

**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: June 29, 2021 2:00 pm, ET

LOG ENTRY SOURCE: Stephen Harsanyi (ESHF)

DATE OF LOG ENTRY: July 2, 2021

LOCATION: Teleconference

CPSC ATTENDEE(S): Stephen Harsanyi (ESHF), Caroleene Paul (ESMC), and Jacqueline Campbell (ESEF).

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 ≥ 50 kG² mm²)*.

The task group discussion included the following topics:

- The title and scope of the standard. There was general agreement in favor of changing the title and scope of the standard, but the specifics have yet to be determined. The following strawman title will be discussed further: *Standard Safety Specification for Certain Magnetic Sets for Ages 14 and Up*. The task group discussed the implication of magnet shape; specifically, whether the scope should be limited only to sphere-shaped magnets from adult magnet sets. CPSC staff raised concern that incident reports demonstrate internal interaction of non-spherical magnets, including even rock-shaped magnets of hematite/ferrite composition. A medical doctor in the group discussed magnet ingestion incidents involving cubical, cylindrical, and disc-shaped magnets. He emphasized that most incidents do not identify the manufacturer, and many do not identify the shape or size of the involved magnets. While there was general agreement that magnets of non-spherical shape also present the internal interaction hazard, there was disagreement regarding whether the scope should include non-spherical magnets. In favor of limiting the scope to spherical magnets, several attendees argued that spherical magnets are the main concern for hazardous use of magnet set magnets as jewelry, and where magnet shape is identified, most cases appear to involve spherical magnets. CPSC staff explained that many incidents involve children and teens playing with magnet set magnets for purposes other than jewelry, and that the previous rule on magnet sets included non-spherical magnets, such as cube-shaped magnets.¹ CPSC staff also

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

requested that the attendees consider similar standards and laws in other countries, such as Australia, Canada, and New Zealand.²

- Definition of magnet set. There was general agreement that the standard will need to more clearly differentiate the subject products from other magnet product types, which are excluded from the standard.
- Role of safety messaging and packaging requirements in the standard. Several attendees were in favor of including in the standard, safety messaging and packaging requirements specific to magnet sets intended for education. There was general agreement that magnet sets intended for education and such requirements need to be discussed further. CPSC staff recommended that the task group consider whether it is appropriate to have safety messaging and packaging requirements for magnet sets with “potentially” hazardous magnets; *i.e.*, magnet sets with magnets to a specified extent below 50, which may be hazardous.

Next Steps:

The task group plans to meet again in July 2021 and continue working on recommendations for the subcommittee (ASTM F15.77).

² The task group briefly discussed the example of BS EN 71-1:2014 – Safety of Toys; Part 1: Mechanical and Physical Properties, which aligns with ASTM F963 regarding hazardous magnets.