



**UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
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This document has been electronically
approved and signed.

Memorandum

Date: Nov 20, 2019

TO: The Commission
Alberta E. Mills, Secretary

THROUGH: Mary T. Boyle, Executive Director
John G. Mullan, Acting General Counsel

FROM: Patricia L. Edwards,
Voluntary Standards Coordinator
Office of Hazard Identification and Reduction

SUBJECT: Voluntary Standards Activities Fiscal Year 2019 Annual Report

Attached is U.S. Consumer Product Safety Commission (CPSC) staff's Voluntary Standards Activities Fiscal Year (FY) 2019 Annual Report (October 1, 2018–September 30, 2019). If you have any questions, please contact Patricia Edwards at: 301-987-2224, or at: pedwards@cpsc.gov.

VOLUNTARY STANDARDS TRACKING ACTIVITY REPORT



**Fiscal Year 2019 ANNUAL REPORT
(October 1, 2018–September 30, 2019)**

**U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway, Bethesda, MD 20814**

This report was prepared by CPSC staff and has not been reviewed or approved by, and may not necessarily reflect the views of, the Commission

Voluntary Standards Activities October 1, 2018 – September 30, 2019

SUMMARY

Voluntary standards play an important role at the U.S. Consumer Product Safety Commission (CPSC). Under some of CPSC's statutes, if a relevant voluntary standard addresses the risk of injury a product presents, the Commission could issue a mandatory standard only if the voluntary standard is not likely to adequately reduce the risk of injury or there is not likely to be substantial compliance with the voluntary standard. Additionally, some provisions of the Consumer Product Safety Improvement Act of 2008 (CPSIA) included provisions regarding certain voluntary standards. Specifically, section 104 of the CPSIA requires the Commission to promulgate consumer product safety standards for durable infant or toddler products. These standards are to be "substantially the same as" applicable voluntary standards or more stringent than these voluntary standards, if the Commission determines that more stringent requirements will further reduce the risk of injury associated with the product.

The Voluntary Standards Tracking Activity Report (VSTAR) is issued bi-annually as: (1) a Mid-Year Report, covering the period from October 1 through March 31, and as (2) an Annual Report of the CPSC's fiscal year, which covers the period from October 1 to September 30. This document is the Fiscal Year 2019 (FY19) Annual Report.

The VSTAR contains a section for each product or product area, associated with voluntary standards work, as outlined in the FY 2019 CPSC Operating Plan (FY19 Op Plan). The FY19 Op Plan, as modified midyear, outlines 74 different products or product areas that staff was actively involved in developing associated voluntary standard(s) during the fiscal year. Thirty-three CPSC staff members serve as designated representatives for the standards work that covers the 74 products outlined in this report. The VSTAR product sections include the name of CPSC staff leading each activity, the name(s) and designation(s) of the standards associated with the product, the purpose of staff's involvement, any associated mandatory standard or regulation, the activity by staff during FY19, and staff's planned Fiscal Year 2020 (FY20) activities and recommendations associated with the voluntary standard. For additional information on specific activities and meetings logs, check the CPSC website.

This report also includes a table listing the standards that staff contributed to developing a new or updated version, during FY19. Each updated standard is also reflected in the product sections of this report.

Voluntary standards activities are handled by various standards developing organizations (SDOs) that are accredited by the American National Standards Institute (ANSI). The majority of the

standards discussed in this report are developed by ASTM International (ASTM) or Underwriters Laboratories Inc. (UL). The standards covered in this report provide safety provisions addressing potential hazards associated with consumer products found in homes, schools, and recreation areas.

UPDATED STANDARDS

Table 1 lists the 28 new or revised voluntary safety standards that CPSC staff was actively engaged in developing, and that were approved and/or published during the period October 1, 2018 to September 30, 2019.

**Table 1: New or Revised Voluntary Standard Published
October 1, 2018–September 30, 2019**

Product	SDO	Designation
Amusement Rides (Design)	ASTM	F2291-19e ¹
Amusement Rides (Dynamic Characteristics)	ASTM	F2137-18
Amusement Rides (Quality, Manufacture and Construction)	ASTM	F1193-18a
Amusement Rides (Standard Practice for Auditing)	ASTM	F2974-19
Candles	ASTM	F1972-19
Clothing Storage Units	ASTM	F2057-19
Crib Mattresses	ASTM	F2933-19
Electric Clothes Dryers	UL	UL 2158
Electric Fans	UL	UL 507 10th Ed (2018)
Full-Size Baby Cribs	ASTM	F1169-19
Gasoline Containers (Flame Arrestors)	ASTM	F3326-19a*
Gates	ASTM	F1004-19
High Chairs	ASTM	F404-18a
Infant Bath Seats	ASTM	F1967-19*
Infant Bouncer Seats	ASTM	F2167-19
National Electric Code	NFPA	70 (2020)
Non-Full Size Cribs/Play Yards	ASTM	F406-19
Playground Surfacing (Attenuation for Use Zone)	ASTM	F1292-18
Playground Surfacing (Standard Guide)	ASTM	F2223-19
Playground Surfacing (Field Test Method of Attenuation)	ASTM	F3313-19*
Portable Fireplaces	ASTM	F3363-19
Portable Gasoline Cans	ASTM	F852 / F852M-19
Primary Barrier Packaging (Child Resistant Packaging)	ASTM	F17-18a
Restricted Delivery Systems for Liquid Consumer Products	ASTM	F3375-19
Self-Balancing Scooters and Light Electric Vehicles	UL	UL 2272 1st Ed (2019)
Spray Polyurethane Foam Insulation	ASTM	D7859-19
Toddler Beds	ASTM	F1821-19e ¹ *
Upholstered Furniture	NFPA	NFPA 260

