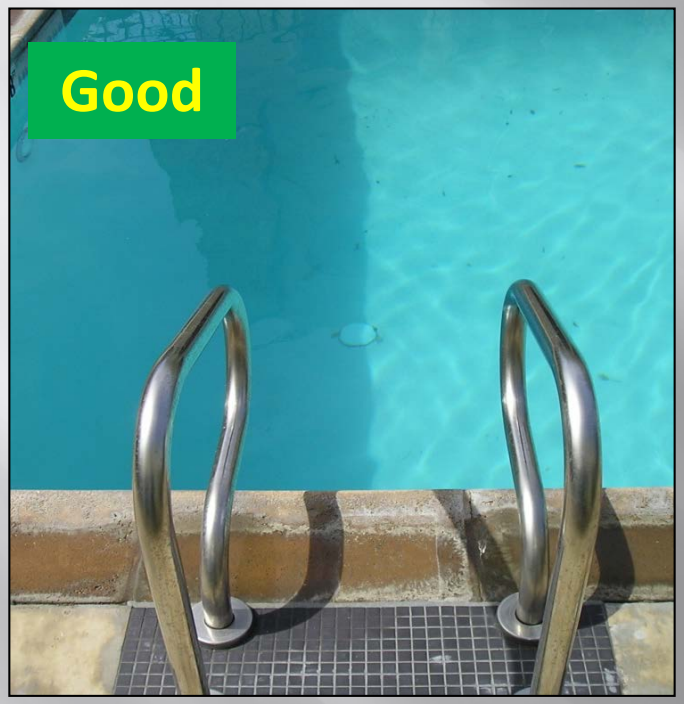
# 16. Water Clarity



***maintain acceptable water clarity**
**MAIN DRAIN MUST BE CLEARLY VISIBLE**

# 17. Free of Algae / Debris

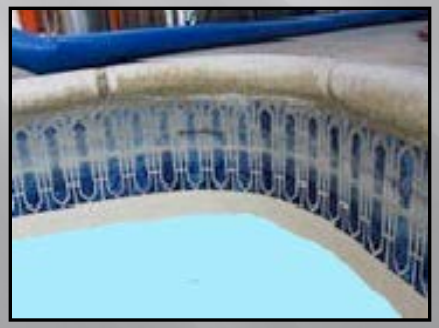
# 18/20. Pool Shell / Tile Maintained

**<u>Resurface/Replaster pool if needed</u>**

***submit scope of work to plan review prior to starting***

***(See new depth marker requirements)***

**Pitted Plaster**



**Repair / clean dirty or damaged tile**

**No designs or decals allowed**

# 19. Depth Markers

**Replace any broken, missing, or unreadable depth markers - check current code requirements for deck marker specifics**

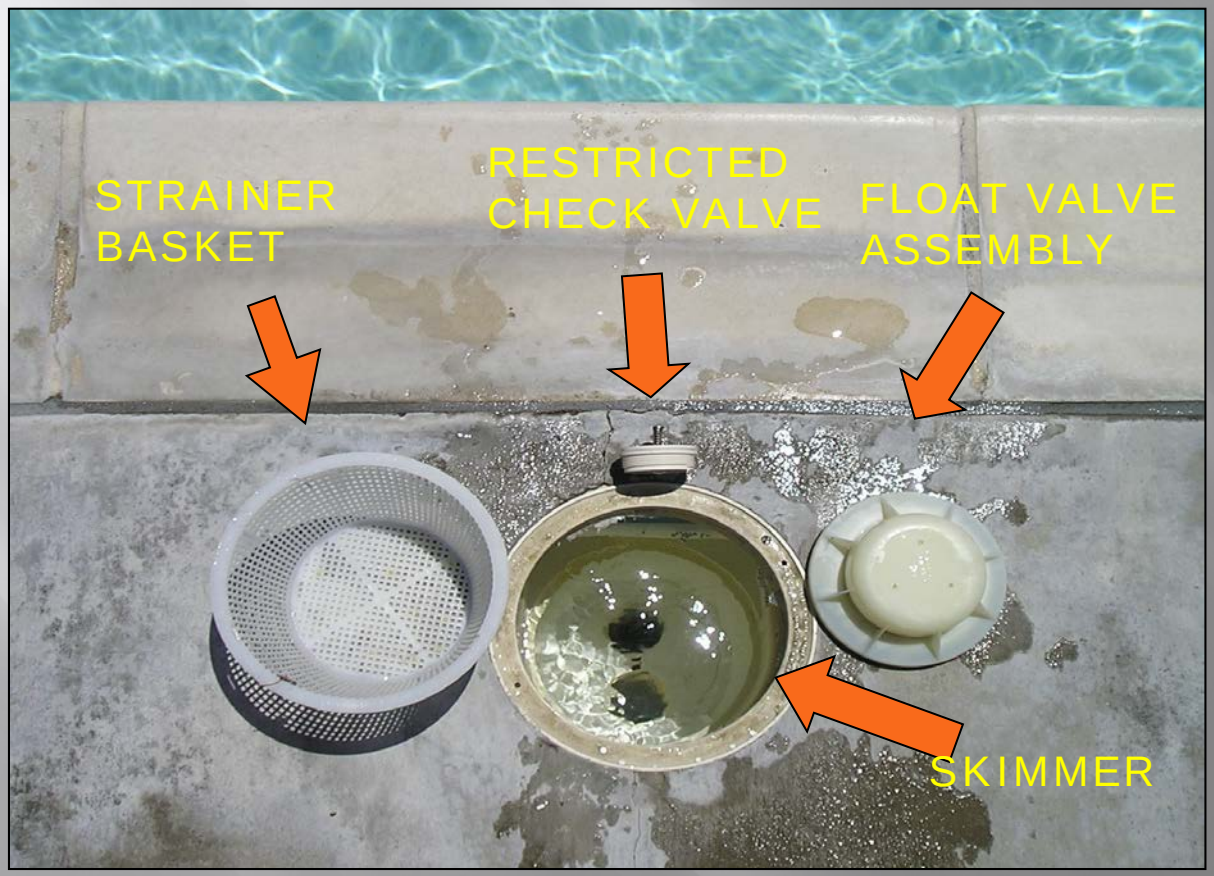
**Belly Band: Pools deeper than 5 ft. must have a 4 to 6 inch wide tile line at 4-1/2 ft depth**

