



Public Pool Safety: The Bottom Line

[Issue](#) | [Background](#) | [Findings](#) | [Conclusions](#) | [Recommendations](#) | [Responses](#) | [Attachments](#)

Issue

Are all operating public pools and spas in San Mateo County compliant with the law requiring elimination of drain-entrapment hazards that put children at risk of drowning?

Summary

San Mateo County has approximately 1,044 public pools and spas. In October of 2009, California passed Assembly Bill 1020, bringing state law into conformance with new federal safety standards expressed in the Virginia Graeme Baker Pool and Spa Safety Act (the VGB Act), designed to eliminate the risk of children drowning due to suction entrapment against drains. Non-compliant pools and spas were required to close as of July 1, 2010 until necessary retrofits were made.

The San Mateo County Environmental Health Division (EHD) is the local enforcement authority for the law. The Grand Jury evaluated the EHD Pool Program and found that EHD did not ensure closure of all non-compliant pools as required by law. In fact, as many as 47 non-VGB compliant pools were found to be operating on July 7, 2011, over a year after the effective date of the regulation. By September 30, 2011, 44 of those 47 had been retrofitted or closed. The three remaining non-compliant pools were being allowed to operate as EHD determined they presented special circumstances.

The VGB compliance issue would have been virtually resolved, were it not for the fact that in May 2011, the Consumer Product Safety Commission announced a manufacturers' recall of drain covers. That recall put 168 previously VGB compliant County pools and spas back into a non-compliant mode. Pools and spas affected by the recall have not been closed and EHD is currently working through this issue with the respective owners.

Based on its findings, the Grand Jury recommends immediate establishment of a firm deadline for resolution of all outstanding issues with operating non-VGB compliant pools, or closure until compliance is achieved. The Grand Jury also recommends that EHD confirm that all pools closed due to non-VGB compliance remain closed until corrections are made. Additionally, the Grand Jury recommends that for all new regulations that significantly affect public safety, EHD develop implementation plans that define enforcement procedures, and that the EHD Director formally approve those procedures. Finally, the Grand Jury recommends that changes be made to the pool inspection program to address inspections of year-round pools and spas, to improve documentation consistency and to support development of a fee structure that more accurately reflects the true costs of the inspection program.

Background

The Virginia Graeme Baker Story¹

Virginia Graeme Baker was the granddaughter of former Secretary of State James Baker. In June 2002, when she was seven years old, she attended a birthday party where she entered a hot tub and became entrapped underwater by the suction of the whirlpool's drain. Her mother, Nancy, saw her body on the bottom and tried unsuccessfully to pull her out. Two adult men finally freed her, pulling so hard that the drain cover broke in the process. Virginia could not be revived and was pronounced dead at the hospital. Nancy subsequently mobilized other parents to lobby and advocate for anti-entrapment devices and effectively made it a national issue.

The Federal Virginia Graeme Baker Pool and Spa Safety Act (the VGB Act)

The "Virginia Graeme Baker Pool and Spa Safety Act" (15 USC 8001, §§ 1401-1409) or the "VGB Act" was signed into law on December 19, 2007 and became effective on December 19, 2008. The purpose of the VGB Act is to prevent drain entrapment and child drowning in public swimming pools and spas. It imposes a requirement that all drain/grate covers meet a specific design standard (ANSI/ASME A112.19.8-2007). Other provisions define acceptable drain configurations and anti-entrapment systems.² The Consumer Product Safety Commission (CPSC) and State Attorney Generals are empowered to enforce the Act. Violations of required equipment standards for public pools and spas are subject to civil or criminal penalties, up to a maximum penalty of \$1,825 million or imprisonment for willful violations.³

The California Version of the VGB Act - AB 1020

California Assembly Bill 1020 was codified as California Health and Safety Code Section 116064.2. (CHSC §116064.2). It was passed to implement new requirements to prevent entrapment hazards in public swimming pools and spas.⁴ Gov. Schwarzenegger signed it on October 11, 2009 and it went into effect on January 1, 2010 with only minor differences from the VGB Act. The final compliance date was established as July 1, 2010. Its stated purpose is to ensure that California law is in conformance with new federal safety standards (the VGB Act) by (1) adopting the federal swimming pool and spa drain cover standard and (2) ensuring that public swimming pools and spas are equipped with proper safety devices.⁵

¹ <http://www.viriniagraemebaker.com/Page2.html>.

² 15USC 8001, §1404 (C) (1)(A)(ii) of the VGB Act.

³ The VGB Act, June 18, 2008 Staff Interpretation of Section 1404: "Federal Swimming Pool and Spa Drain Cover Standard", p.6, "Enforcement Authority".

⁴ "...a swimming pool, hot tub, spa, or non-portable wading pool ... (A) Open to the public generally, whether for a fee or free of charge, (B) Open exclusively to members of an organization and their guests, residents of a multi-unit apartment building, apartment complex, or other multifamily residential area, or patrons of a hotel or other public accommodations facility or (C) Located on the premises of an athletic club, or public or private school."

⁵ Compliance Information for the Public Pool and Spa Safety Act - Assembly Bill 1020.

Specifically, per CHSC §116064.2, all public swimming pools constructed after January 1, 2010 are required to meet the new standard, and all public pools constructed prior to January 1, 2010 “shall be retrofitted to comply with these requirements to prevent entrapment by July 1, 2010.”⁶ Pools retrofitted between December 19, 2007 and January 1, 2010 that complied with the VGB Act were exempted, contingent upon certain documentation being filed.