*Updated more than once in FY19

VOTING AND LEADERSHIP ROLES ON VOLUNTARY STANDARDS

In accordance with 16 CFR part 1031, “*Commission Participation and Commission Employee Involvement in Voluntary Standards Activities*,” the VSTAR report includes information about staff voting and leadership activities. In FY19, there were no new approvals for leadership and one new approval for voting. There were also two renewal requests approved during FY19. The requests approved in FY19 are outlined below:

- Hope Nesteruk - Renewal (leadership on ASTM F15.18 for non-full-size cribs and play yards),
- Scott Ayers - Renewal (leadership and voting on ASTM new task group on flame-mitigation devices for disposable fuel containers), and
- Michael Taylor - New approval (voting on ASTM F15.42 subcommittee for furniture safety).

ORGANIZATIONAL ABBREVIATIONS

The list below contains abbreviations for standards developer organizations (SDOs) and other groups related to the standards covered by this VSTAR report:

AATCC	American Association of Textile Chemist and Colorists
AFSL	The American Fireworks Standards Laboratory
AHAM	The Association of Home Appliance Manufacturers
AHFA	American Home Furnishing Alliance
AHRI	Air Conditioning, Heating and Refrigeration Institute
ANSI	The American National Standards Institute
	<ul style="list-style-type: none">• ANS – American National Standard (Approved by ANSI)
APA	American Pyrotechnics Association
APSP	The Association of Pool and Spa Professionals
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASTM	ASTM International
BIFMA	Business and Institutional Furniture Manufacturing Associations

CAN	Health Canada Regulation
CANENA	Council for Harmonization of Electrotechnical Standards of the Nations in the Americas
CSA	Canadian Standards Association
EN	European Nation
ICC	International Code Council
IEC	International Electrotechnical Commission
IEEE	The Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization <ul style="list-style-type: none"> • TAG – Technical Advisory Group • TC – Technical Committee
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association <ul style="list-style-type: none"> • NEC – National Electrical Code
NIST	National Institute of Standards and Technology
NOCSAE	National Operating Committee on Standards for Athletic Equipment
OPEI	Outdoor Power Equipment Institute
PGMA	Portable Generator Manufacturers Association
PHTA	Pool & Hot Tub Alliance
ROHVA	Recreational Off-Highway Vehicle Association
SAE	Society of Automotive Engineers
SVIA	Specialty Vehicle Institute of America
UL	Underwriters Laboratories Inc. <ul style="list-style-type: none"> • STP – Standards Technical Panel
WCMA	Window Covering Manufacturers Association

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CPSC Staff Voluntary Standards Activities
FY19 Annual Report
(October 1, 2018–September 30, 2019)

Adult Portable Bed Rails

Staff Contact Hall, Ian

Voluntary Standard(s) *Standard Specification for Adult Portable Bed Rails and Related Products (ASTM F3186-17)*

Mandatory Standard(s) 13-1 *Petition on Adult Portable Bedrails* docketed in June 2013.

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM to revise the standard, as needed, to address hazards associated with adult portable bed rails.

FY19 Activities On September 5, 2019, staff sent a letter to ASTM regarding the standard for adult portable bed rails, ASTM F3186-17. In the letter, staff raised concerns about discrepancies found in two different performance requirements (zone 3 entrapment and finger openings). Staff provided recommended language to revise the requirements and associated test procedures. In addition, staff noted several editorial issues in the standard and recommended they be corrected. After receiving the letter, ASTM informed staff that the subcommittee chair had recently passed away; thus, there would be a delay in addressing staff's letter until a new subcommittee chair could be appointed.

Planned FY20 Activity Staff will continue to work with the ASTM subcommittee for adult bed rails once a new subcommittee chair is appointed. In addition, the Commission has directed staff to provide a briefing package concerning the petition in FY 2020.

All-Terrain Vehicles (ATVs)

Staff Contact Paul, Caroleene

Voluntary Standard(s) *Four Wheel All-Terrain Vehicles (ANSI/SVIA 1-2017)*

Mandatory Standard(s)	16 CFR part 1420, <i>Standard for All-Terrain Vehicles</i>
Standard(s) Update	No standards associated with this product were updated during FY19.
Purpose	To work with SVIA to revise the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels to reduce the hazards associated with ATVs.
FY19 Activities	Early in FY19, staff provided SVIA (as well as ROHVA and OPEI) with 121 CPSC staff in-depth investigation (IDI) reports completed between 2004 and 2017, regarding fire hazard-related, off-highway vehicle incidents. On June 27, 2019, staff met with SVIA, ROHVA, and OPEI representatives, and some of the supplied IDI reports were reviewed and discussed.
Planned FY20 Activity	For fire hazards, staff will provide ROHVA, OPEI, and SVIA with additional analysis in the form of a spreadsheet, including probable causes of the fire or fire hazard (based on CPSC staff assessment). Staff will also request a meeting to discuss the data that have been provided. To date, no dates are scheduled for the future meeting.

Amusement Rides, Trampoline Parks and Adventure Attractions

Staff Contact	McCallion, Richard
Voluntary Standard(s)	<p><i>Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices (ASTM F770-18)</i></p> <p><i>Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices (ASTM F1193-18a)</i></p> <p><i>Practice for Measuring the Dynamic Characteristics of Amusement Rides (ASTM F2137-18)</i></p> <p><i>Standard Practice for Auditing Amusement Rides and Devices (ASTM F2974-19)</i></p> <p><i>Standard Practice for Design of Amusement Rides and Devices (ASTM F2291-19e¹)</i></p> <p><i>Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts (ASTM F2970-17)</i></p>
Mandatory Standard(s)	N/A

**Standard(s)
Update**

ASTM F2974-19, the latest revision to the *Standard Practice for Auditing Amusement Rides and Devices*, was approved and published in January 2019.