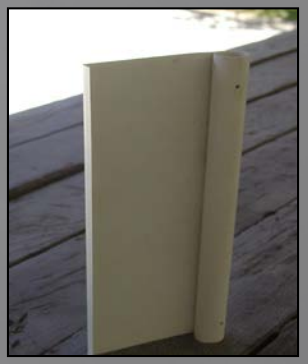
# 21. Water Level Above Skimmer Opening

**Ensure level of water is at a level that will allow continuous removal of debris through pool skimmer system**

# 22. Functioning Skimmer

## Replace any broken or missing parts – including weir



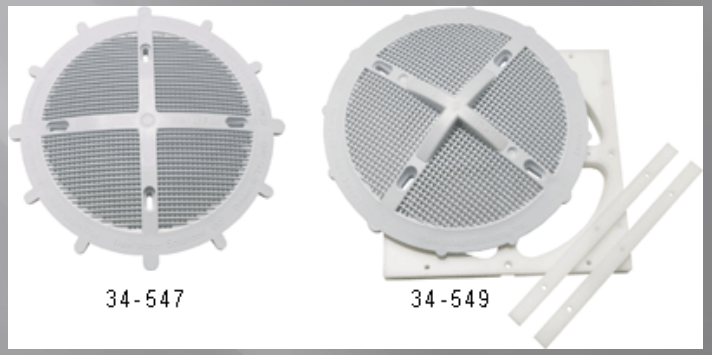
# 23. Pool Fittings in Good Repair

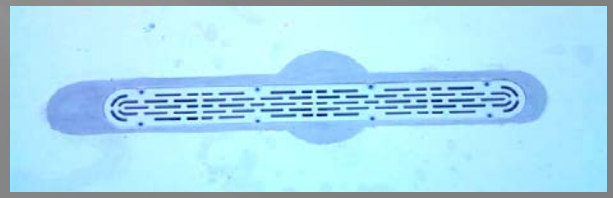
- **Secure/replace return line covers with approved type.**
- **In order to minimize potential limb entrapments, all openings 1.5” or greater shall be covered or reduced to less than 1.5”.**

# 24. AB 1020 – Suction Covers

- **Drain covers that were approved prior to December 2007 are not compliant with the current ASME/ANSI A112.19.8 standards.**
- **All suction outlets must have VGB compliant covers**
- **Equalizer lines must also have VGB compliant covers**

Examples



# 24. AB 1020 – Suction Covers

## Please Note:

- **Main drain covers have expiration dates. Most drain covers expire after 5 years.**
- ***It has been 5 years since covers were required to be replaced to meet VGB requirements***
- ***Expiration dates are stamped on the cover.***

AQUASTAR pool products

IMPORTANT NOTICE

VIRGINIA GRAEME BAKER POOL & SPA SAFETY ACT

5 YEARS. 5 REASONS.

It's been five years since the Virginia Graeme Baker Pool & Spa Safety Act became effective — meaning it's time for public facilities to start replacing their pool and spa drain covers. Here's why this should be your priority as well.

1 **IT'S THE LAW.** The VGB law that went into effect in 2008 requires that all public pools and spas have drain covers that comply with the ASME/ANSI A112.19.8 performance standard, or any successor standard, currently ANSI/APSP 16-2011. This standard requires that manufacturers determine a life expectancy and place a permanent mark with "Life: X Years" on each cover to indicate lifespan. At AquaStar, based on UV, structural and fastener testing, we've determined that our drain covers should be replaced every five years from the date of installation, as stated in our instructions. We have partnered with you to make sure your customers are in compliance with the law and our customer service department is here to help in any way we can.

2 **REDUCE LIABILITY.** The law requires that compliant drain covers be installed in all public pools and spas, in accordance with manufacturer instructions. Failure to comply can result in pool closings and stiff civil penalties, as well as resulting liability in the event of a tragedy.

