



**COUNTY OF LOS ANGELES ♦ DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH
BUREAU OF ENVIRONMENTAL PROTECTION
RECREATIONAL WATERS PROGRAM
5050 Commerce Drive, Baldwin Park, CA 91706 – (626) 430-5360**

4/16/2009

**ADVISORY CONCERNING THE VIRGINIA GRAEME BAKER ACT (VGB) FOR
PUBLIC POOL CONTRACTORS, ARCHITECTS, OWNERS AND OPERATORS**

In 2007, President Bush signed into law the Virginia Graeme Baker Pool and Spa Safety Act. The federal law requires that all public pools and spas be equipped with anti-entrapment drain covers/grates that comply with ASME/ANSI A112.19.8-2007 performance standards. In addition, the act requires that all public pools have split (dual) drains or be equipped with a safety vacuum release system or other device designed to prevent entrapment.

The Consumer Product Safety Commission is the primary enforcement agency for this act. The act provides that the required equipment be in place by December 20, 2008. The Consumer Product Safety Commission's web site is located at <http://www.cpsc.gov>

The California State Department of Public Health is in the process of developing legislation to incorporate parts of the Virginia Graeme Baker Act into California State law. This however, may take some time, possibly well into 2009. Eventually, all swimming pools, spas and other type pools will need to comply.

In the interim, the Los Angeles County, Department of Public Health, Recreational Waters Program will have the following policies in place concerning split drains on public pools. These may be modified if and when the State of California enacts a new law.

Effective immediately, this Department will require all new public pools and all existing public pools that are resurfaced, renovated, replumbed or drained for any reason, including acid-washing, to comply with the following:

One of the following California contractor licenses (which must be valid as well as active) will be required in order to perform the work: a C53 (pool builder); or a C36 (plumber).

Any person who proposes to build a new public pool, replasters or renovates an existing public pool, makes any plumbing changes, drains a pool for any reason, changes drain covers/grates or makes any equipment changes is required to submit plans to this Department and pay a plan check fee prior to commencing the work and in advance of the issuance of any permits. An online plan check application can be obtained at http://publichealth.lacounty.gov/eh/docs/ep_rw_planapp.pdf

On the plan check application, if this is an existing pool, make sure and fill out all pool information. This is required even for something as simple as a drain cover change, as

we need to know pump make/model, pipe material and size etc. to determine if the cover is sized properly.

Important!

Under normal circumstances, any modification to a public/commercial pool or spa requires a final field inspection by this Department upon completion of construction. In order to expedite compliance with the VGB act, a form will be used in lieu of a final field inspection by our Department.

In order to be in compliance with the VGB act and complete the plan check process, you **must** fill out and submit a **Contractors Certification of Work Completed For Compliance with the VGB Pool and Spa Safety Act** form to our Department.

You will receive the form with your approved plans. Remember, this applies only to modifications related to the VGB act. Any combination of VGB and other renovation modifications will still require a final inspection.

New Pool Construction

All new pool construction will, as in the past, require split drains that comply with requirements (a) thru (i) below.

Existing swimming pools and spas with split drain(s)

For existing pools with split drains, when the pool is resurfaced, renovated or drained for any reason, the covers/grates will need to be replaced with approved anti-entrapment covers/grates as specified in requirement (e) & (h) below and if the pool has field-built sumps (no manufactured bowl below the cover), section (f) below. A plan approval is required by this Department, even for just replacement of covers or grates.

Existing swimming pools and spas with single drain(s)

For existing pools with single drains, when the pool is resurfaced, renovated or drained for any reason, the pool must be retrofitted with one of the following:

1. Split drains with requirements (a) through (i) below.
2. Installation of an approved unblockable drain. An unblockable drain is a drain cover or grate with a minimum dimension of 23 inches x 18 inches. Channel drains with a height of 3 inches or greater and length of 31 inches or greater are considered unblockable.
3. Installation of a Safety vacuum release systems or automatic pump shut-off system. The system must comply with the latest ASME/ANSI A112.19.17 performance standards. Covers/grates will still need to be replaced with approved ones.

The safety vacuum release system or automatic pump shut-off system must be installed per manufacturer's instructions. **This Department will not inspect the system to determine whether it is functioning properly, has been calibrated, is being properly maintained or will be periodically tested and maintained. This will be the responsibility of the owner or operator.**

This Department recommends the use of split or unblockable drains as the safest method to prevent entrapment.

Use of Divers

Divers will be allowed to replace drain covers/grates with the following stipulations:

1. A plan check will be required before the commencement of any work.
2. The diver must possess one of the valid California contractor's licenses required above.
3. After completion of the work, the diver must submit a "Contractors Certification of Work Completed" form to our Department.

