





Horizon AAE Seminars  
Spring Start Up

## Spring Start Up Seminar

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April 14, 2010

Hosted by Chad Storley, MED, CPO, AFO, LGT

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## Introductions

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- Housekeeping
- Timeline
- What questions would you like answered today?
- What problems are you having at your pool?

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## Outline

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- System check
- Water chemistry
- Testing the water
- Adding chemicals
- Common problems in and around the water
- New laws
- Mechanicals
- Inspector

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### Putting it all Together:




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### What's Happening in my Pool?




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### Pre-Opening Checklist

- Call health inspector to schedule visit
  - How to find your inspector:  
[www.horizonpoolsupply.com](http://www.horizonpoolsupply.com)
  - Resources
    - Downloads
    - Helpful Tools and Information
    - Local Health Department Contacts
- Start up as soon as freezing at night stops
- Wet Areas- Hydro Static Relief Valve
  - Check sump pump operation!

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### Cover Maintenance

- Clear cover of debris (before taking off)
- Wash with fresh water
- Soft brush/mild detergent/pressure wash only if necessary
- Ensure it is **completely dry** before storing
- Fan fold is recommended for easier removal and install
- Store in mesh bag- keep off the floor
- Flush out anchor casings with hose frequently- prevents sticking. Silicon Lube
- Repair small tares immediately- fabric under stress
  - Takes 8-12 Weeks
- Warranty costs more to ship than repair

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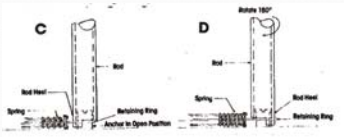
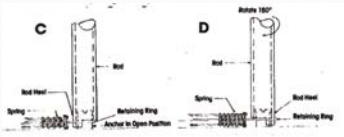
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### Cover Removal

- Insert installation rod over anchor with notch away from pool (Diagram C)
- Next, press down and rotate 180°
- Heel of rod will force spring free of anchor
- Tilt rod to release spring (Diagram D)


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### Structure Inventory

- Decking
  - Caulking
  - Cracking
- Inspect Shell
  - Tile
    - Grot lines
    - Missing
  - Cracks
  - Chalking
  - Discoloration

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### "To Empty or Not to Empty? That is the Question"

- Empty:
  - Every couple years to check drain, surface, tile, etc.
  - Not covered
  - Clean surface remove stains
  - Have additional pumps
  - Large amounts of debris
- Fill and Treat:
  - Only if covered
  - Covered after leaves removed
  - Clear all large material leaves, debris, etc.
  - Treat with non-chlorine shock
  - High metals in makeup water

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### Pool/Spa Surface Preparation

- Empty pool
- Rinse with TSP
- Pressure Wash
- Stubborn Staining
  - Acid Wash (start 50/50)
  - Slowly increase
  - Alternative Sodium Hydrosulfate
- Rinse with TSP

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### Chemical Inventory

- Gasket Lubricant (Magic Lube)
- Caulking (TX-1 Outdoor Masonry Caulk)
- Sanitizer (Chlorine, Bromine, Lithium)
- Stabilizer (Cynaoric Acid)
- pH Decreaser (Muriatic Acid, Acid Magic, Sodium Bisulfate, CO2)
- Phosphate Remover
- Sequestering Agent/Stain Inhibitor
- Clarifier
- Enzymes
- Non-Chlorine Shock
- Chlorine Neutralizer
- Balancing Chemicals if needed (Alk Increaser, pH Up, Calcium Increaser)

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### Working with the Health Inspector

- See Handout

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### Health Inspection

- Who is your Inspector?
- Find your Health Inspector at:
  - [Horizonpoolsupply.com/resources/downloads/](http://Horizonpoolsupply.com/resources/downloads/) helpful tools & information
- Call ahead!!!!
- Checklist
- If you feel they are not correct,
  - Ask for clarification and what you need to do
  - Due the test with them
  - Let them know you would like to clarify (see State)
  - Talk with Supervising Inspector
- Understand there is confusion between Federal, State and Local Regulations
- General Guidelines- ambiguity open for individual interpretation
- Get the items taken care of and call to let them know. (Even if minor)

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### Entrapment Survivors

- A typical main drain with 8" opening with the pool pump exerting 350 pounds of pressure, creates a powerful force.

