May 26, 2015

Mr. Robert Rung, PE
Task Group Chairman, WK24716 Gravity Drain Task Group
ASTM Consumer Products Subcommittee F15.51
ASTM INTERNATIONAL
100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959

Subject: CPSC Staff Position on the ASTM International ("ASTM") Gravity Drain Task Group

Dear Mr. Rung:

U.S. Consumer Product Safety Commission ("CPSC") staff recognizes the importance of gravity drain systems as a secondary form of entrapment protection cited in the Virginia Graeme Baker Pool and Spa Safety Act ("VGBA"). We understand that the goal of the ASTM Gravity Drain Task Group is to assist the development of the ASTM Subcommittee F15.51 work item WK24716, "New Specification for Safe Design and Installation of Suction-Limiting Gravity Systems for Suction Entrapment Prevention in Swimming Pools, Spas, Hot Tubs, and Wading Pools." During our participation in the ASTM Gravity Drain Task Group, CPSC staff recently received a draft test plan titled, "Test Plan Biomimetic Body Blocking Element ("BBBE") DRAFT", dated April 14, 2015 ("Test Plan"). This letter responds to the planned development of human-modelled materials and the use of human subjects for testing detailed in that document.¹

Staff agrees that an evaluation of the body entrapment risk on suction outlet fitting assemblies ("SOFAs"), whether installed in a direct-suction circulation system or a gravity drain system, must include testing on each distinct SOFA device. VGBA requires that SOFAs comply with ANSI/APSP-16 2011, "Standard Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs" ("APSP-16"). Although staff is not aware of any approved gravity drain standard, any requirements that may be developed must comply with VGBA requirements. In accordance with the VGBA, all SOFAs must receive a flow rating following APSP-16 2011 procedures, which specifies the composition of the BBBE.

¹ The comments in this letter are those of the CPSC staff and have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.
CPSC staff monitors entrapment-related deaths and injuries. A reduction in deaths and injuries from SOFA entrapments can be associated with the enactment of the VGBA. According to the most recent report, there were no deaths associated with SOFA entrapment in the period 2009-2013. As such, the VGBA, through APSP-16 requirements, appears to be effective in rating drain covers appropriately. Given that these requirements have been fully implemented and shown to be effective, and that staff actively participates with the APSP-16 Committee, staff does not view its participation in the ASTM Gravity Drain Task Group to be an effective use of limited staff resources. Therefore, CPSC staff will no longer participate in this Gravity Drain Task Group.

Furthermore, CPSC staff has serious concerns about the planned use of human subjects in ASTM’s Gravity Drain Task Group’s Test Plan provided to CPSC staff. Although we note the procedures for conducting tests on suction outlets show an overall awareness of the hazards, we have seen no indication that a formal review of the use of human subjects has been conducted. For your reference, CPSC must comply with 16 C.F.R. part 1028 - Protection of Human Subjects.

Sincerely,

Mark Eilbert

cc: Len Morrissey, ASTM International Director. Technical Committee Operations
Colin Church, CPSC Voluntary Standards Coordinator