Local enforcement authority is provided to the City and County Departments of Environmental Health. Penalties for violating CHSC §116064.2 are: “Every person who violates any provision of this article ...is guilty of a misdemeanor, punishable by a fine of not less than fifty dollars (\$50) nor more than one thousand dollars (\$1,000), or by imprisonment for not more than six months, or both.”⁷ The San Mateo County EHD handles enforcement for the VGB Act for both the County and its cities.

The San Mateo County Response to the VGB Act and CHSC §116064.2

On December 30, 2008 the County Environmental Health Department (EHD) sent an “Advisory Notice” to owners/operators of public pools, spas and wade pools located in San Mateo County (*Attachment #1*) informing them of the federal VGB Act, its requirements and the effective date of December 19, 2008. The letter specifically noted that the “CPSC is the primary enforcement agency for the Act and that they have the authority to close any public pool or spa found not to be in compliance on December 19, 2008.” It added that the “San Mateo County Environmental Health Department cannot enforce the standards locally unless the California state law is amended to include the VGB Act.”

On January 15, 2010, EHD sent letters, subject “**California Virginia Graeme Baker Act (VGB)**” (*Attachment #2*) to the 80% of the County pool and spa owners/operators who had not yet complied with the federal VGB Act. The notice stated

...as of January 1, 2010 local authorities are mandated to enforce its provisions. The new statute has July 1, 2010 as the final compliance date in California. If your pools are not in compliance by this date, you will be required to close your pool(s) to the public until they meet all of the new law’s requirements. (emphasis in original).

The letter also contained information about local contractors, permitting requirements, and the state surcharge fee.

On June 21, 2010, EHD sent “Notice to Close – Pool /Spa” letters (*Attachment #3*) to owners who had not yet complied with the VGB law according to EHD records. This letter stated

The law requires owners to retrofit their pool/spa drains no later than July 1, 2010 or voluntarily close their pools to the public until brought into compliance.... If voluntary closure is what you choose... You will be required to post closure signs and lock all entrances to your pools. Your district

⁶ *Ibid.*

⁷ California Health & Safety Code §116065.

inspector will periodically conduct inspections to ensure your pools remain closed, and are being maintained properly. Failure on your part to comply shall result in an enforcement action to seek legal remedy. (emphasis in original)

The Incidence Rate of Entrapment Fatalities and Injuries⁸

There have been no reported public pool or spa fatalities or injuries in San Mateo County due to drain entrapment from 1999 through 2010.

On a national level, as an indication of the seriousness of the risks involved, in this same time period CPSC staff was aware of 97 reports of circulation entrapments, involving 12 fatalities and 82 injuries. Eleven of the fatalities involved children, ages 6 -17 years old, with the majority of them female. Seventy-nine percent (79%) of all the entrapments involved individuals under 18, with over half under 10 years of age.

Forty-nine percent (49%) of the entrapments involved pools and 33 percent spas, with 37 percent confirmed to be in public settings as contrasted to residential or “unknown.” Sixty-eight percent (68%) were body or limb entrapments, with “trapped by suction” being the most common hazard scenario (33%). Five fatalities and 29 injuries were in public pools or spas.

Investigation

This report was compiled from data from numerous sources including:

- Interview with a San Mateo County EHD management official
- Interviews and follow up written communications with a San Mateo County Pool Program representative
- Interview with a San Mateo County Inspector in the field during a pool inspection
- Interview and follow-up written communications with a San Mateo County EHD administrative employee familiar with Pool Program accounting
- Interviews with three major pool contractors operating in San Mateo County
- Interview with a representative of the Northern California Recreational Health Technical Advisory Committee to the California Conference of Directors of Environmental Health (CCDEH)
- Review of EHD’s pool inventory, Inspection Forms (IFs) and VGB correspondence
- Review of San Mateo County’s Pool Program Inspection Policy and available training documentation
- Review of San Mateo County EHD’s Pool Program Budget and Actual financial data 2007-08 to 2011-12
- Visits to twenty public pools or spas, some multiple times, to confirm operating status
- Review of relevant Federal and California Health and Safety Code §§116064.2 and 116065 and related published interpretation guidance
- Review of the San Mateo County Ordinance Code Title 5 §5.64070 – Collection of Fees

⁸“1999-2010 Reported Circulation/Suction Entrapments Associated with Pools, Spas, and Whirlpool Bathtubs”, 2011 Report, CPSC, May 2011.

- CPSC and Association of Pool and Spa Professionals websites
- Responses to written requests for VGB-related compliance data from 5 Bay Area counties

This investigation consisted of exploration of the following areas:

- **Overall Pool Program Practices and VGB Compliance Impacts** - What is the frequency and nature of public pool inspections by EHD? Is there a governing policy and is EHD complying with it? How are violations documented by EHD and handled through resolution? How did the VGB Act and CHSC §116064.2 impact the Pool Program?

The large majority of pool inspections, including year-round pools, occur between April and September because of the way EHD allocates its resources to support both food and pool inspections. There are fifteen food inspectors and only one full-time Pool Program Specialist. The food inspectors schedule their restaurant inspection work and other duties throughout the year to free up enough time to support the pool inspection program during the summer months. They are cross-trained for this purpose. This was designed to be an efficient use of available resources.

The Grand Jury determined that there are approximately 1,044 public pools and spas in the County subject to inspection. According to EHD Policy, the minimum standards are that public swimming pools are inspected at least twice during each swim season, with the first routine inspection between April 1 and June 30 and the second routine inspection between July 1 and September 30.⁹ The EHD policy does not currently address year-round inspections even though some public pools operate daily all year long.

