



U.S. CONSUMER PRODUCT SAFETY COMMISSION

4330 EAST WEST HIGHWAY
BETHESDA, MARYLAND 20814-4408

Record of Commission Action
Commissioners Voting by Ballot*

This is a DRAFT RCA.
It will be replaced by a Final RCA.

Commissioners Voting: Chairman Inez M. Tenenbaum
 Commissioner Nancy A. Nord
 Commissioner Robert S. Adler

ITEM:

Petition CP12-1; Petition for Classification of "BeeSafe System" as an Anti-Entrapment System under the Virginia Graeme Baker Pool and Spa Safety Act (VGB Act)
(Briefing Package dated November 28, 2012, OS No. 4519)

DECISION:

The Commission voted unanimously (3-0) to deny Petition CP12-1 and direct staff to draft a letter of denial to the petitioner. The petition, submitted by Bonnie Snow and Teri Snow of BeeSafe Systems, requested the Commission initiate rulemaking to determine that the "BeeSafe System" is equally effective as, or better than, the systems designed to prevent entrapment listed in the VGB Act, 15 U.S.C. § 8001 et seq.

Commissioners Adler and Nord submitted statements with their votes.

For the Commission:

Todd A. Stevenson
Secretary

* Ballot vote due December 7, 2012
(Commissioner Nord extended the vote due date from December 4, 2012.)

Attachments: Statement of Commissioner Adler
 Statement of Commissioner Nord



**U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814**

**Statement of Commissioner Robert Adler on Petition CP12-1 for Classification of
“BeeSafe System” as an Alternative Anti-Entrapment System Under the Virginia
Graeme Baker Pool and Spa Safety Act**

December 7, 2012

Background

On February 13, 2012, Bonnie Snow and Teri Snow submitted a petition requesting that the Commission initiate rulemaking to determine that their BeeSafe System is as effective as, or better than, systems designed to prevent drain entrapment listed in §§ 1406(c)(1)(ii)(I)-(V) of the Virginia Graeme Baker Pool and Spa Safety Act (VGB Act). After careful study and examination of the petition, CPSC staff concluded that the safety and efficacy claims asserted in the petition could not be demonstrated, so they recommended denial of the petition. Having carefully read both the petition and the staff’s analysis of it, I concur in the staff’s recommendation and therefore have voted to deny the petition.

The VGB Act

Briefly stated, the VGB Act, among other things, requires that each public pool and spa in the United States with a single main drain other than an unblockable drain be equipped with one or more of the following anti-entrapment devices or systems: (i) safety vacuum release system (SVRS), (ii) suction-limiting vent system; (iii) gravity drainage system, (iv) automatic pump shut-off system, (v) drain disablement, or (vi) any other system determined by the Commission to be as effective as, or better than, these systems at preventing or eliminating the risk of injury or death associated with pool drainage systems.

Petitioners claimed that their BeeSafe System met the requirements of number (vi) above in that it is equally effective as, or better than, the systems set forth in (i) through (v).

The BeeSafe Petition

Briefly described, the BeeSafe System is a large circular device intended to be permanently affixed over a pool drain both with strong industrial adhesive and “lock-tite treated screws [that require a specialty screw driver and that] cannot be removed with a straight screwdriver or knife.”¹ In the center of each device is a winterizing lid attached by a separate set of screws that is removable for maintenance and repair work.

Petitioners claimed the most critical feature of their system to be the presence of numerous open long tubes that empty so quickly that even if some of them become blocked, water would continue to flow through the unblocked tubes sufficiently that dangerous suction would not occur. More significantly to me, they claimed that if the winterizing cover in the center of the device were to go missing, any tubes that became blocked would empty the water into the built-in sump and any suction at the surface would be released when this happened.

