LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: Meeting of the ASTM Infant Bedding task group on Crib Bumper Firmness

DATE OF MEETING: May 15, 2018

PLACE OF MEETING: Virtual (teleconference)

LOG ENTRY SOURCE: Tim Smith (ESHF)

COMMISSION ATTENDEES: Tim Smith (ESHF), Mark Eilbert (LSM), Sandra Inkster (HSPP), & Hope Nesteruk (ESMC)

NON-COMMISSION ATTENDEES: Richard White (Triboro) and other task group members. Contact ASTM for attendee list.

SUMMARY OF MEETING:

The purpose of the meeting was to discuss possible performance requirements and test methods related to firmness for crib bumpers and similar products. The meeting was led by Richard White, the chair of the Firmness task group for the ASTM Infant Bedding subcommittee.

The meeting focused on the portions of the CPSC staff letter to the Infant Bedding subcommittee, dated April 26, 2018, that pertained to crib bumper firmness requirements (section 6 of ASTM F1917 – 12) and test methods (section 7). During the meeting, the task group discussed CPSC staff's proposal, including the following issues:

- There was some discussion about the rationale behind the 15 mm (0.59-inch) thickness measurement and the justification for exempting bumpers that are thinner than this dimension. The consensus was that it makes sense to exempt these since that measurement is the thickness of the bottom disk of the test device, and a product thinner than this would be guaranteed to pass. One task group member questioned whether a bumper with a memory foam-type filling thinner than 15 mm would be of concern; there wasn't a consensus of opinion on the hazard posed by such a product.
- A figure of the test device will need to be added as Figure X.
- The portion of the performance requirement that requires the bumper to be tested in its pre-washed state and after three wash/dry cycles should be combined with the information about conditioning the bumper, and moved to the beginning of the test method.
- A question was raised about the proposed accuracy needed for the test level equipment. After some explanation and discussion, it was agreed that the specification was reasonable for the intended purpose.
- There was some discussion about the rationale behind the modified test method for bumpers that are no more than 8 inches wide, with the long axis intended to be installed

vertically. CPSC staff clarified that this test method was intended to account for vertical bumpers, which generally cover only one or two slats, but that the 8-inch measurement also represents the diameter of the bottom disk of the test device; thus, staff believed that it would not make sense to test products with shorter widths at the specified horizontal intervals. It was noted that although the distance between crib slats is standardized, there are no standard dimensions for crib slats or spindles. There was some discussion about how vertical bumpers can fit differently depending on the type of crib side-type firmness test platform used beneath the bumper. There was also discussion as to whether both ends of vertical bumpers would need to be tested; it was decided that CPSC's proposed language already directed testers to select the bumper end most likely to contact the test fixture, so specifying that both ends must be tested would be unnecessary. The group concluded that a diagram or two might help to communicate how the test is performed, particularly for vertical bumpers.

- The group agreed that dimensions should be provided in both metric and English units, with the latter presented parenthetically.
- The group agreed that all vertical bumpers should be tested individually rather than testing multiple vertical bumpers together, because one cannot guarantee how many a consumer would use. For this reason, the portion of the test method that specified that multiple vertical bumpers would be tested at once will be deleted.
- There was some discussion about how to determine whether there is contact between the feeler arm and the bumper during testing. One option that was discussed was to specify that the bumper cannot be within 3/1000-inch of the feeler arm, with that dimension approximating the thickness of a piece of paper, which could then be used to verify contact. However, the group agreed that a simple visual confirmation that there is no obvious gap should be all that is needed and would be less of a burden on test labs. This visual pass/fail criteria will be added to the test method along with verbiage to clearly inform that any single test point failure is sufficient to say the bumper does not meet the firmness test requirement.

The meeting concluded with general agreement among the task group members on CPSC staff's proposal, with minor revisions based on the issues discussed. CPSC staff agreed to forward an editable version of the tables of firmness requirements and test methods to the task group chair, who will revise them based on the discussion.