



SNOHOMISH HEALTH DISTRICT

ENVIRONMENTAL HEALTH DIVISION
Living Environment Section
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Pool News—Spring, 2009

PUBLIC HEALTH
ALWAYS WORKING FOR A SAFER AND
HEALTHIER SNOHOMISH COUNTY

POOL & SPA OPERATORS CONFERENCE

Hosted by Snohomish Health District

When: May 27, 2009, 9 a.m. to 12 noon
Where: Snohomish Health District
3020 Rucker Avenue
Everett, Washington
Auditorium
Cost: \$30

Introduction to Certified Pool Operator (CPO)

- Learn what it takes to become a CPO
- Why it is important for your facility
- How to find a class
- Review some of the chapters that will be covered in a full CPO Class
- Find out what math skills are required for CPO

To register or for more information, call SHD at 425.339.5250. Ask for the Food and Living Environment Desk

PERMIT RENEWALS

Permit renewals are due **May 29, 2009**.

Please make sure you do the following before mailing:

- ✓ Sign the application.
- ✓ Update any missing or inaccurate information.
- ✓ Return the ORIGINAL application (make a copy for your records).
- ✓ Enclose a signed check or money order for the correct amount.

Virginia Graeme Baker Pool and Spa Safety Act (VGB) Compliance Summary

This new federal law changes the way we design, construct, maintain, and operate public pools. In short every public pool in the United States must:

- Install new covers on all drains or suction outlets. These new drain covers must meet a new higher engineering standard that requires the supplier to ensure safety through design, testing, and certification. However, drain covers are still made with plastic, which gets weak over time. Therefore, each new VGB cover includes an expiration date at which time they must be replaced.
- Pools that have a single main drain must install an automatic shut-off system or have some other acceptable safety device, such as a gravity drainage system. Note that if a pool has multiple drains, but they are too close or they are not hydraulically balanced, the additional safety equipment is still needed.
- Have documentation that your pool is in compliance with VGB, which includes what equipment was installed, who installed the equipment, date it was installed, and how the equipment was sized.



Steps to Virginia Graeme Baker Pool and Spa Safety Act (VGB) Compliance

Pool operators or owners should seek advice from a consultant for this work. The consultant must be familiar with the federal regulations, staff interpretation memoranda, national standards, various product installation requirements and state guidelines (links provided on the Snohomish Health District (SHD) Web site provide some of this information www.snohd.org/snoEnvHealth/file/recreation/about.htm). Be aware that you may need a permit from SHD if you have to modify your pool in order to comply fully with VGB. The following steps outline the many technical issues involved in compliance with the federal and state laws:



Step 1, Evaluation

- a. Find existing drawings of the pool, or make a drawing of the pool that includes the location of drains (suction outlets), skimmers, connecting pipes, and pump room. Include dimensions of the pool, size of the pipes and distance between the drains. Locate any original information about the pumps such as model numbers and pump curves. If the size of the original equipment has been changed since construction of the pool, a professional engineer will need to evaluate the existing pumps and recirculation system.
- b. Check the condition and dimensions of your pool's existing drain sumps (a sump is the empty space below the main drain cover). The sump and connecting frame need to be in good condition to securely hold the new drain cover fasteners. The sump dimensions, including the location and diameter of the outlet pipe, need to be compatible with the new cover manufacturer's requirements and comply with the ASME A112.19.8-2007 standard. For more information about sumps, see the "Pool Main Drain Safety" guidance at <http://www.doh.wa.gov/ehp/wr/rules.htm#guidelines>.
- c. Evaluate the hydraulic balance of a multiple drain system by using a drain camera for pipes between the drain sumps, or other methods. This may provide evidence that these drains are connected in a manifold system and could be considered hydraulically balanced.
- d. Check the pool for skimmer equalizer lines. According to state guidelines, all equalizer lines need new covers that meet the ASME A112.19.8-2007 standard. Note, if covers are not available, it may be necessary to plug the equalizer line. If the equalizer line is plugged permanently with concrete, alternative pump protection, such as a remote water level controller, is needed.
- e. Evaluate the need for additional entrapment prevention equipment. If your pool's recirculation system has only one drain, you need to install additional entrapment prevention equipment. If your pool's recirculation system has two or more drains, additional entrapment prevention equipment may still be required if drains are closer than 3 feet to each other, or multiple drains are not hydraulically balanced.

Step 2, Equipment Selection

Before selecting drain covers and other equipment for your pool, the following issues need to be addressed:

- a. Look for a drain cover that has been tested by a nationally recognized testing laboratory and have markings on the cover or packaging, displaying "VGB-2008" or "ASME A112.19.8-2007." A list of cover manufacturers can be found at www.cpsc.gov/whatsnew.html#pool.
- b. If your pool drain has no sump or the sump does not meet the cover manufacturer's requirements, look for a complete outlet fixture (cover, mounting frame, and sump), or have the pool modified and a new sump installed. New sumps will require a pool modification permit from SHD and design from a professional engineer.
- c. Drain covers must be properly sized for the sump and meet certain flow requirements. New drain covers that meet the federal standard are rated for the maximum water flow they can operate safely. The "Maximum Flow Rate" marking should be stamped on the cover in gallons per minute (GPM) or included in the information from the manufacturer. The maximum flow rating needed for your new cover depends on three factors: 1) the total volume of water circulated through the drains; 2) the number and location of drain outlets on the recirculation system; and 3) the speed of water flowing through the selected drain cover (1.5 fps maximum).
- d. Detailed information about selection of additional Entrapment Prevention Equipment options can be found in the *Guidelines for Pools with Single Main Drains* at <http://www.doh.wa.gov/ehp/wr/guidance-mainrainlaw.pdf>.

Step 3, Installation, Maintaining Records, and Verifying Compliance

Proper installation of replacement covers is critical to ensure that the new cover will remain safely attached. You are encouraged to have the new main drain cover and necessary supporting components (fasteners, installation frames or brackets, etc.) installed by a pool professional who understands the new federal law.

After successfully selecting and installing replacement covers for your pool, be sure to retain all supporting information you have used to identify the correct cover, including name of installer, product literature (must include expiration date), and flow calculations. A Compliance Verification Form (www.doh.wa.gov/ehp/wr/vgbform.pdf) can assist you with demonstrating that your pool complies with the Virginia Graeme Baker Pool and Spa Safety Act. Keep this information available for inspectors or accident investigators.