ASTM F1193-18a, the latest revision to the *Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices*, was approved and published December 2018.

ASTM F2291-19e¹, the latest revision to the *Standard Practice for Design of Amusement Rides and Devices*, was approved in May 2019 and published in June 2019.

ASTM F2137-18, the latest revision to the *Practice for Measuring the Dynamic Characteristics of Amusement Rides*, was approved and published in November 2018.

Purpose

To work with ASTM on revising their standards to strengthen safety provisions addressing hazards associated with amusement rides, trampoline parks, and adventure attractions.

FY19 Activities

Staff attended task group meetings on February 13-16, 2019, in Houston, TX, where recent ballot results were discussed. The subcommittee considered developing an umbrella standard to ASTM F770-18, and a new task group was established to review the references and dates in existing standards. Task group meetings were also held in February. The Evolution (EVO) I task group reviewed current plans to address corrosion hazards. The latest ballots were intended to address these issues. Updates to the standard are progressing; however, another round of balloting is needed, based on persuasive negative votes. After the next revisions, the task group will proceed to address aging/orphan rides. The EVO II task group reviewed the ballot results for ASTM F1193. Editing language in the ballot is needed to address negative votes. This includes updating the language related to retention of documents. New language will include specific time frames and eliminate open-ended language.

On March 22, 2019, ASTM issued another ballot containing seven ballot items for amusement ride standards: F2291-18 (two ballot items); F2974-19 (three ballot items); and F770-18 (two ballot items). Negative votes were received on five of the seven ballot items.

On July 18, 2019 ASTM issued another ballot containing 10 ballot items for amusement ride standards: F2137-18 (one item, passed); F2974-19 (four items, all with persuasive or unresolved negatives); and F2291-18 (five items, 2 passed and three have persuasive or unresolved negatives).

On September 8, 2019 ASTM issued another ballot containing 13 ballot items on two standards, F2291-18 (three items) and F2970-17 (10 items). The ballot results were not known at the end of FY19.

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting held in San Diego, CA. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Baby Changing Products (formerly Changing Tables)

Staff Contact Nesteruk, Hope

***Voluntary
Standard(s)*** *Standard Consumer Safety Specification for Baby Changing Products for Domestic Use (ASTM F2388-18)*

***Mandatory
Standard(s)*** 16 CFR part 1235, *Safety Standard for Baby Changing Products*

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with baby changing products.

FY19 Activities Staff participated in a subcommittee meeting held on October 16, 2018. The subcommittee chair reported that there were no outstanding ballots or old business. New business included several proposed clarifications and editorial changes to the standard. The subcommittee decided to send the non-editorial changes to ballot.

Staff also participated in a subcommittee meeting on May 8, 2019. During the meeting, the subcommittee agreed to formally changing the name of the subcommittee from Changing Tables to Baby Changing Products. In addition, the subcommittee chair announced that the proposed clarifications and editorial changes discussed at the Oct 2018 meeting were all deemed by ASTM to be editorial in nature, thus no ballots need to be issued. In June 2019, staff supplied updated incident data on changing products to the ASTM subcommittee.

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Bassinets/Cradles

Staff Contact Nesteruk, Hope

Voluntary Standard(s) *Standard Consumer Safety Specification for Bassinets and Cradles (ASTM F2194-16e¹)*

Mandatory Standard(s) 16 CFR part 1218, *Safety Standard for Bassinets and Cradles*

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with

FY19 Activities During FY19, staff participated in subcommittee meetings held on October 15, 2018 and May 6, 2019, and several task group meetings:

- Warning label language (February 19, 2019)
- Compact bassinet (March 5, 2019 and September 19, 2019)
- Baby Boxes (July 1, 2019)
- Stability (September 5, 2019)

During the October subcommittee meeting, four ballot items from the September 10, 2018 ballot were discussed:

- Compact Bassinets Requirements: including definitions, stability, side height, and other aspects. The ballot received two negatives, which were discussed at length. The item was withdrawn, and the task group will consider the concerns as they rework the proposal.
- Cardboard Bassinets Lid Requirements: The ballot received six negative votes. The item was withdrawn, and the task group will consider the concerns as they rework the proposal.
- Warning Requirements for Compact Bassinets: There were two negative votes. The item was withdrawn, and the task group will consider the concerns as they rework the proposal.
- Force for Single-Action Folding Requirements: There were no negatives, but there was one comment. The subcommittee agreed to address the comment with a note.

On March 21, 2019, ASTM issued a ballot with two items for the bassinet standard: baby box lid requirements and warnings. Both ballot items received negative votes and the subcommittee subsequently found the negatives to be persuasive.

On March 28, 2019, ASTM issued a ballot with three items for the bassinet standard: folding mechanisms, compact bassinets and mattress definition. All three items received negative votes but the latter item (mattress definition) the subcommittee found the negatives to either be non-persuasive or not related.

On May 6, 2019 staff participated in the subcommittee meeting on bassinets. During the meeting, the subcommittee reviewed the ballot results (see above) and the task group chairs provided reports.

On September 5, 2019 ASTM issued a ballot containing four items related to the bassinet standard. Two of the items were follow up ballots to negative votes cast on the earlier mattress definition ballot item. And the other two ballot items pertained to folding requirements and baby box lid terminology and requirements. At the end of FY19, the ballot results were not known.