3 **IT'S SIMPLE.** Public pools are required to install compliant covers in accordance with manufacturer instructions. You want your residential customers to have the same level of protection. To ensure structural integrity and avoid accidents with broken covers, the drain covers that public pools and spas installed five years ago need to be replaced. Our drain cover solutions give you the selection you need to meet any requirements. (See cross-reference chart on back and our website for our wide array of available replacement options.) And if you don't currently have an AquaStar drain cover, we also have many retrofit choices that will adapt to other manufacturers' frames and sumps. Keep in mind that you must also assess the integrity of the existing frame or sump to ensure that it is structurally sound and able to get three threads of engagement with the new screws provided with each cover. Remember, at AquaStar, every product is held to the highest standard of quality, resulting in superior, dependable products that last.

4 **IT'S SMART BUSINESS.** When you remind your customers about their upcoming drain cover expirations, you are more than just a pool supply vendor for them. You're a trusted resource and partner helping them stay compliant with the law and keeping consumers safe. And that's good for business.

5 **DON'T WAIT UNTIL IT'S TOO LATE.** While replacing drain covers is the legal thing to do, it's also the safe thing to do. Help your customers make the right decision — at the right time.

As you're helping your customers select new drain covers this year, consider AquaStar. Every AquaStar pool product is designed and manufactured in the United States, ensuring the highest quality merchandise. Our entire product line is designed to provide the very best look, feel and performance.

COMPLETE LINE OF VGB COMPLIANT RETROFIT DRAINS

PLEASE CALL OR VISIT OUR WEBSITE FOR MORE INFORMATION

877-768-2717 +1-805-620-5060 (outside the U.S.) www.aquastarpoolproducts.com

# 24. AB 1020 – Suction Covers

## How do I know if my covers are expired?

- **First:** **Review you last inspection report to determine if your inspector identified that you have expired suction covers. Can find previous reports on EMD's website**
- ***Second:*** ***Contact the contractor who installed the covers to obtain a copy of your AB 1020 Compliance Form***
- ***Third:*** ***Look up the lifespan of your suction covers on the manufactures website***

# 24. AB 1020 – Suction Covers

## What do I do if my suction covers are expired?

- **Submit plan review forms to EMD prior to new covers installation**
- **Covers need to be replaced by a licensed contractor with a C53, C36, C61 or D35 license**

**Routine inspections 2018**

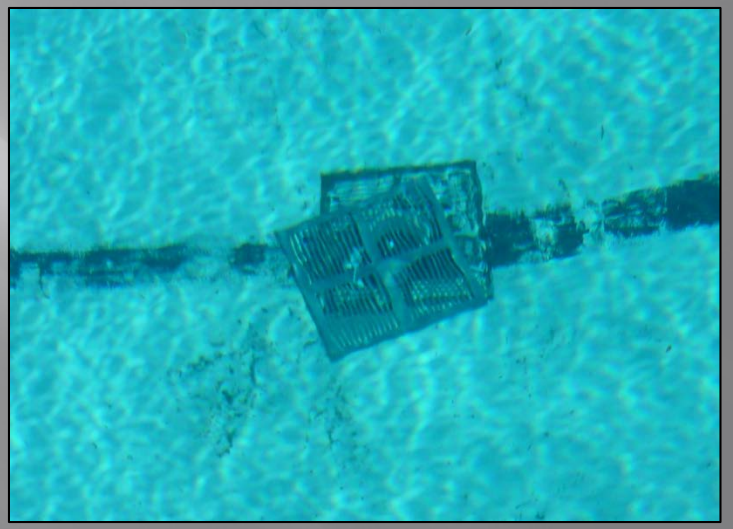
***expired covers will be noted on the report to be replaced.***

**Routine inspections 2019**

***expired covers will be noted as a major violation and pool may be subject to closure until corrected.***

# 24. AB 1020 – Suction Covers

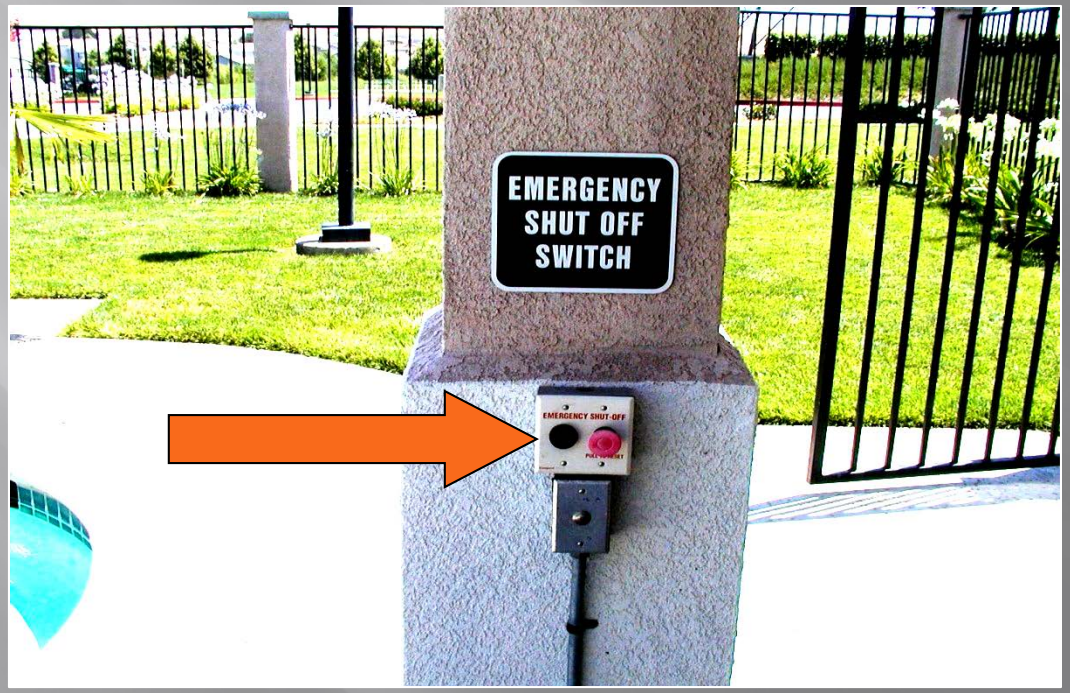
All suction covers must meet current standards and be in good shape