The required frequency of inspection (twice per year) would have resulted in a minimum of six inspections between December 19, 2008 and September 30, 2011, all opportunities to evaluate VGB compliance status and note violations of it on Inspection Forms (IFs). Three of those would have been between July 1, 2010 and September 30, 2011 when CHSC §116064.2 was already effective.

The Grand Jury reviewed copies of 116 IFs for 17 different pools and spas, spanning 2007 - 2011. In general, EHD complies with its required minimum routine pool inspection frequency. Some inspections of year-round pools are made at other times of the year, although this is not required by policy. These are performed with the limited dedicated Pool Program resources, primarily the Pool Program Specialist.

Typical violations, such as water chemistry, signage, safety and security violations are routinely documented on IFs, and there appeared to be consistent follow-up within short periods of time to visually confirm required corrections were made. VGB status documentation on IFs, however, was inconsistent by inspector, time period, and description. The absence of any specific VGB-related status checkbox on the IF likely contributed to this.

⁹ EHD Policy “Food 2010-05, dated July 16, 2010, Subject: Inspection Frequency” (Food and pool inspection frequencies are established in the same document)

The impact of VGB issues fell primarily on the Pool Program Specialist who personally tracked status, reviewed plans, and worked with owner/operators to achieve compliance. The impact to individual inspectors was less, and varied depending on the number and VGB status of the pools assigned to them. It is important to note that CHSC §116064.2 allows Counties to accept written documentation of compliance with its provisions. Certification by an appropriate licensed contractor on a California Department of Public Health Compliance Form developed for this purpose is sufficient. However, San Mateo County EHD chose not to consider pools and spas VGB compliant until verified by physical inspection.

- **Communications with owners of requirements under CHSC §116064.2** – What were the type and frequency of communications to let owners know the technical requirements and timing of the VGB Act and CHSC §116064.2 requirements, as well as implications of failure to meet them?

As noted in the Background section above, three letters were sent by EHD to affected pool and spa owners:

- 1) The Advisory Notice of December 30, 2008 informing owners and operators of the December 19, 2008 effective date of the VGB Act and EHD’s inability to enforce its provisions;
- 2) The January 15, 2010 letter to non-VGB compliant owners notifying them that as of January 1, 2010 local authorities are mandated to enforce California VGB provisions and that July 1, 2010 was the final compliance date in California. (“**If your pools are not in compliance by this date, you will be required to close your pool(s) to the public until they meet all of the new law’s requirements.**”) (emphasis in original);
- 3) The “Notice to Close – Pool /Spa” letters of June 21, 2010 (See Attachment 3 for sample) to owners who had not yet complied with California’s VGB law (CHSC §116064.2) according to EHD records, notifying them of their obligation to close their pools as of July 1, 2010 if not VGB compliant. There were no other general letters or communications to all non-compliant owners related to VGB compliance status between July 1, 2010 and August 2011.¹⁰

The Grand Jury made specific requests for any written correspondence aimed at achieving VGB compliance between EHD and individual non-compliant pool owners. Only one such letter, dated August 10, 2010, to a single pool owner was provided. It addressed multiple pool violations, including VGB non-compliance, and gave the owner 30 days to “submit plans to eliminate all entrapment hazards.” The only subsequent IF provided for this location was dated June 3, 2011, and noted “Pool closed due to non-compliance with Virginia Graeme Baker (VGB)/anti-entrapment requirements.” A Pool Program representative stated that formal documentation of telephone contacts is not maintained. This representative explained

¹⁰ An informational letter was being prepared by EHD in August 2011 for pool owners/operators impacted by a May 2011 CPSC-announced manufacturers’ drain cover recall that had the effect of rendering previously VGB compliant pools and spas as non-compliant.

that the other communications addressing VGB compliance status would have been through the IFs, copies of which are provided to owners or pool managers designated to handle such matters, or through permit applications. (See below for discussion of specific IF reviews.)

- **EHD Pool Program Systems, Training and Documentation** - What is the capability of the EHD to accurately determine and track status of owner actions toward VGB compliance? What kinds of reports are available from the system(s) used? Are Inspection Reports readily available and properly completed by adequately trained inspectors to reflect pool conditions and VGB status?

The Grand Jury determined that the EHD uses its Envision database to maintain pool inventories, track inspections, record results, capture time for budget and other business purposes, and invoice “beyond the norm” re-inspections. EHD personnel provided the Grand Jury with a variety of reports out of the system, some on their own to satisfy general requests, such as pool inventory by name and address with last Activity Dates (inspection dates) and VGB status, and others in response to specific Grand Jury requests. EHD personnel were able to extract the requested reports and data from Envision in a timely fashion.

The Envision system has a field that represents VGB status, where “5” represents compliance and “blank” non-compliance. IFs, however, do not have a specific field for entering VGB status, resulting in inconsistent or missing notations. This is an issue, given that as many as 15 inspectors may be supporting the program seasonally. As an example, inspection records from seven pools had IF entries making an explicit comment related to non-VGB compliance and the need to comply, yet one or more subsequent inspections of those same pools made routine comments without mention of the outstanding VGB issue. Another example of IF inconsistencies is that the IF and EHD Policy 2009-01 require entry of a result code (Excellent, Good, Fair, Poor, Closed) for each inspection. Two different interviewed personnel independently confirmed that this evaluation is subjective and that the same conditions or violations may result in different ratings by different inspectors.

Generally, the Pool Program Specialist, rather than the Inspectors, updates the VGB status in Envision, which helps ensure its accuracy in the system despite IF reporting inconsistencies. The Pool Program Specialist periodically provides pool inspection training, which included VGB-specific training, to all inspectors performing pool inspections. The Grand Jury reviewed the documentation provided that showed participants’ names and dates of “Team Meeting” training sessions, but no documentation was provided or readily available to show the specific content of training provided in those sessions.