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**Federal Law**

- Virginia Graeme Baker Pool and Spa Safety
  - H.R. 6-303 to 309 Title XIV- Pool and Spa Safety
  - Federal law addresses ALL pools both commercial and residential

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**Standards for the Federal Law**

- Consumer Product Safety Rule
  - Items within Subsection B
  - Issued by the Consumer Product Safety Commission
  - Considered under the Consumer Product safety Act
    - 15 U.S.C 2051 et seq

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**Subsection B**

- Drain Cover Standard
  - Must act on provisions before December 19, 2008
  - Pool or spa drain covers shall conform to the Anti-Entrapment ASME/ANSI A112.19.8 standards
    - Performance standard or any successor standard regulating pool or drain covers
    - Includes
      - Manufactured
      - Distributed
      - Entered into Commerce

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### New ANSI/APSP-7 2006

- Federal Drain Cover Requirements:
  - 4.4
    - **Tested and listed by Nationally Recognized Testing Laboratory**
    - Life of the drain cover
    - Conform to most recent addition
      - VGB
      - ASME/ANSI A112.19.8 (Current Year)
    - Permanent marked flow rate
    - Marked for dual or single

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### Subsection C

- Public Pools Required Equipment
  - Must act on provisions before December 19, 2008
  - Each public pool and spa in the U.S. with a single main drain OTHER than an unblockable drain shall be equipped with one or more of the following:

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### [Continued]

- Safety Vacuum Release System
- Suction-Limiting Vent system
- Gravity Drainage System
- Automatic Pump Shut-Off System
- Drain Disablement
- Other System





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### Enforcement

- Violation of is considered part of the Consumer Product Safety Act Section 19 a1 as well as Section 17
- Note: Recent Q&A with CPSC Stated "State Attorney General may also Enforce"

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### Federal Interpretation Changes

- Sept 2008: For all non-existing unblockable drain covers it is highly recommended that you have a secondary device.
- December 2008: Skimmer Equalizers are considered suction outlets, therefore should have a federally compliant drain cover
  - Auto-leveler does not
  - State may amend
  - 4717 to allow you
  - to do away with
- Sept 2009: CPSC Inspectors
- Inspecting pools. Selected areas.




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### Changes In Drain Cover Identification

- ASME/ANSI A112.19.8 2007 (NO LONGER STAMPED)
- NEW Identification
  - "VGB" or "VGB 2008" (current date)




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### MN State Law

- Abigail Taylor Pool Safety Act- May 16, 2008
- State of Minnesota can not enforce Federal Law
- State Law addresses public pools




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### Main Dates and Provisions

- Public Pools defined- Pool other than a Private Residential Pool
- Fees
- New Pool Construction- Certified Professional Engineer (Jan 1, 2009)
  - ONLY Dual Drains
- License and Inspected All Public Pools Annually-
  - Prior Pools with Food or Beverage Service
  - Pool 1<sup>st</sup> \$180, each additional \$100/Spa \$110, Each additional \$50
  - Submit State Online Survey or Physical Survey
    - Local Inspector Survey (Hennepin County)

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### Drain Cover/Grate Inspection

- Daily Physical Inspection
  - (Show i.e. Dive, Shepherds Hook, String/Hook)
  - Documented in Log Book
  - Must be closed immediately if found loose, broken or missing

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


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### Drain Covers Cont.

- June 1, 2008- All Drain Covers and Grates Installed with Screws that meet Manufacturers Specifications
- July 1, 2008- Certify to Commissioner of Health:
  - Annually thereafter
  - Without submission will not receive license to operate pool
  - Mounting rings, covers and grates are inspected and are not broken or loose. (Includes swimming ponds)
  - Drain Covers Meet ASME/ANSI Standards and are tested and certified. PROBLEM!!




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### Unblockable Drain

- ASME/ANSI Definition-
  - Stamped and/or documented approval
  - Any size or shape that 90% of a adult male can not sufficiently block to create suction
  - 18" x 23"
  - Long channel
  - Diagonal of 29' or more




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### MN Dual Drains $\leq$ 4ft

- January 1, 2009: all pools 4ft or less
  - January 2<sup>nd</sup> pool subject to closure
  - Tested/Approved unblockable drain cover
  - 2 Suction outlets connected in parallel
    - Covers meet ASME/ANSI standards
    - Gravity Outlet/Drain

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