Broken, cracked, or non-compliant suction covers may result in pool closure

# 25. Emergency Shut-off Switch

**Spa emergency shut-off switch must be able to completely shut off both jet and spa filter pumps**

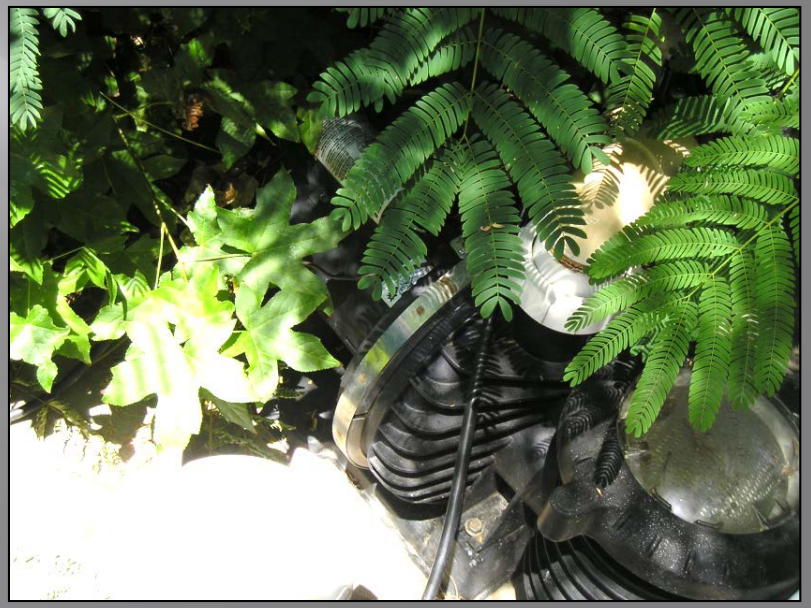


# 26. Spa Temperature

**104˚F Max**

# 27. Maintain Equipment Room

## Remove junk /vegetation



# 28. AB 1020 – SVRS

**…if a single main drain is in use that is not "UNBLOCKABLE" then one of the following must be installed…**

- Safety Vacuum Release System (SVRS)
- Suction limiting vent system
- Gravity drainage system
- Automatic pump shut off
- As approved…

***Intelliflo VS+ SVRS pump***

***Vac-alert***

***Emotron***

***Hayward Stratum***

***AO Smith Motor - Guardian***

***Vac-less***

***Stingl***

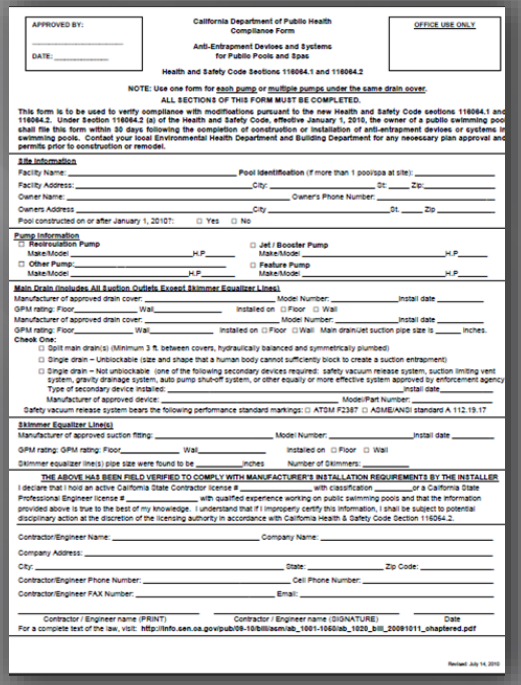
# 29. AB 1020

## Virginia Graeme Baker Federal Pool and Spa Safety Act.

**All drains must have anti-entrapment drain covers that meet ASME/ANSI performance standards**

**State Installation Certification form for main drain cover and/or Secondary Safety Device required for every public pool and spa.**

***New form required to be submitted whenever a cover is installed or replaced.***



APPROVED BY:

DATE:

California Department of Public Health
Compliance Form

Anti-Entrapment Devices and Systems
for Public Pools and Spas

Health and Safety Code Sections 116064.1 and 116064.2

OFFICE USE ONLY

NOTE: Use one form for each pump or multiple pumps under the same drain cover.
ALL SECTIONS OF THIS FORM MUST BE COMPLETED.