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Bath Tubs (Adult)

Staff Contact McCallion, Richard

***Voluntary
Standard(s)*** *Consumer Safety Specification for Slip-Resistant Bathing Facilities (ASTM F462-
withdrawn)*

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM to re-establish F462, or to develop a new standard to address fall hazards associated with bath tubs and shower facilities.

FY19 Activities Staff analyzed incident data regarding adult bath tubs and drafted a letter to ASTM regarding the analysis and the continuation of the work on F462. The letter was sent to ASTM on August 21, 2019.

***Planned FY20
Activity*** Staff will participate in the next ASTM subcommittee meeting, when scheduled and provide support to the F462 task group.

Batteries, Fire (High-Energy Density)

Staff Contact Lee, Doug

Voluntary Standard(s)

*Standard for Rechargeable Batteries for Mobile Telephones (IEEE 1725);
Standard for Rechargeable Batteries for Multi-Cell Computing (IEEE 1625);
Standard for Safety for Lithium Batteries (UL 1642);
Standard for Household and Commercial Batteries (UL 2054);
Standard for Audio, Video, and Similar Electronic Apparatus—Safety Requirements (UL 60065);
Outline of Investigation for Safety of Power Banks (UL 2056);
Standard for General Requirements for Battery- Appliances (UL 2595);*

*Standard for Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications (UL62133)
American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - General and Specifications (ANSI C18.1M Part 1);
American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - Safety Standard (ANSI C18.1M Part 2);
American National Standard for Portable Rechargeable Cells and Batteries—General and Specifications (ANSI C18.2M Part 1);
American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard (ANSI C18.2M Part 2);
American National Standard for Portable Lithium Primary Cells and Batteries - General and Specifications (ANSI C18.3M Part 1);
American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard (ANSI C18.3M Part 2);
American National Standard for Portable Cells and Batteries (ANSI C18.4M)
Standard for Safety for Class 2 Power Units (UL 1310);
Standard for Safety for Information Technology Equipment – Safety Part1: General Requirements (UL 60950-1)*

Mandatory Standard(s)

N/A

Standard(s) Update

Staff had no activity with any revisions or reaffirmations of battery-related standards during FY19.

Purpose

To work with the various standard developers on revising battery, battery charger, and battery-powered product safety standards and support developing certification programs for batteries to address fire-related hazards, including overheating, fire, thermal burns, and explosions.

FY19 Activities

Staff attended the NEMA/ANSI C18 subcommittee meeting by teleconference on November 14, 2018. CPSC staff and others supported adding a recommended

guideline to use a systems approach for safe design and use of products. The subcommittee will continue work on a recommended-practices guide for lithium-ion batteries.

Staff also attended the NEMA/ANSI C18 subcommittee meetings held in February 2019 and June 2019. The subcommittee members continued their discussion on lithium battery safety in products and the recommended guideline for safe design and use of products. The goal is to add the recommended practices to an ANSI C18-5 annex. A task group was formed, with CPSC staff as part of the membership, to outline this effort.

Staff sent a letter to UL STP 1310 and UL STP 60950-1 in November 2018 seeking improvements to these voluntary standards for battery chargers to address reports of burns, fires, explosions, and electric shock incidents while charging batteries. This work is a result of a joint project with safety regulators in Mexico, Canada, and the United States involving the analyses and investigation of potential safety hazards associated with battery chargers.

See activity reports for Self-Balancing Scooters and Toys for activities related to those specific products.

***Planned FY20
Activity***

Staff will continue to participate in NEMA, UL, IEEE, and other pertinent meetings to draft, revise, and harmonize requirements to eliminate or reduce overheating and fire hazards in high-energy density batteries.

Batteries, Ingestion (Button)

Staff Contact Le, Huy

***Voluntary
Standard(s)***

*Standard for Safety for Products that Incorporate Button or Coin Cell Batteries Using Lithium Technologies, (UL 4200A);
American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - General and Specifications (ANSI C18.1M Part 1);
American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - Safety Standard (ANSI C18.1M Part 2);
American National Standard for Portable Rechargeable Cells and Batteries—General and Specifications (ANSI C18.2M Part 1);
American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard (ANSI C18.2M Part 2);
For Portable Lithium Primary Cells and Batteries - General and Specifications (ANSI C18.3M Part 1);
American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard (ANSI C18.3M Part 2);*

American National Standard for Portable Cells and Batteries - Environmental (ANSI C18.4M); Standard for Audio, Video, and Similar Electronic Apparatus–Safety Requirements (UL 60065)

Mandatory Standard(s)

N/A

Standard(s) Update

Staff had no activity with any revisions or reaffirmations of battery-related standards during FY19.

Purpose

To work with the various standard developers on revising battery safety standards to address ingestion and chemical burn hazards.

FY19 Activities

Staff attended NEMA/ANSI C18 subcommittee teleconferences in November 2018, March 2019, May 2019, June 2019, and September 2019 where pictograms and label requirements were discussed. A working group was formed to review requirements for ANSI C18.1 Part 2, annexes for non-lithium button cell packaging and use of the IEC pictogram requirements. The working group decided to remove a reference to “death” from the warning label since there were no known deaths associated with the non-lithium button cells. CPSC staff advocated for keeping “serious injury and death” in the warning label because it is a possible outcome that should be noted. It was also proposed that the safety alert symbol and “WARNING” signal word be changed to “CAUTION.” CPSC staff also supported the use of “WARNING” as the signal word since it is consistent with ANSI Z535.4 *American National Standard for Product Safety Signs and Labels use of “WARNING”*. The working group requested a review of serious injury and death data to support the appropriate signal word and warning text.