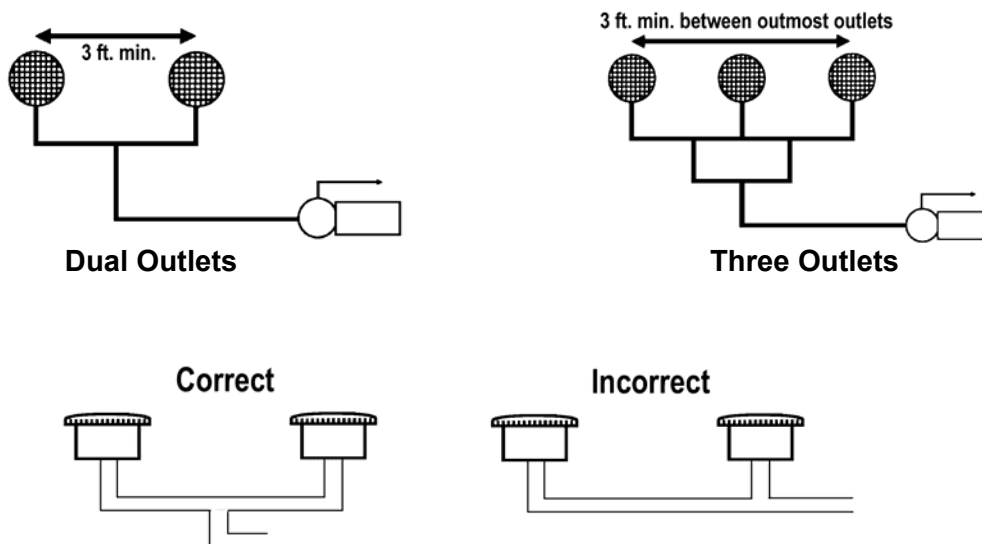
Contact information

Any future changes to our requirements or changes to California State law will be posted on our web site at www.publichealth.lacounty.gov/eh/rw.htm

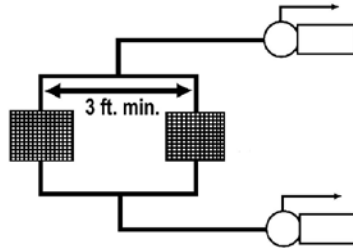
For more information you can call our office at (626) 430-5360 Monday through Friday 8:00 am to 4:30 pm.

REQUIREMENTS:

- a. The suction side of each pump, located on any type of pool, shall be plumbed with at least two suction outlets. Suction outlets shall be separated by a distance of at least 3 feet, measured from the center of one suction pipe to the other. The suction drains must be plumbed with a T in the center that is hydraulically balanced. Each branch of the "T" must be at least the same size as the main suction plumbing. Note: Spas have two separate systems, one for the filtration and the other for the jets. Both systems need to comply with dual drain requirements.



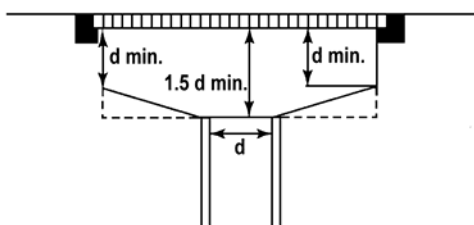
- b. Each branch of a split suction shall terminate under its own suction outlet cover/grate. Except, suction plumbing from two different pumps may terminate under one suction outlet cover/grate if the combined flow rate of each suction pipe is less than the flow ratings of a single cover/grate.



- c. In situations where room on the floor is limited, (e.g. in a spa), the suction outlets may be located less than 3 feet apart, as long as they are located on different design planes (e.g. one drain on the floor and one on the wall or two different walls) and as long as they are offset so a body cannot cover both suction outlet covers\grates. When a suction outlet is located on a wall, the bottom edge of the cover/grate shall be within 3 inches of the floor.
- d. The flow rating of each cover/grate shall be equal to or greater than the flow rating of the pump it is connected to. For example, if a pump is rated at 80 gpm at 60 feet of head, each cover/grate of the split suction must be rated at 80 gpm or greater. If 3 or more suction outlets are used, refer to the table below.

Number of covers/grates per system	Minimum flow rating of each cover/grate % maximum system flow rate
2	100%
3	66.7%
4	50%
5	40%
6	33.3%

- e. All drains/grates will be required to meet the latest ASME/ANSI A112.19.8 performance standards. A list of covers/grates, approved by this Department, can be obtained on our web site at http://publichealth.lacounty.gov/eh/docs/ep_sw_pools equip.pdf.
- f. If the suction outlet cover/grate is not part of the manufactured sump and is placed on a field-built sump, the sump must comply with the following dimensions.



d= inside pipe diameter

Field built sumps with lesser dimensions will be allowed if the covers have been tested with lesser dimensions and specifically stated in the manufacturer's installation instructions.

- g. All skimmers shall be dual port design. Skimmers shall be vented to atmosphere through an opening in the lid. Skimmers shall be connected to either an equalizer line or a main drain. A main drain connected to a skimmer requires split main drains.
- h. Cover/grate and sump requirements for main drains shall also apply to all equalizer lines, except, the cover/grate is not required to be within 3 inches of the pool floor.
- i. Drain covers shall not be directly in line with diving boards.