This form is to be used to verify compliance with modifications pursuant to the new Health and Safety Code sections 116064.1 and 116064.2. Under Section 116064.2 (a) of the Health and Safety Code, effective January 1, 2010, the owner of a public swimming pool shall file this form within 30 days following the completion of construction or installation of anti-entrapment devices or systems in swimming pools. Contact your local Environmental Health Department and Building Department for any necessary plan approval and permits prior to construction or remodel.

Site Information

Facility Name: _____ Pool Identification (if more than 1 pool/spa at site): _____

Facility Address: _____ City: _____ St: ____ Zip: _____

Owner Name: _____ Owner's Phone Number: _____

Owners Address _____ City _____ St: ____ Zip _____

Pool constructed on or after January 1, 2010? ☐ Yes ☐ No

Pump Information

☐ Recirculation Pump — Make/Model: _____ H.P. _____
☐ Other Pump: _____ — Make/Model: _____ H.P. _____
☐ Jet / Booster Pump — Make/Model: _____ H.P. _____
☐ Feature Pump — Make/Model: _____ H.P. _____

Main Drain (Includes All Suction Outlets Except Skimmer Equalizer Lines)

Manufacturer of approved drain cover: _____ Model Number: _____ Install date _____
GPM rating: Floor_____ Wall_____ Installed on ☐ Floor ☐ Wall
Manufacturer of approved drain cover: _____ Model Number: _____ Install date _____
GPM rating: Floor_____ Wall_____ Installed on ☐ Floor ☐ Wall Main drain/Jet suction pipe size is _____ inches.

Check One:
☐ Split main drain(s) (Minimum 3 ft. between covers, hydraulically balanced and symmetrically plumbed)
☐ Single drain – Unblockable (size and shape that a human body cannot sufficiently block to create a suction entrapment)
☐ Single drain – Not unblockable (one of the following secondary devices required: safety vacuum release system, suction limiting vent system, gravity drainage system, auto pump shut-off system, or other equally or more effective system approved by enforcement agency)
Type of secondary device installed: _____ Install date_____
Manufacturer of approved device: _____ Model/Part Number: _____
Safety vacuum release system bears the following performance standard markings: ☐ ATDM F2387 ☐ ASME/ANSI standard A 112.19.17

Skimmer Equalizer Line(s)

Manufacturer of approved suction fitting: _____ Model Number: _____ Install date _____
GPM rating: GPM rating: Floor_____ Wall_____ Installed on ☐ Floor ☐ Wall
Skimmer equalizer line(s) pipe size were found to be _____inches Number of Skimmers: _____

THE ABOVE HAS BEEN FIELD VERIFIED TO COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS BY THE INSTALLER

I declare that I hold an active California State Contractor license # _____ with classification _____or a California State Professional Engineer license # _____ with qualified experience working on public swimming pools and that the information provided above is true to the best of my knowledge. I understand that if I improperly certify this information, I shall be subject to potential disciplinary action at the discretion of the licensing authority in accordance with California Health & Safety Code Section 116064.2.

Contractor/Engineer Name: _____ Company Name: _____

Company Address: _____

City: _____ State: _____ Zip Code: _____

Contractor/Engineer Phone Number: _____ Cell Phone Number: _____

Contractor/Engineer FAX Number: _____ Email: _____

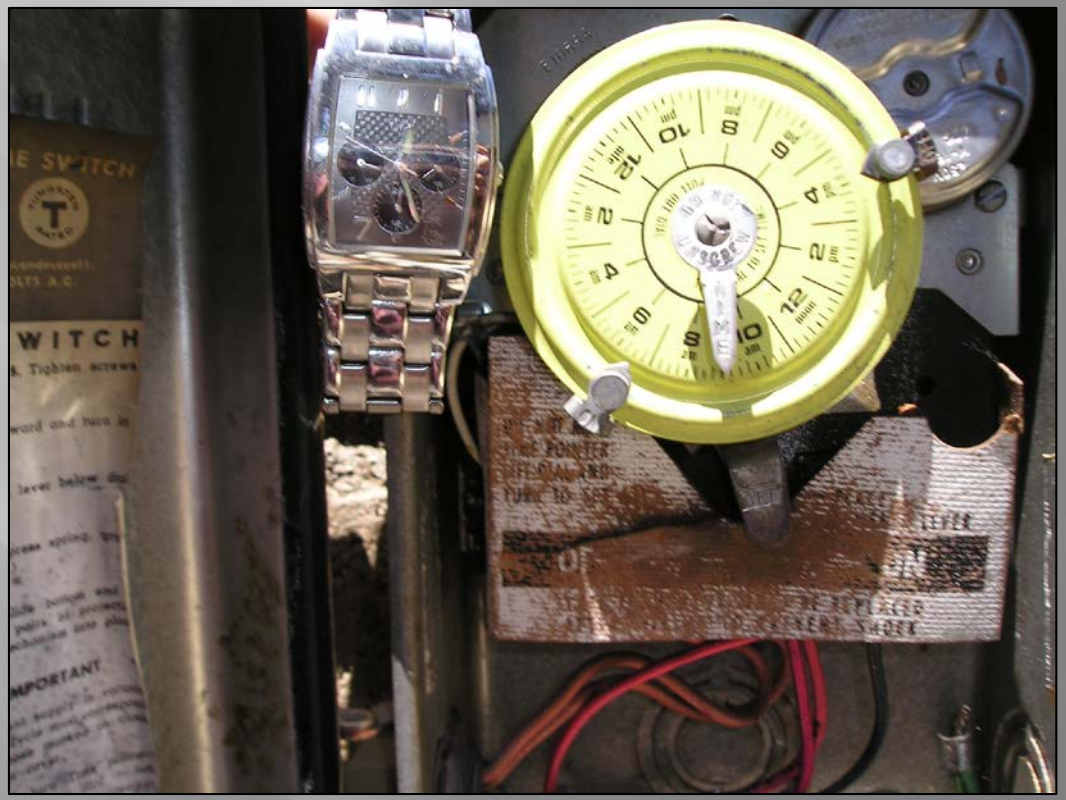
Contractor / Engineer name (PRINT) Contractor / Engineer name (SIGNATURE) Date

