

**LOG OF MEETING  
DIRECTORATE FOR ENGINEERING SCIENCES**

**SUBJECT:** Meeting with ASTM F15.51 Subcommittee on Safety Vacuum Release Systems

**DATE OF MEETING:** July 23, 2020

**PLACE OF MEETING:** Teleconference

**LOG ENTRY SOURCE:** Mark Eilbert (LSM)

**COMMISSION ATTENDEE:** Mark Eilbert (LSM)

**NON-COMMISSION ATTENDEES:** Contact ASTM for attendee lists.

**SUMMARY OF MEETING:**

Subcommittee ASTM F15.51 met to discuss a negative ballot on revision of ASTM F 2387-04 (Reapproved 2012) Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs. Main discussions were: testing SVRS devices with variable speed pumps (VSP) and secondary entrapments.

Subcommittee ASTM F15.51 discussed a persuasive negative on the revision, ASTM F2387-2020, that had two parts pertaining to perceived shortfalls in SVRS testing: (1) VSPs are not used in SVRS testing but will see more widespread use after a new DOE energy efficiency rule for pool pumps is effective in summer 2021; (2) a body entrapment can be missed because the current SVRS test does not hold down the test body on the test drain. Other discussions included the use of check valves in circulating systems and refining general test parameters. A markup was prepared by a member and circulated before the meeting with proposed changes to address the negative and other subjects.

Variable speed pumps (VSP) can save energy but were not generally available when current SVRS devices were developed. A changing speed or flow can be problematic to an SVRS device that detects entrapment pressures related to water flow. Proposed changes to 5.2 testing include testing with VSPs at the full speed range of the VSP system and also at flow rates specified by the manufacturer. In addition, a new definition was proposed to define variable speed pumps in terms of pump control to include systems with (1) both pumps and controls and (2) add-on control devices to existing pumps. New labelling would also identify those SVRS devices that are compatible with VSPs.

In the ASTM F 2387-04 test, a foam blocker is lowered to a drain opening and then released immediately without pause and without applying downward force. The SVRS device is required to release the foam blocker from the suction pressure from the drain within 3.0 seconds. In some circumstances, the suction pressure can increase once again and pose an entrapment hazard after the test had concluded: the SVRS has already triggered and released the test block. A proposal

was submitted to address this by adding a second part to the entrapment test in which the test blocker would be returned to the drain opening and held against the test drain for several seconds.

The subcommittee members will be given several weeks to review the proposed changes. The revised standard will then go to a concurrent ballot to the subcommittee and main committee.