- **Financial Implications of VGB** – What is the cost to the County of the Pool Program and how did VGB activities affect budgets and actuals? Does the County have the ability to segregate and track pool program costs separately and accurately from other EHD activities and functions? What was the cost to public pool owners to comply with the VGB Act and CHSC §116064.2?

The Grand Jury determined that the Pool Program gets no funding from the San Mateo County General Fund. It is expected to be self-sustaining from fees charged. Fees consist of annual inspection fees that cover the standard inspection program and one-time fees that cover plan reviews, remodel inspections, and “beyond the norm” re-inspections. That fee structure was approved by the Board of Supervisors on November 27, 2007 and prescribed escalating fees for calendar years 2008-2011. A VGB surcharge of \$6 was provided for in CHSC §116064.2 to help cover related state’s costs. The County is allowed to keep up to \$1 to cover its administrative costs of collecting and remitting the surcharge to the state. It is not intended to offset local costs of this mandated, but unfunded, new law.

With respect to “beyond the norm” re-inspection fees, imposition of such is left to the discretion of individual inspectors, based on the history of the pool, the number of times it takes to get resolution of an issue, etc. There is no written guidance to support these decisions. When imposed, the charge is based on the standard hourly rate for the inspector’s time (approximately \$150/hr.). Fifty-four reinspections were billed in 2010 -11. EHD does a satisfactory job of collecting these fees, based on a review of outstanding balances.

Total revenues collected from all sources have not consistently covered the expenses of the Pool Program during the VGB compliance period. Costs of the Pool Program primarily consist of salaries and benefits of two people, the full time Pool Program Specialist and the salary of one individual inspector who represents the total allocations of 15 division inspectors’ time to the pool program. This approach is taken to simplify budgeting and reporting. The shortfall, after overhead application, was \$45,263, \$54,194, and \$85,862 for the last three fiscal years. The overall EHD budget absorbed this shortfall.

This budget variance was attributed to: (1) the extra VGB compliance related work (the full time Pool Program Specialist reported spending the significant majority of his time on VGB issues for the past two years); and (2) a more diligent and accurate data capture initiative. Historically, not all pool program time incurred was reported, resulting in fee structures and budgets that understated the program’s true costs. An initiative to improve reporting accuracy is resulting in better data that should translate into more accurate future fee structures and budgets.

The effect of the VGB program on pool owners was also investigated. An EHD Pool Program representative had estimated the typical cost of compliance to be \$1,500 - \$2,500 and added that owners often do additional work unrelated to VGB compliance at the same time mandated drain work is being done, increasing the overall cost. An independent pool contractor reported costs for grates to be in the \$400-\$500 range, and splitting drains in the \$2,000-\$2,500 range, consistent with the EHD estimate.

- **VGB Enforcement Diligence** - How many pools were non-compliant with CHSC §116064.2 at the time of its final compliance date of July 1, 2010 and at the conclusion of this investigation on September 30, 2011? On what basis and whose authority determined the approach taken with respect to enforcement? How aggressively or not did EHD deal with non-compliant owners? Were there any significant obstacles to compliance for owners?

As noted in Background above, a letter was sent to approximately 800 non-VGB compliant pool and spa owners on January 15, 2010. The Grand Jury attempted to determine the number of pools that were non-compliant on July 1, 2010, the legally mandated effective date of the regulation in California. An answer was not readily available, although an EHD representative said that it could be determined with considerable effort.¹¹ EHD did provide copies of previously run reports of non-VGB compliance spanning the period of interest, with results as follows.

Table 1 - # Active Non-VGB Compliant Pools by Date¹²

Date	Number of Non -VGB Compliant Active Pools
Jan 15, 2010	800 (est. based on “80% non-compliant”)
Aug 18, 2010	448
Nov 19, 2010	262 (includes unspecified # inactive)
Jan 7, 2011	201
Mar 11, 2011	127
May 9, 2011	82
Jul 7, 2011	47
Aug 26, 2011	8
Sep 9, 2011	9 (5 of the 8 above plus 4 special situations ¹³)
Sep 30, 2011	3 (all special situations)

As mentioned previously, pools and spas were not considered VGB compliant until a confirmatory physical inspection was performed, even if the State Compliance Form had been submitted to EHD with appropriate certification. As a result, the numbers in the table are maximums.

A Pool Program representative acknowledged that action was not taken to promptly close all non-VGB compliant pools on CHSC 116064’s final compliance date of July 1, 2010. Reasons provided included the following:

- There were difficulties with backlogs of pool contractors and parts availability due to the compliance deadline. Contractors were coming in from “the valley” to do the work.
- There was not a great safety risk. There had never been a reported entrapment- related drowning or injury in San Mateo County. Priority attention was given to wading pools and spas (with flat drain grates and single main drain systems) where the risk of entrapment was greater than in deep pools where small children were unlikely to be in the proximity of drains.

¹¹ The Grand Jury decided that the reports and data already available (reflected in Table 1) were sufficient to establish the rate of progress in achieving VGB compliance and therefore did not request additional work by EHD to establish the July 1, 2010 starting number.

¹² There were 1,044 total public pools and spas at the start of the investigation, but the total varied over time as new public pools or spas were added or others closed. Hence, absolute numbers are reported rather than percentages.

¹³ “Special situations” refers to complicating factors such as custom engineering requirements or difficulties assessing compliance of work completed.