CPSC hired a contractor to observe children trying to access coin cells in assorted types of packages used in various markets. CPSC staff provided the *Report on PPPA Protocol Testing of Button Battery Packaging* dated June 2019 for the subcommittee review at the June 2019 meeting.

Planned FY20 Activity

Staff will attend future meetings, including the working group meetings and the next ANSI C18 subcommittee meeting, scheduled for October 2019.

Bedside Sleepers

Staff Contact

Nesteruk, Hope

Voluntary Standard(s)

Standard Consumer Safety Specification for Bedside Sleepers (ASTM F2906-13)

<i>Mandatory Standard(s)</i>	16 CFR part 1222, <i>Safety Standard for Bedside Sleepers</i>
<i>Standard(s) Update</i>	No standards associated with this product were updated during FY19.
<i>Purpose</i>	To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with bedside sleepers.
<i>FY19 Activities</i>	On October 15, 2018, CPSC staff attended a subcommittee meeting on bedside sleepers. During the meeting, a new task group was formed to examine the standard for its 5-year review and renewal. In July 2019, ASTM issued a ballot for the re-approval of the standard, without change. The ballot passed with no negative votes but there were comments suggesting that the warnings and labeling requirements be updated to reflect the ad hoc wording used in many of the other juvenile product standards. At the end of FY19, ASTM had not yet published the re-approval version of the standard.
<i>Planned FY20 Activity</i>	Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Bicycles

<i>Staff Contact</i>	Paul, Caroleene
<i>Voluntary Standard(s)</i>	<i>Standard Specification for Manually Operated Front Wheel Retention Systems for Bicycles – ASTM F2680-14</i> <i>Standard Specification for Bicycle Grips - ASTM F2793-14</i> (and other standards in the ASTM F08.10 subcommittee on bicycles).
<i>Mandatory Standard(s)</i>	16 CFR part 1512, <i>Requirement for Bicycles</i>
<i>Standard(s) Update</i>	No standards associated with this product were updated during FY19.
<i>Purpose</i>	To develop new or revised ASTM safety standards to reduce or eliminate hazards associated with bicycles and bicycle components, such as quick-release mechanisms.

FY19 Activities On May 14, 2019, staff attended the ASTM F08.96 U.S. TAG to ISO/TC 149/SC1 meeting on cycle standards. The TAG working groups reviewed proposals to revise ISO 4120 that were presented at the ISO meeting in February 2019 in Brussels.

On May 15, 2019, staff attended the ASTM F08.10 subcommittee on bicycles and provided information on a fatal incident involving a child who became impaled on a bicycle handlebar. Staff raised concerns about the current standard for bicycle grips, ASTM F2793-14.

Planned FY20 Activity

Staff will attend the next ASTM F08.10 and ASTM F08.96 meetings, scheduled for November 2019, in Houston TX.

Booster Seats

Staff Contact Kish, Celestine

Voluntary Standard(s) *Standard Consumer Safety Specification for Booster Seats (ASTM F2640-18)*

Mandatory Standard(s) 16 CFR part 1237, *Safety Standard for Booster Seats*

Standards Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with booster seats.

FY19 Activities To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff reviewed and analyzed updated incident data associated with booster seats. Staff did not identify any new or emerging hazards in the data.

Planned FY20 Activity Staff will review and analyze incident data annually and participate in the next ASTM subcommittee meeting when it is scheduled.

Candles and Candle Accessories

Staff Contact Ayers, Scott

**Voluntary
Standard(s)**

Standard Test Method for Collection and Analysis of Visible Emissions from Candles as They Burn (ASTM F2326-04(2015))
Standard Specification for Candle Fire Safety Labeling (ASTM F2058-07(2015))
Standard Specification for Fire Safety for Candles (ASTM F2417-17)
Standard Specification for Fire Safety for Candle Accessories (ASTM F2601-18)
Standard Specification for Annealed Soda-Lime-Silicate Glass Containers That are Produced for Use as Candle Containers (ASTM F2179-14)
Standard Guide for Terminology Related to Candles and Associated Accessory Items (ASTM F1972-19)

**Mandatory
Standard(s)**

N/A

**Standards
Update**

Standard Guide for Terminology Related to Candles and Associated Accessory Items was updated during FY19 to ASTM F1972-19 and includes the latest updated candle terminology.

Purpose

To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with candles and candle accessories.

FY19 Activities

Staff participated in a candle fire safety task group to discuss possible changes to the ASTM standard, including:

- Testing trimmed and un-trimmed candles,
- Requiring candles to cool to a certain temperature between testing, and
- Testing a sample size, instead of an individual candle.

The next meeting will be scheduled after the series of tests is completed.

Staff and the candle incident data task group also met several times during the fiscal year to discuss candle incidents. Besides reviewing CPSC incident data, the group reviewed and discussed a report from Health Canada on multi-wick candles in the Canadian marketplace and their performance to the ASTM standards.

On February 8, 2019, ASTM issued a ballot item for ASTM F1972 on candle terminology. The terminology task group met on March 28, 2019, to review the ballot results. There were no negative ballots, but five voters did provide comments. Since ASTM F1972 is a glossary of terms found in the other candle standards, the group felt that suggested changes to definitions should be made to the underlying standard.

**Planned FY20
Activity**

Staff will participate in future task group meetings, as scheduled.

Carbon Monoxide (CO) Alarms

Staff Contact Brookman, Matt

Voluntary Standard(s) *Single and Multiple Station Carbon Monoxide Alarms (UL 2034)*
National Fire Alarm and Signaling Code (NFPA 72)

Mandatory Standard(s) N/A

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with UL, NFPA, and other stakeholders on potential revisions to standards and codes to strengthen safety provisions addressing hazards mitigated by carbon monoxide alarms.

