

**LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES**

SUBJECT: ASTM F15.77 Subcommittee on Magnets; Meeting of the Task Group on Performance Requirements

DATE OF MEETING: July 12, 2021 3:00 pm, ET

LOG ENTRY SOURCE: Stephen Harsanyi (ESHF)

DATE OF LOG ENTRY: July 16, 2021

LOCATION: Teleconference

CPSC ATTENDEE(S): Stephen Harsanyi (ESHF), Jacqueline Campbell (ESEF), John Stabley (HSPP), and Patricia Edwards (EXHR).

NON-CPSC ATTENDEE(S): Contact ASTM for the attendee list.

Summary of Meeting:

In this task group meeting, attendees met to discuss potential performance requirements to be considered for ASTM F3458, *Standard Safety Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index $\geq 50 \text{ kG}^2 \text{ mm}^2$)*. The task group is preparing recommendations to share with the ASTM F15.77 subcommittee on magnets.

The task group discussion included the following topics:

- The title of the standard. The task group chair presented the following title to be shared with F15.77: “Standard Consumer Safety Specification for Certain Magnetic Sets for Ages 14 Years and Older.” The task group did not have a chance to discuss the title.
- Scope of the standard. The task group reviewed various considerations for products subject to the voluntary standard.
 - *Should the standard be limited to specified types of magnets (e.g., alloys of neodymium, iron, and boron)?* CPSC staff supported recommendations from other attendees to not limit the scope to specific magnet compositions beyond being a permanent magnet. CPSC staff explained that various compositions, including ferrite/hematite, have been involved in ingestion incidents resulting in the internal interaction hazard. Another attendee explained that composition beyond being a permanent magnet is not important to specify because the task group plans to propose size and strength requirements.
 - *Should the standard include magnets sold individually?* The task group appeared to be in favor of including individual magnets intended or marketed for use with or as a magnet set. The task group reviewed a screenshot of a website that allows consumers to purchase magnets in customer-specified quantities, beginning with a single magnet. CPSC staff supported the inclusion of individual magnets intended or marketed for use with or as a magnet set, consistent with the previous rule.¹

¹ 2014 Briefing Package: Final Rule on Safety Standard for Magnet Sets: https://cpsc.gov/s3fs-public/pdfs/foia_SafetyStandardforMagnetSets-FinalRule.pdf.

- *Should the standard include only magnets of specified shapes (e.g., spheres, cubes, rods, rocks, and disks)?* Several attendees voiced concerns in favor and against limiting shapes in the scope. CPSC staff reiterated concerns from the previous meeting that magnets of various shapes have been involved in internal interaction incidents, and that the absence in the data of certain shapes should not preclude their inclusion in the standard if the shapes do not prevent the hazard. CPSC staff recommended being preemptive, rather than reactionary, regarding protecting consumers. Attendees in favor of limiting in-scope shapes reiterated from the previous meeting that some shapes, such as cylindrical magnets, are less likely than spheres to be involved in magnet ingestions and internal interaction incidents. The task group discussed that the incident data in most cases is too limited in detail to identify the involved shapes, but that various shapes, including spheres, cubes, rods, and rocks are implicated in incidents, with spheres being the most commonly-reported shape.
- *What types of magnet products and purposes should be excluded from the scope?* The task group reviewed examples of various products with loose magnets, including hardware magnets. Attendees agreed that the standard needs to indicate clearly which types of magnets are in-scope; however, the attendees did not agree at this time on which types of products should be excluded.

Next Steps:

The task group and/or subcommittee will continue discussions regarding performance requirements for certain magnet products. One of the attendees plans to share with the subcommittee results of his analysis of incident data pertaining to magnet ingestions.