- A “grace period” through the end of the current swimming season would provide owners with an opportunity to get the work done in the offseason.
- The Bay Area Swimming Pool Information Sharing Committee, a professional group of Northern California County representatives responsible for their respective pool programs, had discussed this in meetings and, based on those discussions, counties were generally in agreement that they should work with the owners to make the required changes in a reasonable time frame but not immediately move to shut down non-compliant pools.¹⁴

The Grand Jury attempted to verify each of those reasons independently.

- Three major local pool contractors interviewed said there were minor, short-term issues around the final compliance date of the regulation, but in their view, neither parts nor labor issues impacted the ability of pool owners to meet legal requirements.
- Based on the CPSC national incidence rate of drownings and injuries due to entrapment reported in Background, the risk was low. The local prioritization of wading pools and spas was appropriate, based on CPSC guidance¹⁵
- An interview with a representative of the Northern California Recreational Health Technical Advisory Committee (and review of minutes of a meeting held before and one after the July 1, 2010 effective date) showed the Committee discussed technical aspects of compliance but made no recommendations to its members or to the CCDEH with respect to enforcement approaches, a decision that was left to the Counties.¹⁶ A Pool Program representative interviewed confirmed that San Mateo County’s enforcement approach (*i.e.*, to work with owners to achieve compliance and not take prompt enforcement action) was handled at the operations level and was not escalated to the EHD Director as a formal recommendation for a decision.
- Additionally, the Grand Jury requested a limited amount of data from five surrounding counties to evaluate, at a high level, relative VGB enforcement results. Based on the five responses, only one county achieved full compliance by the July 1, 2010 effective date, one other achieved it by September 30, 2011, and one other expects to be complete by December 2011. San Mateo County appears to be in the upper middle of the range in terms of VGB compliance results achieved to date. (See Attachment #4 for Summary).

One major pool contractor who works across county lines was asked for his evaluation of the capability and performance of the San Mateo County EHD Pool Program management of this issue relative to others and he responded positively about San Mateo County’s overall VGB program management.

¹⁴ It was subsequently learned from a representative of that organization that this is not its official name. It is properly named the Northern California Recreational Health Technical Advisory Committee (to the California Conference of Directors of Environmental Health).

¹⁵ Pool and Spa Safety Act FAQs <http://www.cpsc.gov/businfo/vgb/poolspafaq.pdf> 1/30/2009)

¹⁶ The California Conference of Directors of Environmental Health is an Association of EDH Directors from 62 jurisdictions representing all 58 counties and four cities. It is affiliated with the California State Association of Counties (CSAC).

On September 9, 2011, an EHD representative reported two pools previously operating were closed for non-VGB compliance. Documentation to show dates of closure of these pools could not be provided by EHD when requested. Grand Jury members found these pools to be open when visited by them on September 15, 2011. Both pools had one or more children swimming in them at the time.

EHD provided a written status update to the Grand Jury on September 30, 2011, stating that owners of one of these pools completed modifications intended to achieve VGB compliance, but there is some question regarding whether the changes fully comply, as EHD has no record of a remodel permit, did not witness the work, and has not received the state Compliance Form. Requests have been made by EHD for contractor documentation, and the outcome will dictate next steps. It was reported that visually, the pool is VGB compliant and is being allowed to operate in the interim.

The second pool, also reported on September 30, 2011 as closed, was confirmed to be closed by a Grand Jury member visit on September 29, 2011. Gates were locked and the sign posted was signed by EHD on September 23, 2011.

Two Pool Program representatives independently told the Grand Jury that occasionally EHD discovers that a pool it has closed has had locks and signage removed, either by the owner/operator or by tenants who want to use the pool anyway. In such cases, EHD will reclose the pool and resolve the issue with the owner. The Grand Jury was not able to establish what happened in the two cases cited.

In addition to the pool that appears visually VGB compliant, but is pending a documentation review to confirm, two non-VGB compliant pools were still open on September 30, 2011 at the conclusion of this investigation. Both had special circumstances associated with them:

1. The Four Seasons Hotel at 2050 University in East Palo Alto (one pool and one spa) - Units have a unique design that requires custom fabrication of parts to achieve compliance. EHD has determined by inspection that there is no safety risk so the pool is being allowed to operate pending resolution.
2. The Residence Inn by Marriott in San Mateo has had VGB work done, but there is a question about whether it meets standards and was under evaluation as of September 30, 2011.