For a complete text of the law, visit: http://info.sen.ca.gov/pub/09-10/bill/asm/ab_1001-1050/ab_1020_bill_20091011_chaptered.pdf

Revised: July 14, 2010

# 29. Recirculation System Running When Pool is Open

## Circulation system running during open hours



# 30. Pool Equipment and Plumbing – Good Repair

***Something is leaking…***

# 31. Approved Automatic Chlorinator/Brominator Installed

- **An automatic chlorine feeder is required for every pool and spa.**
- **It must be functional and capable of feeding at least 3lbs of 100% Cl /10,000 gal. water/ day**
- ***Violations include routine hand dosing and placing tablets in the skimmer basket***

# 32. Liquid Chemical Feeder Interconnected to Pump

**Chemical feeder needs to shut off if pump stops working.**

## Options:

**Feeder can be wired in a manner that will shut off when pump stops.**

*Or*

**Flow switch can be installed and connected to power cord.**

# 33. Required Turnover Rate Maintained

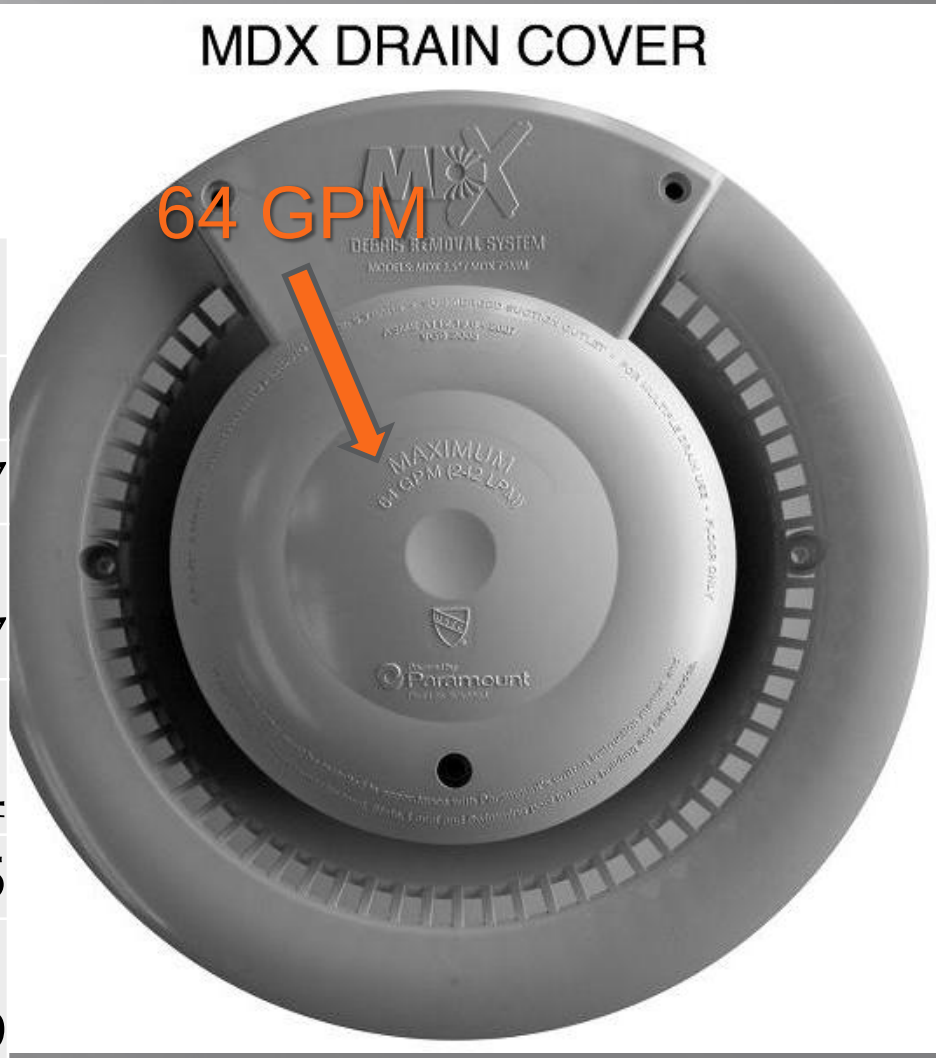
**Ensure that the recirculation system completes a turnover of pool water**

