

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

January 19, 2007

Mr. Merle Stoner Chairman F15.49 Pool Safety Standards c/o Katharine Morgan ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959

## Dear Merle:

The U.S. Consumer Product Safety Commission (CPSC) staff\* requests a meeting of the ASTM International F15.49 Subcommittee on Pool Safety Standards to discuss recent CPSC staff testing of pool alarms to F2208-02 *Standard Specification for Pool Alarms*. The results of the CPSC staff testing indicate that few products meet the standard, and there are potential variations in interpretation of the test procedures which may cause inconsistent results. The objective of the meeting would be to discuss potential revisions to performance tests that could improve repeatability and consistency, and rely less on subjective input.

The November 3, 2006 ballot of F 2208-02e1 included two proposals – one to clarify the specifications for the child intrusion simulator, and one to remove the false alarm test that uses a regulation-sized basketball. The clarification regarding the child simulator should ensure a consistent test device among different testing bodies. However, CPSC staff believes that additional clarifications regarding the introduction of the child simulator into a pool is needed. Current language (...dropped horizontally ...dropped vertically...) is subjective and can lead to varying results.

If adopted, the removal of the false alarm test using a basketball would mean that the wind test is the sole false alarm test for both surface and subsurface alarms. The reasoning provided with the ballot indicates that the "false alarm" produced by the basketball test may not necessarily be false, in that it warns the caregiver that an unsupervised child may be playing near the pool. This concept would be true, provided the test is intended to simulate an unsupervised child playing near the pool and tossing something into the pool.

<sup>\*</sup> These comments are those of the CPSC staff, have not been reviewed or approved by, and may not necessarily represent the views of, the Commission.

It was the understanding of the CPSC staff, at the time the requirement was developed, that the purpose of the basketball test was similar to the wind test. The wind test is generally a surface test and unlikely to create subsurface waves of the intensity that would falsely trigger a subsurface alarm. The introduction of the basketball was intended to displace water and create an underwater pressure wave, likely to trigger a subsurface alarm if the sensitivity was set too high. Without some type of displacement test, the subsurface alarms are unlikely to be tested for false alarm propensity. The staff is concerned that a consumer choosing to include a pool alarm among the layers of protection may experience false alarms that could eventually lead to removal of the alarm from the pool.

Over sixty percent (60%) of the drowning incidents that led to an emergency department visit were located at a home or apartment complex. In many cases, the pool is familiar to the child, either in their own back yard, a neighbor's, or at their grandparents. One strategy the CPSC recommends to address drowning of young children is to use "layers of protection" including, but not limited to, barrier fencing with self-closing and self-latching gates, door alarms, perimeter and/or pool alarms. To serve as an effective final layer, the pool alarm must provide a reliable response.

The staff looks forward to working with the F15.49 subcommittee to develop requirements that will result in repeatable and consistent test results. The staff believes that improved requirements may ultimately lead to full participation from manufacturers and compliance among all alarms. Please feel free to contact me at 301-504-7548 if you have any questions.

Sincerely,

Troy Whitfield

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Mechanical Engineer

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U.S. Consumer Product Safety Commission

**Enclosures** 

cc: Colin Church, CPSC Voluntary Standards Coordinator John Blair, Chairman, ASTM F15 Committee