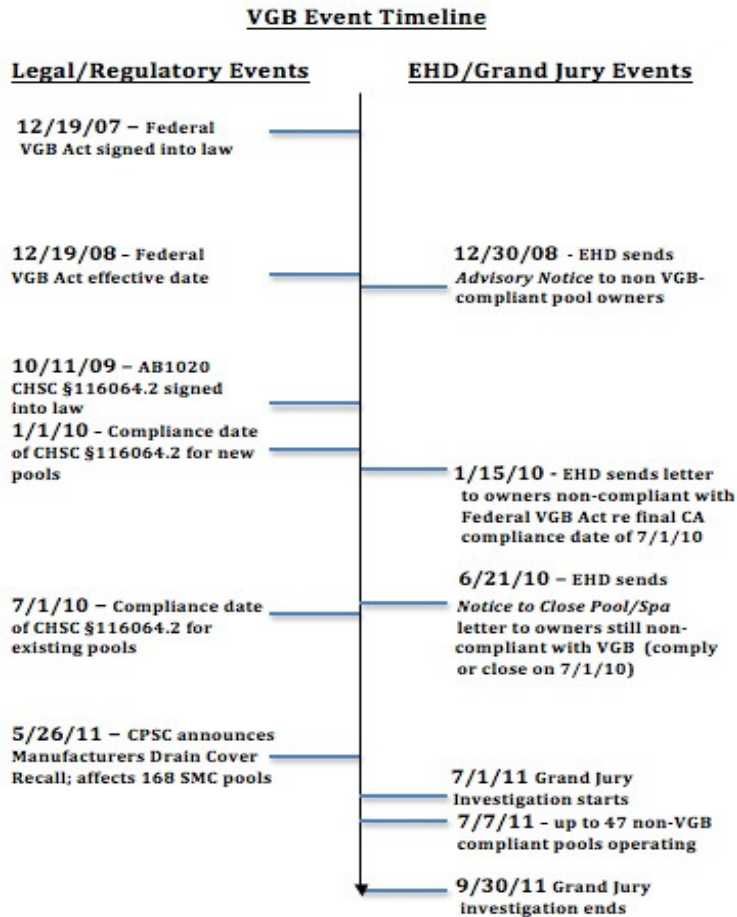
New Development: Grate recall

- On May 26, 2011 CPSC announced a voluntary recall of pool and in-ground spa drain covers from eight manufacturers.¹⁷ The recalled drain covers were incorrectly rated to handle the flow of water through the cover, which could pose a possible entrapment hazard to swimmers and bathers. EHD determined that this recall has rendered 168

¹⁷ News from CPSC, May 26, 2011, <http://www.cpsc.gov/cpscpub/prerel/prhtml11/11230.html>

previously VGB compliant public pools in San Mateo County now non-VGB compliant until those drain covers are replaced. EHD had prepared notifications, assigned them to inspectors and initiated their delivery to owners during the course of this investigation. EHD was not using the VGB compliance-tracking field in its database to this point, instead tracking it outside the system.

Table 2 – VGB Event Timeline



Findings

The San Mateo County Civil Grand Jury finds that:

1. There have been 97 reports of circulation entrapments nationwide from 1999 – 2010, 36 of which involved fatalities or injuries in public pools or spas. None occurred in San Mateo County.

2. California Health and Safety Code §116064.2 required pools and spas to be closed on July 1, 2010 if they did not comply with anti-entrapment requirements of the law. EHD did not ensure closure of all non-VGB compliant pools on that date, nor has EHD initiated any enforcement actions despite its June 21, 2010 Notice to Close Pool/Spa letter warning of that action.
3. It has taken more than 15 months since the July 1, 2010 final compliance date of CHSC §116064.2 to get the approximately 448 owners/operators of public pools/spas that were non-VGB compliant at the time to come into compliance.
4. EHD was only able to provide the Grand Jury with one letter sent to a non-VGB compliant pool owner after July 1, 2010, stating a specific timeframe for compliance to avoid closure.
5. The decision to not strictly enforce CHSC §116064.2 on its final compliance date, and the rationale to justify it, was made at a level below the EHD Director.
6. Three pools that had not yet achieved VGB compliance or were pending confirmation of compliance were still operating at the close of this investigation on September 30, 2011. There were special circumstances associated with each of them requiring either custom fabrication of parts or confirmation that work completed met VGB standards. EHD did not consider any of them to be hazardous.
7. One hundred sixty-eight (168) pools previously determined to be VGB compliant became non-compliant due to a May 2011 safety-related recall of drain covers by their manufacturers. Those pools are being allowed to operate with this condition. EHD notifications to owners were in process during the course of this investigation.
8. Two pools reported by EHD on September 9, 2011 to have been closed by EHD due to non-VGB compliance were observed to be open and to have one or more children swimming in them when initially visited on September 5, 2011. Subsequently, on September 30, 2011, EHD reported that one “appears visually compliant” and that documentation has been requested to confirm that status. The other was found, on September 29, 2011, to be closed with an EHD sign dated September 23, 2011. Two EHD representatives noted pools closed by EHD have been occasionally found reopened by either owner/operators or tenants before changes are made and approved.
9. According to EHD policy, the inspection schedule and frequency for year-round pools and spas are the same as for seasonal pools and spas.
10. EHD used its Envision system’s capabilities to effectively track and report the status of initial VGB compliance. The Pool Program Specialist took primary responsibility for ensuring its correctness. The tracking of drain cover recall-related VGB status changes, however, was being managed manually outside the system.

11. Inspectors are inconsistent in their completion of Inspection Forms, ratings of pools, and their diligence in accurately reporting activities and time allocations in the Envision system. Inspection Forms do not include a specific field for indicating VGB status, contributing to the inconsistencies in reporting.
12. Pool Program and administrative management at EHD have initiated actions to develop new standards and improve time and labor reporting accuracy.
13. The Pool Program does not receive County General Fund support and is expected to manage expenses to revenues derived from the approved inspection fee structure. The Pool Program revenues did not cover pool program expenses, after overhead application, during the last three fiscal years (2009 – 2011) spanning the VGB compliance period.

Conclusions

The San Mateo County Civil Grand Jury concludes that:

1. Some pool owners in San Mateo County chose to make the federally mandated VGB modifications prior to California's regulatory response, but the majority took no action. This is not surprising given that they knew EHD was not authorized to enforce the federal mandate and that there was some risk that California's regulatory requirements might be different.
2. The San Mateo County EHD initially communicated requirements of both the VGB Act and California's CHSC 116064.2, but allowed some non-compliant pools to continue to operate for up to 15 months after the effective date of the California law.
3. The EHD decision to not strictly enforce CHSC 116064.2 compliance on its effective date was not based on significant difficulties owners had in meeting requirements, but on an internal operational decision based on a perceived low level of safety risk, an intent to work constructively with the owners to avoid enforcement actions, and an expectation that other counties would take a similar approach.
4. The lack of a Director-level approved implementation plan for VGB enforcement contributed to operational inconsistencies (no pre-determined grounds for exceptions, documentation standards, fee charging, etc.).
5. The extended "grace period" provided was not justified, with few exceptions. A reasonable "accommodation" to any special circumstances would have been to require all issues to be addressed during the 2010 pool season and in the subsequent off-season so that all pools were compliant before June 2011.
6. The utilization of suitably trained food inspectors to support the Pool Program during the swimming season between June 1 and September 30 appears to be an efficient use of current resources.