- **Pool: every 6 hours**
- **Spa and Spray Grounds: every 30 minutes**
- **Wading pool: every 1 hour**
- **Therapy pool: every 2 hours**

# 34. Flow Rate Not Exceeding Pipe and Suction Cover GPM Rating

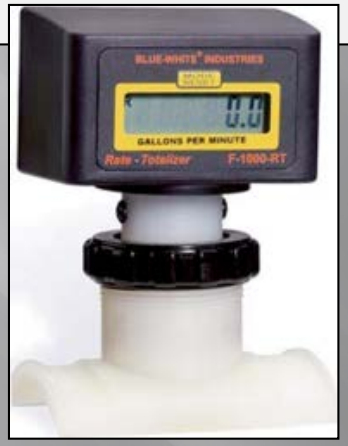
**Maintain GPM flow below maximum rating.**

| PIPE SIZE | PVC SCHEDULE 40 | | |
|---|---|---|---|
| | 6 FPS | 8 FPS | 10 FPS |
| 1 | 16 | 22 | 27 |
| 1 1/4" | 28 | 37 | 47 |
| 1 1/2" | 38 | 51 | 64 |
| 2" | 63 | 84 | 105 |
| 2 1/2" | 90 | 119 | 149 |



# 35. Flow Meter

- Must be installed properly and be functional (bobber is not stuck)
- Flow meter must be the correct size (size by the diameter of the pipe they are attached to)



*FloVis*
*NSF approved*

# 36. Gauges

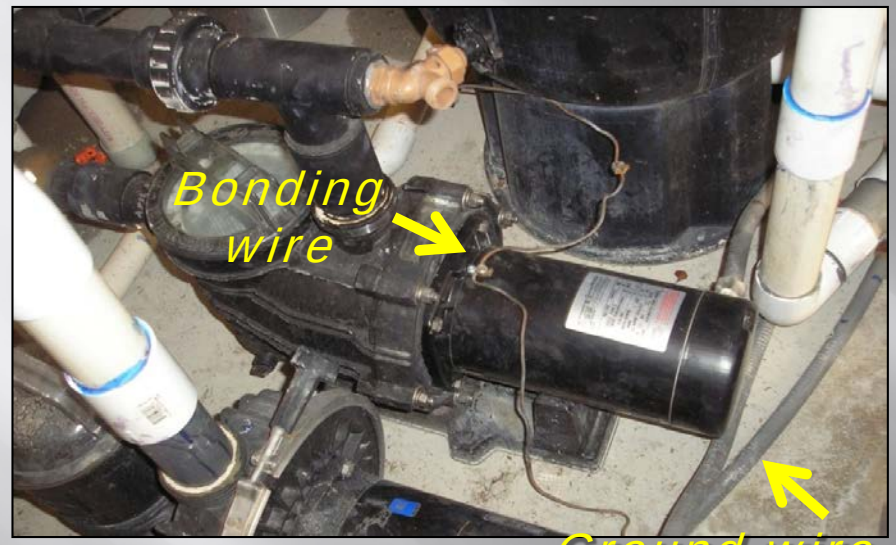
**INFLUENT GAUGE**
**- going into filter-**

**VACUUM GAUGE**
**is required**

# 37. Free of Electrical Hazards

**Make sure that the GFCI (Ground Fault Circuit Interrupter) is working properly**

# 37. Free of Electrical Hazards




**Bonding wires and Ground wires must all be properly attached to equipment and ground**

**Permits, plan review and licensed contractors keep swimmers and pool owners safe.**

**Police photos show shoddy electrical work at pool that caused three kids to be shocked**

Property owner expected to be fined

Author: Roger Lohse, Reporter, rlohse@Local10.com
Published On: 26 m

HIALEAH -

Images released by the city show the shoddy electrical work that led to three children being shocked in a community pool last week.

Hialeah Police took dozens of pictures of the pool equipment after the incident which occurred April 27at the Palms West Condominiums on West 56th street.

One of the images shows a disconnected green ground wire on the pool pump.

# 37. Free of Electrical Hazards

**Pool Closure Required**

**Floating electrical**

**Water in pool light**

# 37. Free of Electrical Hazards

## Boy, 7, electrocuted by faulty light as he raced friend across his family's pool while his nanny was watching

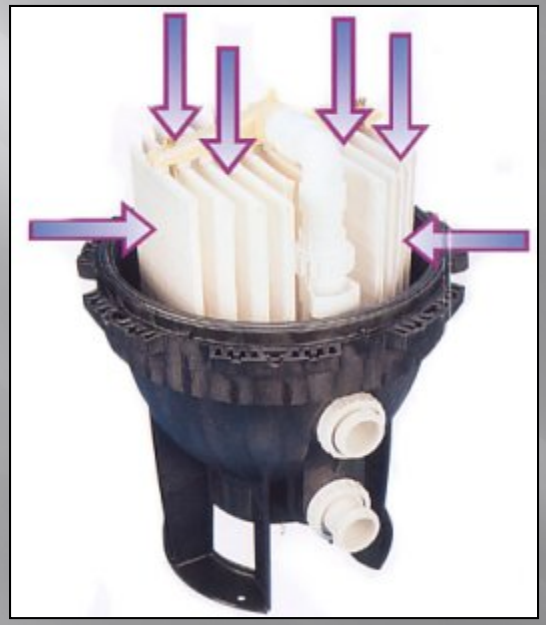
- Calder Sloan was swimming in his family's pool in Miami, Florida on Sunday when he received a jolt that threw him out of the pool
- The light switch to the pool was not properly grounded, meaning power that should have been diverted from the pool was instead going in to it
- The family had the light fixed about 9 months ago and now contractors face questions over what happened
- Calder's dad Chris paid tribute to his 'heaven-sent' sports- they would call 'Mr Awesome'