FY19 Activities CPSC staff participated in a NFPA 72 committee meeting in July 2019. Public inputs were reviewed, and the committee developed proposed revisions for the next edition of the code.

In January 2019, under the guidance of CPSC staff, the contractor began administering the National Smoke and CO Alarm Survey (SCOA) regarding the use and perception of smoke and CO alarms. Staff is working with the contractors to continue to execute the survey and enhance participation. There was no activity during the fiscal year on the UL standard for CO alarms.

Planned FY20 Activity Staff will continue working with the contractor to complete the Smoke and CO alarms survey. Staff will continue working with UL regarding the revision and improvement of the standard and will continue to participate in the NFPA 72 technical group to develop the next edition of the code.

Carriages and Strollers

Staff Contact Talcott, Kristen

Voluntary Standard(s) *Standard Consumer Safety Specification for Carriages and Strollers (ASTM F833-19)*

Mandatory Standard(s) 16 CFR part 1227, *Safety Standard for Carriages and Strollers*

**Standard(s)
Update**

Standard Consumer Safety Specification for Carriages and Strollers was revised during FY19 to ASTM F833-19 and includes updates pertaining to tray/grab bars and the static load test.

The mandatory standard, 16 CFR part 1227, *Safety Standard for Carriages and Strollers* was revised during the reporting period to reference the latest version of the voluntary standard, ASTM F833-19.

Purpose

To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with carriages and strollers.

FY19 Activities

Staff participated in subcommittee meetings on October 18, 2018, and May 8, 2019. During the meetings, the subcommittee reviewed past ballot results, and task group chairs presented their reports. The following task groups were active during the fiscal year:

- Jogger wheel detachment: The task group is exploring adding a dynamic test for wheel detachment. Car seat stroller combination: The task group will draft a ballot item to revise the sections that refer to “combo” products.
- Test weight: The task group is working on redefining what constitutes failure to support the test weight in Note 5. The task group is working on a draft ballot item.
- Parking brake: The task group is looking at how to determine whether a parking brake can be disengaged by the child, including defining the “accessibility” zone. To date, the task group continues to work on specific language and accessibility zones.
- Stroller/tricycle combination products: The task group is looking at products that have both tricycle and stroller modes and will determine which modes are within the scope of the standard.

Staff also participated in these task group meetings over the fiscal year: Jogger wheel detachment - March 18, 2019, and August 15, 2019; Car seat stroller combination - May 2, 2019; Test weight - October 1, 2018, May 3, 2019, and September 5, 2019; Parking brake - October 4, 2018, March 18, 2019, August 15, 2019, and September 17, 2019; Stroller/tricycle combination products - February 11, 2019, and August 7, 2019.-

On March 21, 2019, ASTM issued a ballot pertaining to a change of the test surface for strollers, to be consistent with other juvenile standards. The ballot received a negative vote and comments. The subcommittee intends to resolve the item at a future meeting.

ASTM F833-19 was revised in April 2019. Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified CPSC of the revision on May 9, 2019. On July 17, 2019, staff submitted a briefing memorandum to the Commission, recommending that the Commission accept the revision. The Commission voted to accept revision. On

August 2, 2019, the *Federal Register* published a direct final rule incorporating ASTM F833-19 by reference into 16 CFR part 1227 (84 FR 37763).

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20. Also in FY20, CPSC staff is planning to buy a rolling road test fixture for the jogging wheel detachment test, and will do testing, including reasonable mis-installations of a quick-release lever.

Children's Folding Chairs and Stools

Staff Contact Lee, Kevin

***Voluntary
Standard(s)*** *Standard Consumer Safety Specification for Children's Chairs and Stools (ASTM F2613-17a)*

***Mandatory
Standard(s)*** 16 CFR part 1232, *Safety Standard for Children's Folding Chairs and Stools*

***Standard(s)
Update*** No standards associated with this product were updated during FY 2019.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with children's folding chairs and stools.

FY19 Activities Staff participated in the ASTM subcommittee meeting on October 16, 2018. The subcommittee chair discussed proposed wording developed by the scissoring task group to clarify the testing requirements for pinching, shearing, and crushing injuries from folding chairs. The proposed wording was discussed, but no decision made. The task group will continue work on the proposal.

On April 16, 2019, staff participated in a task group meeting to discuss clarifications to the requirements for shearing, scissoring, and pinching and for hinge-line clearances. The task group chairman presented a mark-up of the existing requirements, including new figures that attempt to show how the requirements for clearances are to be assessed.

On September 5, 2019, ASTM issued a ballot with an item regarding the children's chairs and stools standard. The ballot item revised the section on scissoring, shearing, and pinching. At the end of FY19, the ballot results were not known.

Planned FY20

Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Child-Resistant Packages (CRP)

Staff Contact

Eilbert, Mark

Voluntary

Standard(s)

Standard Classification of Child-Resistant Packages (ASTM D3475-18)
Standard Terminology Relating to Primary Barrier Packaging (ASTM F17-18a)
Standard Test Method for Assessing Non-Metered Restricted Delivery Systems for Liquid Consumer Products (ASTM F3375-19)

Mandatory

Standard(s)

Poison Prevention Packaging Act of 1970 (PPPA)

Standard(s)

Update

Standard Test Method for Assessing Non-Metered Restricted Delivery Systems for Liquid Consumer Products was updated during FY19 to ASTM F3375-19 and includes updated test methods.