7. Year-round pools with a history of violations may not be adequately monitored in the off-season in the absence of a policy requiring off-season inspections.
8. EHD inspector documentation with respect to inspection findings, pool ratings and imposition of re-inspection fees has been inconsistent. EHD management has recognized this and has initiated work to develop better standards and to train inspectors to those standards, to improve form design and data entry, and to evaluate a field inspection tool for electronic IF completion and direct, automated database updates
9. The Pool Program was unable to cover all of its costs as intended in 2008-11 because of the added VGB compliance efforts and minimal use of available re-inspection fees. In addition, past underreporting of inspector and administrator time to the pool program drove multi-year fixed fee structures that did not reflect true costs. True program costs are becoming more apparent as reporting improves.

Recommendations

The San Mateo County Civil Grand Jury recommends that the Board of Supervisors:

Direct the Environmental Health Division Director to:

1. Immediately establish a firm deadline for closure of any public pools and spas that are non-VGB/ CHSC 116064.2 compliant until acceptable modifications are completed and documentation provided. Communicate that deadline as soon as possible to all impacted owners in writing.
2. Confirm all pools and spas closed by owners or EHD due to non-VGB compliance remain closed until corrections are verified. Where signs have been removed and pools unlocked, close the pools and impose additional inspection fees and initiate enforcement action for non-compliance where appropriate.
3. Immediately begin tracking the VGB compliance status of pools and spas impacted by the drain cover recall in the Envision system to achieve consistency and provide full reporting capabilities.
4. Institute a policy before June 1, 2012 that requires the EHD Director to approve, in writing, enforcement procedures for any new regulations that materially affect public safety.
5. Amend before June 1, 2012 the policy governing pool and spa inspections to stipulate that, at a minimum, pools that operate year round, and have a history of violations, be inspected at least one additional time outside of the April to September period.
6. Revise Inspector training and Inspection Forms before June 1, 2012 to increase standardization of reporting, align with Envision database fields, increase consistency of

ratings, and support a move to an electronic Field Reporting System with on-line Inspection Forms, automatic error checking and transcription error-free database updates.

7. Develop guidelines before June 1, 2012 that define when additional inspection fees should be imposed on owners due to repeat violations or failure to correct violations in a timely fashion.
8. Immediately institute a practice of maintaining written documentation of verbal communications with pool owners or representatives that relate to conditions that may lead to pool closures or enforcement actions.
9. Continue ongoing efforts to improve the accuracy of reporting of time allocated to the pool program by administrators and inspectors, and use that data to develop a new fee structure that fully and consistently covers program expenses.

Attachment 1: 12/30/08 EHD Advisory Notice

ADVISORY NOTICE

Date: December 30, 2008

To: Owners/Operators of Public Pools, Spas, and Wade Pools Located in San Mateo County

From: San Mateo County Environmental Health Department

Subject: **VIRGINIA GRAEME BAKER POOL AND SPA SAFETY ACT**

This is a notification letter to inform you about the new *Virginia Graeme Baker Pool and Spa Safety Act* (VGB) requirements. In December 2007, President Bush signed into law the VGB Act. The main purpose of this Act is to increase the safety of swimming pools and spas by establishing a federal swimming pool drain cover standard and ensuring pools and spas are equipped with proper safety devices. The federal law mandates that all public swimming pools and spas be equipped with anti-entrapment main drain covers that comply with ASME/ANSI A112.19.8-2007 performance standards. In addition, the Act requires that all public pools have dual (split) main drains that are separated by at least 3 feet **OR** be equipped with a safety vacuum release system or other device designed to prevent entrapment.

The VGB Act requires that such modifications be in effect by December 19, 2008. The Consumer Product Safety Commission (CPSC) is the primary enforcement agency for the Act and they have the authority to close any public pool or spa found not to be in compliance on December 19, 2008. The San Mateo County Environmental Health Department cannot enforce the standards locally unless the California state law is amended to include the VGB Act.

However, please be advised that any renovations that include splitting drains, changing grates or adding devices to an existing pool or spa to meet the VGB Act must be approved by the San Mateo County Environmental Health Department and/or your local building department. Submittal of plans may be required for this work.

If you have questions regarding this advisory please contact:

- Ken Robinson, Registered Environmental Health Specialist, San Mateo County Environmental Health Department, at (650) 372-6236.
- Troy Whitfield, Consumer Product Safety Commission, at (301) 504-7548, for technical or engineering questions; or visit <http://www.cpsc.gov/whatsnew.html#pool> for information and interpretations of the VGB Act.

For a full text of the new VGB Act from the Federal Code, please visit the following web site: http://www.nspf.org/Documents/HR6_TitleXIV.pdf

Attachment 2: 1/15/10 EHD California VGB Letter



SAN MATEO COUNTY
HEALTH SYSTEM

California Virginia Graeme Baker Act (VGB)

January 15, 2010

Dear Commercial Pool Owner:

California's Virginia Graeme Baker Act was signed into law and went into effect January 1, 2010. This notice is being provided in an effort to keep you informed of this law. To date, roughly 20% of commercial pools in San Mateo County have complied with the federal VGB rule. Our records indicate that your pool(s) are part of the 80% that have not yet complied.