News story from May 21, 2017

Loss: Calder Sloan, 7, has died after he was electrocuted while swimming in his family's pool on Sunday

# 38. Maintain Approved Filtration System

Cartridge filter



DE filter

Sand filter

# 39. Proper Disposal of Filter Cleaning Waste

**Mop Sink for cartridge filter**

good

bad

# 39. Proper Disposal of Filter Cleaning Waste

**Separation tank required for DE filter**

**Sump required for sand filter**

Drain to sanitary sewer must be available or installed at the time of filter change out or new installation

# 40/41/42. Spray Grounds

- **UV light dosage shall be at a minimum of 40 mJ/cm2.**
- **Recirculation system must be in operation when spray ground is open for use.**
- **Ensure recirculation system and water feature pumps are interconnected.**
- **Four turnovers are required prior to opening.**

# 43. Equipment Approved

## Minor Remodel

Equipment change out must go through plan review.

**County of Sacramento**
**Environmental Management Department**
**Environmental Health Division**

OFFICE USE ONLY
Verified by: _____
Date Received: _____
Total Fee: _____
Receipt No.: _____
Date Paid: _____

**Application for Recreational Health**
**Minor Remodel[1] Plan Review**

Please complete the following form and FAX, mail or hand deliver to Sacramento County Environmental Management Department, Environmental Health Plan Review Office, 10590 Armstrong Ave., Mather, CA 95655-4153, Tel. (916)874-6010 / FAX (916)874-6825.

| | |
|---|---|
| Name of Recreational Health Facility (dba): | |
| Address and phone number of Facility: | |
| City, State, Zip Code: | |
| Year Pool Built: | |
| If multiple pools, spas, and/or wading pools are on site, identify which one is to be remodeled. | |
| *OFFICE USE ONLY:* ☐ Minor Remodel ☐ Single Equipment | |

**SIZE OF POOL, SPA OR WADING POOL**

| | |
|---|---|
| Gallonage: | (Surface area)_____ x (avg. Depth) _____ x 7.48gal./cu.ft. x (.95 pool or .66 spa)= _____ gallons |
| Turnover rate: | Pool: (gallons) / 360 minutes = _____gpm<br>Spa: (gallons) / 30 minutes = _____gpm<br>Wading pool: (gallons) / 60 min. = _____gpm |

| EQUIPMENT | | APPROVED ON FILE *(OFFICE USE ONLY)* | EXISTING or NEW |
|---|---|---|---|
| FILTER: | Make and Model: | | |
| | Type: | | |
| PUMP: | Make and Model: | | |
| | H.P.: | | |
| JET PUMP: | Make and Model: | | |
| | Type: | | |
| SANITIZER: | Make and Model: | | |
| | Type: | | |
| FLOWMETER: | Make and Model: | | |

**ADDITIONAL INFORMATION**

| | | | |
|---|---|---|---|
| NUMBER OF SKIMMERS: | | | |
| SUCTION PLUMBING SIZE | MAIN DRAIN: | SKIMMER(S): | JETS(SPA): |
| RETURN PLUMBING SIZE | RECIRCULATION: | JETS(SPA): | |
| SUCTION COVER(S) | MAIN DRAIN: | EQUALIZER LINE: | |
| MAIN DRAIN: (Circle one) SINGLE DUAL/SPLIT | | EQUALIZER LINE(S): (Circle one) SINGLE DUAL/SPLIT | |

[1] Minor remodel means remodeling of less than 30% of the pool, spa or wading pool structural area or equipment alterations, excluding replacement of like equipment solely for repair purposes. If you have questions on whether your work falls into this category call 874-6010 for clarification.

Page 1 of 2

# 44/45. Lifeguard Certification and Equipment

## Safety Equipment

- Industrial 10 person first aid kit
- Operating telephone
- Backboard and head immobilizer

# Well, this sounds complicated…maybe I should just hire a professional…?

FYI –

- Some individuals are very well educated and have lots of experience and some have almost none.
- It is recommended that you look for a person who has the appropriate certification and licensing.
- Be informed and ask lots of questions.
- Own your own test kit and check the pool daily.

***As the owner or operator <u>you</u> are responsible for your pool/spa regardless of what a pool maintenance company does or says.***

# Questions?

**ENVIRONMENTAL MANAGEMENT DEPARTMENT**

**10590 Armstrong Ave., Mather, CA 95655**

**Phone : 916-875-8440**

**www.emd.saccounty.net**