Standard Terminology Relating to Primary Barrier Packaging was updated during FY19 to ASTM F17-18a and includes a revision to the definition of “leak.”

Purpose

To work with ASTM on package design and development to ensure the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with child-resistant packaging.

FY19 Activities

ASTM held subcommittee meetings on October 3-4, 2018, in Nice, France, but staff did not attend. In subcommittee ASTM F02.30 Mechanical Dispensers, a second inter-laboratory study was completed for the draft *ASTM Test Method for Assessing Non-Metered Restricted Deliver Systems for Liquid Consumer Products*. ASTM issued a ballot for the test method, which closed on March 15, 2019. CPSC staff submitted comments on the ballot and discussed those comments with subcommittee members in a meeting on March 29, 2019.

Staff participated in the F02.50 Package Design and Development subcommittee on April 3, 2019, and the F02.30 Mechanical Dispensers subcommittee on April 4, 2019. The subcommittee members discussed the ballot results and the status of various standards covered by the subcommittee.

Planned FY20

Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Clothes Dryers

Staff Contact Lee, Arthur

Voluntary

Standard(s)

Standard for Electric Clothes Dryers (UL 2158)

Mandatory

Standard(s)

N/A

Standard(s)

Update

No standards associated with this product were updated FY19.

Purpose

To work with UL on revising the standard to strengthen its safety provisions addressing hazards associated with clothes dryer fires.

FY19 Activities

Staff is reviewing incident data on reported clothes dryer fires with current dryers and those produced before 2013.

Planned FY20

Activity

Staff will inform UL of the incident data analysis when it is completed.

Clothing Storage Units (formerly Furniture Tip-overs)

Staff Contact Taylor, Michael

Voluntary

Standard(s)

Standard Safety Specification for Clothing Storage Units (ASTM F2057-17)
Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s) (ASTM F3096-14)

Mandatory

Standard(s)

An advance notice of proposed rulemaking (ANPR) was published in November 2017 (82 FR 56752, Nov. 30, 2017).

Standard(s)

Update

No standards associated with this product were updated during FY19.

Purpose

To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with furniture tip-over incidents.

FY19 Activities

During FY19, staff participated in multiple ASTM task group meetings where potential revisions to the standard were discussed:

- Scope task group: October 4, 2018, December 19, 2018, and March 8, 2018;
- Age/Weight task group: October 30, 2018, April 8, 2019;
- Freestanding Furniture task group: November 6, 2018;
- Operational Slide Length task group: November 5, 2018;
- Testing task group: February 15, 2019;
- Tip Restraint task group: June 5, 2019;
- Dynamic Testing task group: June 27, 2019;
- Multiple/Loaded Drawer task group: July 2, 2019, August 21, 2019, September 26, 2019.

Staff also participated in four subcommittee meetings during the fiscal year:

- November 7, 2018 (Held at CPSC National Product Testing and Evaluation Center)
- February 20, 2019 (Held at ASTM Headquarters, staff participated via teleconference due to weather)
- March 14, 2019 (Teleconference only)
- May 10, 2019 (Held at ASTM headquarters, staff attended in person)

During the subcommittee meetings, task group chairs reported on the progress of the task group, potential ballot items were discussed, and ballot results were reviewed.

The staff and Commission members corresponded several times with ASTM and the industry during the fiscal year:

- On October 12, 2018, staff sent a letter to an ASTM task group chair, providing data analysis on the age and weight of children involved in clothing storage unit-related fatalities.
- In November 2018, Commissioner Elliot Kaye sent a letter to Wayfair, urging them to consider participating in the voluntary standards process with ASTM.
- On February 27, 2019, DeWane Ray, CPSC Deputy Executive Director, sent a letter to manufacturers, importers, distributors, and retailers of clothing storage units. This letter informed industry that CPSC's Office of Compliance regards clothing storage units that fall within the scope of ASTM F2057-17, but do not meet its requirements, to have a defect under Section 15(a) of the CPSA, and further advised that CPSC's Office of Compliance would initiate an investigation.
- On February 27, 2019, the CPSC Acting Chairman sent a letter to ASTM, asking the ASTM subcommittee to increase the test weight used in ASTM F2057 from 50 to 60 pounds and to expand the scope to include clothing storage units that are between 27 and 30 inches in height.

- On April 17, 2019, staff sent a letter to ASTM with staff comments regarding ballot F15 (19-03). Staff supported the three ballot items pertaining to clothing storage units.

ASTM balloted several proposals for ASTM F2057 during the fiscal year:

- Ballot F15 18-09 (closed on October 11, 2018) Item #15 - Changes to the operational slide length. This ballot item did not pass, as it received several persuasive negative votes. Staff submitted an abstention vote with comment and provided suggested wording changes to what had been balloted.
- Ballot F15 19-01(closed on March 11, 2019) Item #9 - Changes to the scope, terminology, and rationales. This ballot item did not pass, as it received several persuasive negative votes. Staff did not vote, but submitted a comment letter.
- Ballot F15 19-03 (closed on April 30, 2019)
 - Item #6 - Revised scope to 27 inches and higher and provided a definition of “nightstand” (passed and included in the F2057-19 revision).
 - Item #7 - Revised the test weight to 60 pounds (received many negative votes).
 - Item #8 - Revised the scope to cover children up to 72 months old (received many negative votes).
- Ballot F15 19-05 (closed on June 25, 2019) - Contained 50 items to uphold a previous negative vote (from ballot F15 19-03 outlined above) to find the negatives either not related or non-persuasive. Most of the items did not pass, and therefore, the negative votes were considered persuasive.

In summer 2019, Michael Taylor was approved to vote on upcoming ASTM ballots pertaining to clothing storage units.