The federal VGB Act has been law since 2007. The federal rule required all commercial pools to close by December 19, 2008 if not in compliance with its requirements; and remain closed until brought into compliance. Local health departments did not have the authority to enforce this federal rule. However, as of **January 1, 2010, local authorities are mandated to enforce its provisions.**

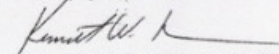
The new statute has July 1, 2010 as the final compliance date in California. If your pools are not in compliance by this date, you will be required to close your pool(s) to the public until they meet all of the new law's requirements.

Attached is a list of contractors that have already completed VGB retrofits in San Mateo County. A minor remodel permit from this office is required for a VGB retrofit. A Pool & Spa Construction/Remodel Application can be found at our website: www.smhealth.org/enviroen/water. If you believe you have already complied, or if you have any questions pertaining to the new requirements, please call Environmental Health at (650) 372-6236 to discuss your specific situation.

One provision of the new law establishes a surcharge on public swimming pools that is collected by the local health department and transmitted to the State Controller for deposit into the State Recreational Health Fund to cover the State costs of administering the law. This \$6.00 surcharge will be added to the annual Environmental Health permit fee for each public swimming pool. The surcharge is mandated until January 1, 2014.

Your compliance in the elimination of all entrapment hazards in San Mateo County's public swimming pools is greatly appreciated.

Sincerely,


Kenneth W. Robinson, REHS

Enclosure: List of Pool Contractors

COMMUNITY HEALTH • ENVIRONMENTAL HEALTH

Board of Supervisors: Mark Church • Rose Jacobs Gilson • Richard S. Gordon • Carole Groom • Adrienne Tissier
Health System Chief: Jean S. Fraser

2000 Alameda de las Pulgas, Suite 100 • San Mateo, CA 94403 • PHONE 650.372.6200 • CA RELAY 711 • FAX 650.627.8244
www.smhealth.org

Attachment 3: 6/21/10 EHD Notice to Close-Pool/Spa Letter



SAN MATEO COUNTY
HEALTH SYSTEM

Notice to Close – Pool/Spa

June 21, 2010

PR0005289

Environmental Health records indicate that the public swimming pool(s) located at the above referenced address have not yet complied with the requirements of the Virginia Graeme Baker (anti-entrapment) Act (VGB). **The VGB law took effect in California on January 1, 2010. The law requires owners to retrofit their pool/spa drains no later than July 1, 2010 or voluntarily close their pools to the public until brought into compliance.**

The federal VGB law required you to comply no later than December 19, 2008 or close your pools to the public. Now that VGB has become state law, you are being notified of your responsibility to comply or close your pools. If voluntary closure is what you choose, your pools will be placed on the County's inactive list. An annual inactive fee of \$148.00 per pool will be charged. You will be required to post closure signs and lock all entrances to your pools. Your district inspector will periodically conduct inspections to ensure that your pools remain closed, and are being maintained properly.

Failure on your part to comply shall result in an enforcement action to seek legal remedy. You will be charged an hourly fee of \$149.00 for time spent following up on pools that have not closed. You also have the option of demolishing your pools if you wish. A demolition permit is required by your local building department.

If you have any questions or need any assistance, please contact me at (650) 372-6236 or by email at krobinson@co.sanmateo.ca.us. You may obtain a pool remodel permit application packet, which includes a list contractors, permit fee schedule and general information pertaining to VGB at our website: smhealth.org/environ

Thank you in advance for your cooperation and compliance.

Sincerely,

Kenneth W. Robinson, REHS
Recreational Waters Program

cc: Chris Day, Program Supervisor
District Inspectors

COMMUNITY HEALTH • ENVIRONMENTAL HEALTH

Board of Supervisors: Mark Church • Rose Jacobs Gibson • Richard S. Gordon • Carole Groom • Adrienne Tissier
Health System Chief: Jean S. Fraser
2000 Alameda de las Pulgas, Suite 100 • San Mateo, CA 94403 • PHONE 650.372.6200 • CA RELAY 711 • FAX 650.627.8244
www.smhealth.org

Attachment 4: Summary of Other Bay Area Counties' VGB Status

	San Mateo	County 1	County 2	County 3	County 4
# Public Pools/Spas	1044	3406	159+	1610	548
#VGB Compliant Inactive	40	46	6	Not provided	≈10
#Non-VGB Compliant 7/1/10	up to 448	2690	≈69	≈160	0
# Non-VGB Compliant 9/30/11 ¹⁸	3	1837#	1(0)*	0	0
Accept State Form as sufficient?	No	No	Yes, but verified at next routine inspection	Yes**	No

+ 159 facility permits are associated with 270 total bodies of water. System requires all bodies of water to be in compliance for the facility to be in compliance

1837 represents the number of pools where all compliance requirements have not been met, which includes submission of the Compliance Form and Final Inspection. The number that have not had physical modifications made was not provided separately.

* Depends on interpretation of design. Pool in question is a pool where one can swim in place. Use is for physical therapy. Technically, one wall is a suction device to create the action required.

** "For the 2011 pool season, staff was instructed and the operators were advised that the pool/spa remain closed if not in compliance with AB1020. We have received the State Compliance Forms... We put a lot of weight on the sign off from the qualified professional listed on the State Compliance Form."

¹⁸ For this purpose, we requested data exclusive of the impact of the May 2011 manufacturers' drain cover recall discussed on page 12 of this report.