Specifically, the petition stated:

But what would happen if the winterizing lid were to go missing? The answer is simple: most likely, nothing. There would be no body entrapment because the tubes would still be functioning and there would be no possibility of blocking them to create a suction entrapment. The lid opening is small enough and the rise of the BeeSafe System off the floor of the pool high enough that even if the cover were gone there would not be a risk of an evisceration. As there is no grate, if the winterizing cover were damaged or missing there would be no risk of a hair or mechanical entrapment with the BeeSafe System.²

This claim, to me, was the critical test of the BeeSafe System. The VGB Act requirement for secondary anti-entrapment devices rests upon the assumption that all drain covers potentially come off, thereby presenting entrapment and evisceration hazards. Were the BeeSafe System one that was permanently affixed with a winterizing lid that never came off or opened, the issue would be quite different. But, the winterizing lid is clearly designed to be opened and removed for routine maintenance. In order to satisfy me that the BeeSafe System is equivalent or superior in safety, the petition had to demonstrate safety with the winterizing lid removed.

Staff's Analysis

Upon receiving the petition, the agency's technical staff undertook a broad analysis of BeeSafe's claims, including extensive tests in a carefully constructed pool model both with the

¹ BeeSafe Petition, page 19.

² BeeSafe Petition, p. 23.

BeeSafe Model 1 and with Model 2. Staff particularly focused on testing the claims made by the petitioners regarding the safety of the BeeSafe System with the winterizing lid removed.

Regrettably, the results of staff's tests are clear and unequivocal:

Without the winterizing covers installed, both the Model 1 and the Model 2 failed to meet the requirements of ANSI/APSP-16 at their rated flows.

The petitioner claims that its products will meet the standard even without the winterizing cover installed. CPSC staff, however, found that pull-off forces for the body-block tests exceeded the forces allowed by the standard. When CPSC staff conducted the full-head-of-hair tests, the simulated human head that was used to conduct the test was pulled completely into the winterizing cover opening, stopped only by the plumbing underneath of the product.³

In other words, contrary to BeeSafe's claims, the staff's testing demonstrated that the System provided insufficient protection to pass the ANSI/APSP standard's requirements.

Discussion

I am very disappointed that the BeeSafe System fails to meet the VGB Act's requirements as an alternative system to the specified systems in the Act. I continue to hope that improvements in technology will be developed as alternative safety systems. I say this in part because I suspect that SVRS continues to be the secondary anti-entrapment system of choice for most pool owners due to its relatively low cost. Unfortunately, I believe that the SVRS technology currently on the market provides extremely limited secondary protection to swimmers and bathers.⁴

As I have previously stated, I eagerly await the development of a drain cover with a "dead-man switch" that shuts off the pool pump immediately upon the removal of the drain cover. If not that approach, I would like to see unblockable drain covers that need not be removed for pool maintenance or repair – which, alas, is not what I consider the winterizing lid on the BeeSafe System to be.

I urge the petitioners and others who think they have good alternatives to the present compliance approaches under the VGB Act to continue to explore those alternatives.

³ Staff analysis, p. 15.

⁴ Of the five main entrapment hazards, SVRS provides full protection only against full body entrapment. It provides limited protection against limb entrapment, limited protection against evisceration, and no protection against hair or mechanical entrapment.



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COMMISSIONER NANCY A. NORD

**Statement on the Commission's vote to deny the petition to classify
BeeSafe Systems products as "other" anti-entrapment systems under
the Virginia Graeme Baker Pool & Spa Safety Act**

December 7, 2012

Today, I joined with my colleagues to reject a petition from BeeSafe Systems to classify their products as "other systems" under the Virginia Graeme Baker Pool and Spa Safety Act. Based on the evidence presented in the staff's briefing package, I am persuaded that the BeeSafe products do not meet the VGBA's requirements. I believe, however, that the analysis our staff used to reach this result is flawed, and I am concerned that the petition process will be warped by misapplication of the law. To avoid stifling technological innovation that could make swimmers safer, I explain below how we should correct our current analysis and process.

