

LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES

2000 OCT 23 P 3:15
OFFICE OF THE SECRETARY
INFORMATION

SUBJECT: Swimming Pool Entrapment

DATE OF MEETING: October 12, 2000

PLACE OF MEETING: CPSC Headquarters, Bethesda MD

LOG ENTRY SOURCE: Troy Whitfield *TW*

COMMISSION ATTENDEES: Troy Whitfield

NON-COMMISSION ATTENDEES:

Ron Schroader Triodyne Safety Systems L.L.C.
Peter Poczynok Triodyne Safety Systems L.L.C.
Carvin DiGiovanni National Spa and Pool Institute (NSPI)

SUMMARY OF MEETING:

The meeting was request by Mr. Schroader to discuss evisceration, body and hair entrapment hazards associated with the suction drain covers on swimming pools and spas. Mr. Poczynok provided a brief history of Triodyne and explained that the Safety Systems L.L.C. portion of the firm is relatively new in comparison to the firm, which was founded in 1969. Triodyne Safety Systems has developed a drain cover ('Anti-Hair Snare Plus') which advertises hair entanglement and child evisceration elimination, and minimization of entrapment. After looking at the sample cover provided, Mr. Schroader and Mr. Poczynok continued to discuss common entrapment scenarios and how their cover, a new concept in drain cover design, addressed those hazards.

There was some discussion about the layers of protection promoted by both NSPI and CPSC and how to further promote the need to educate the public about the hazards of pool drains and the need for Safety Vacuum Release Devises (SVRDs). Triodyne Safety Systems provided materials for review and some proposed changes to existing standards that they plan to provide to the appropriate voluntary standards subcommittees.

CPSA 6 (b)(1) Cleared

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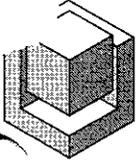
Products Identified

Excepted by

Firms Notified

Comments Processed.

attached



Triodyne Safety Systems, L.L.C.

Safety Device Design and Development

Established 1998

SAFETY PRODUCTS:

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Paula L. Barnett
Joel I. Barnett

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November 21, 2000

Mr. Todd A. Stevenson
Deputy Secretary
Office of the Secretary
U.S. Consumer Product Safety Commission
Washington, DC 20207

Re: Meeting Summary Dated October 12, 2000

Dear Mr. Stevenson:

I am in receipt of the meeting summary of my meeting with Troy Whitfield at CPSC headquarters on October 12, 2000. Please be advised that the summary accurately reflects the contents of my meeting with Mr. Whitfield. Furthermore, we do not request confidential treatment of any part of the summary as currently written, our corporate name, the identity of our product or any of the comments contained in this correspondence.

Triodyne Safety Systems wishes to make the following comments regarding the October 12 meeting:

1. Mr. Poczynok discussed the fact that section 5 of the current ASME/ANSI A112.19.8M standard entitled "Hair Entrapment Test" focuses entirely on hydrodynamic drag as the mechanism for hair entrapment. This phenomenon creates a tug-of-war between flow-induced drag on a bather's hair and the strength of a bather to pull his or her hair from a suction fitting against the flow of water. Hair entanglement, which involves the knotting and wrapping of hair strands around the elements of a pool drain cover, is not addressed by the current ASME/ANSI A112.19.8M standard, regardless of the fact that every hair related death or injury recorded by the CPSC was caused by hair entanglement, not hydrodynamic drag. It was pointed out that in hair entanglement scenarios, the harder the victim pulls, the tighter the knot becomes. The patented Anti-Hair Snare Plus concept automatically sheds hair which becomes accidentally or deliberately entangled. Its cantilevered elements provide an escape geometry to entangled hair strands in a manner completely analogous to a regular comb.

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2. The international community is currently considering the adoption of an 8 millimeter rule for controlling the aperture size of drain covers. Triodyne Safety Systems supports the adoption of this criteria in the United States as well. Its purpose is to prevent small children from entrapping their fingers or toes in a drain cover. Also, because the 8 millimeter rule would preclude the formation of an interference (power) grip, teenagers would be prevented from engaging in "grip-it and rip it" activities which can break or dislodge many currently available drain covers. Once again, the current ASME/ANSI A112.19.8M standard does not address aperture size, nor do they prescribe strength requirements for drain cover retention systems. Nevertheless, a number of domestic drain cover designs, including the Anti-Hair Snare Plus, have already embraced the 8 millimeter rule, which has the additional functional advantage of straining out small pool toys and debris.
3. The Triodyne Safety Systems presentation included a discussion of domed pool cover designs such as the Anit-Hair Snare Plus and their propensity for eliminating child evisceration and minimizing body entrapment. These maladies are controlled with increasing effectiveness as the dome heights and diameters of the drain cover increase. Practical limits to dome size are imposed by the current designs of pool cleaners and pool bottoms.
4. As discussed at our meeting, almost none of the currently available drain covers comply with even the minimal standard represented by ASME/ANSI A112.19.8M. At the time of the meeting, the Anti-Hair Snare Plus was undergoing testing by NSF International. It has subsequently become the first pool and spa drain cover to be awarded a certification by NSF International after completing evaluation to the requirements of ANSI/NSF Standard 50 "Circulation System Components and Related Materials for Pools, Spas/Hot Tubs" including testing to ASME/ANSI A112.19.8M. The latter deals with the strength, stiffness and safe flow rate properties of drain covers, while the former includes material criteria. It bears noting that the safe flow rate of the Anti-Hair Snare Plus, when tested in accordance with ASME/ANSI A112.19.8M, is 37% higher than other drain covers which comply with that standard.

As requested in your cover letter, I have enclosed documentary evidence in support of the above comments for the commission's review in the form of two binders. Two similar sets of documents were left with Mr. Whitfield at the conclusion of our meeting. Other copies have also been sent to NSF International and the ASME/ANSI A112 committee.

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Should you require anything further or if I can be of any assistance, please do not hesitate to contact me.

Sincerely,



Peter J. Poczynok, P.E.
President

PJP/cmb
Enclosures