A flawed reading of the VGBA

The now-conventional (but I believe mistaken) reading of the VGBA is that it demands both primary and secondary anti-entrapment systems on public pools with a single main drain in order to provide "layers of protection." However, the statute does not impose a requirement for two anti-entrapment systems. The "layers of protection" concept appears only in the VGBA's findings section, which calls for the "installation of barriers or fencing, as well as additional layers of protection." Any pool with a fence, then, can meet the goals of that finding by installing any other protective system, not just any particular anti-entrapment device.

The text of the provisions that require an anti-entrapment system, moreover, does not create a requirement for a second system. The misunderstanding is understandable: the section of the Act that discusses drains does, in fact, require equipment to perform two functions. One is a cover, as defined by industry performance standards. The second is "1 or more . . . devices or systems designed to prevent entrapment."¹ Terms like "second," "separate," "another," or "in addition" do not appear at all, let alone near the word "device." The Act requires two *functions*—coverage and anti-entrapment—but there is nothing to indicate those functions must be performed by separate *devices*.

¹ Pub. L. 110-140 § 1404(c)(1)(A)(i) & (ii).

To understand this distinction, I suggest an analogy. Suppose you asked a clothing salesperson to find you outerwear to protect against cold temperatures and to protect against rain. If the salesperson returned with a heavy sweater and a poncho, your requirements would be met. Those requirements would also be met if the salesperson suggested a waterproof winter coat. Regardless of the number of items you purchased, you would get both functions.

Under the current CPSC reading of the VGBA, only the sweater and poncho combination approach is available. But that is not the only option under the statute, which, by its plain text, allows the waterproof winter coat approach. If a system meets the anti-entrapment standard *and* the cover standard, then it has satisfied the VGBA as written. The current reading, however, has trapped the CPSC and the pool industry in the more limiting box of a separate-device mandate.

The strongest support for the flawed current reading of the anti-entrapment provisions comes from trying to identify the characteristics common to the five statutorily-approved systems. They share at least two common features. First, they all guard against one or more (although not all²) of the five entrapment hazards. Second, they all operate away from the drain itself, either through basic physics or through a mechanical device. The agency currently focuses on the second shared feature, the locus of operation, as evidence that Congress intended any VGBA “other systems” to function similarly.

But we can look to the other common feature—at least partial entrapment protection—to identify systems that are “equally effective as, or better than, the systems described” in the law. Moreover, the purposes of the Act (and indeed all our statutes) are to protect consumers as best as possible. Reading the VGBA to require anti-entrapment devices to function away from the drain forecloses the possibility of new technologies that could better protect against entrapment simply because they do so at the drain. I do not believe this fits Congress’s intent, as manifested by the text it passed.

The current reading of the VGBA is backed by inadequate process

Beyond the direct limitations for innovators and consumers, this flawed reading also creates risk of litigation, in particular from those whose innovations have been foreclosed by our constrained approach. If my colleagues believe that Congress wished us to apply the “other systems” clause only to derivations from the systems already approved, then we should make that requirement plain through proper rulemaking, not

² *Virginia Graeme Baker Pool and Spa Safety Act: Final Interpretive Rule on Unblockable Drains*, U.S. Consumer Product Safety Commission, 8 (Mar. 30, 2010), <http://www.cpsc.gov/library/foia/foia10/brief/unblock.pdf>.

simply establish it de facto through the petition process. Not only would this give more opportunity for consumers, businesses, and even members of Congress to weigh in through comments, it would better shield our decisions in this area from judicial overturn.

Conclusion

The BeeSafe products attempted to address both functions—coverage and anti-entrapment—with one device. Our staff’s technical analysis of the BeeSafe products has convinced me that, even if they were analyzed through the framework of what I believe the VGBA actually requires and authorizes, they does not appear to meet those statutory requirements. That said, there might be a product that does the job well enough or perhaps even guards effectively against all five forms of entrapment, a claim no current system can make. I hope we will not reject that innovation just because our flawed reading of the statute requires it do that work away from the drain.