***Planned FY20
Activity***

Staff will continue testing clothing storage units and will participate in the task groups established by the subcommittee. Staff will attend the next ASTM subcommittee meeting in November 2019.

Commercial Cribs

Staff Contact Nesteruk, Hope

***Voluntary
Standard(s)*** *Standard Consumer Safety Performance Specification for Commercial Cribs (ASTM F2710-13)*

Mandatory Standard(s)

16 CFR part 1219, *Safety Standard for Full-Size Cribs*, and CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs*

Standard(s) Update

Both mandatory standards, 16 CFR part 1219, *Safety Standard for Full-Size Cribs*, and CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs* were updated to reference the latest version of the voluntary standards ASTM F1169-19 and ASTM F406-19.

ASTM F1169-19 *Standard Consumer Safety Specification for Full-Size Cribs* was updated during FY19 and includes a revision to the labeling requirements.

Purpose

To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with cribs in commercial settings, such as hotels and child care centers.

FY19 Activities

ASTM did not hold any subcommittee or task group meetings on commercial cribs during the fiscal year.

To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff reviewed the incident data associated with commercial cribs during the fiscal year. Staff discovered incidents with potential new hazard patterns and supplied the incident data to ASTM in October 2018.

On September 5, 2019, ASTM issued a ballot with an item to revise the commercial crib standard. The ballot item contains many revisions throughout the standard. At the end of FY19, the ballot results were not known.

Planned FY20 Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Connected Products/Smart Products/Internet of Things (IoT)

Staff Contact

Lee, Doug

Voluntary Standard(s)

Remote Software Updates (UL 5500),
Software Cybersecurity for Network-Connectable Devices (UL 2900)

Mandatory Standard(s)

N/A

**Standard(s)
Update**

No standards associated with this product were updated during FY19.

Purpose

To work with UL, ASTM, and other stakeholders on revising existing standards and developing new standards to address hazards associated with connected consumer products.

FY19 Activities

Staff participated in ASTM F15.75 subcommittee working group monthly meetings between February 2019 and September 2019. The working group is developing an ASTM standard for connected products. A whitepaper released by CPSC's Commissioner Kaye titled, "Considerations for Consumer Product Safety," was discussed during the working group meetings. The working group determined that product safety would be the focus of the standard and that privacy issues would not be directly addressed. However, the working group expressed the belief that by addressing safety, many of the privacy issues also would be addressed. CPSC staff discussed internal efforts to look at incident data. The present UL standards were also discussed for UL-certified products. CPSC staff believes that a similar approach is needed to address products covered by this future standard and that the NIST 8228 framework, entitled, "*Considerations for Managing Internet of Things (IoT) Cybersecurity and Privacy Risks*," should be applied, as needed. In March 2019, CPSC staff drafted the initial scope language for the standard and submitted it to the working group for review and discussion. In July 2019, at the request of the ASTM subcommittee chair, CPSC staff sent the working group a definition for "connected products" and scope text for the subcommittee to consider.

Staff also participated in UL STP working group meetings in August and September 2019, to discuss revising UL 2900-1. Staff met with the American Council for Electrical Safety in April 2019, and National Electrical Manufacturers Association in July 2019, to discuss ongoing work with connected products. Staff also attended a workshop on connected products at NIST in August 2019.

**Planned FY20
Activity**

Staff will participate in upcoming ASTM meetings and UL meetings associated with connected products.

Crib Bumpers (Infant Bedding)

Staff Contact Smith, Tim

**Voluntary
Standard(s)**

Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories (ASTM F1917-12)

***Mandatory
Standard(s)***

12-2 *Petition on Crib Bumpers* docketed in June 2012; Petition granted in May 2013; Section 104 of the CPSIA (under development)

***Standard(s)
Update***

No standards associated with this product were updated during FY19.

Purpose

To work with ASTM on revising the standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with crib bumpers.

FY19 Activities

Staff participated in the ASTM subcommittee meeting held on October 16, 2018, where members reviewed ballot results. The ballot contained a new definition of “crib liners,” which, as defined in the ballot, includes crib bumpers, crib mesh liners, and similar products. Staff wrote a letter in response to the ballot, abstaining from voting, but providing an editorial comment. The ballot received a persuasive negative vote. The subcommittee concluded that the definition should go back to the task group to consider these points and revise the ballot.

Staff was active in two different task groups in early FY19, the crib bumper/liner attachment group and the definitions group. Staff attended meetings for these two task groups on October 31, 2018 (crib bumper/liner attachment) and November 15, 2018 (crib bumper/liner attachment and definitions).

On February 8, 2019, ASTM issued a ballot containing an item on infant bedding. The ballot item was a revised definition of “crib liners,” in response to the previous ballot’s persuasive negative vote. CPSC staff wrote a letter supporting the ballot. The ballot item received one negative that was found to be persuasive, and one editorial comment.

Staff participated in Infant Bedding Standard Update task group meetings held on March 22, April 16, April 30 and August 7, and also participated in the spring Infant Bedding subcommittee meeting held on May 7, 2019. The task group worked on updating the infant bedding standard and presented recommendations to the subcommittee during the May meeting. The task group developed a proposed ballot item, and ASTM sent it out to ballot on September 5, 2019. The ballot item is a substantial revision to the standard containing many changes to most every section in the standard. Before the ASTM September 5, 2019 ballot closed, staff sent out a comment letter with an abstention vote on the infant bedding ballot item. At the end of FY19, ballot results were not known.

On September 4, 2019, staff delivered a briefing package¹ to the Commission with a recommendation to publish a notice of proposed rulemaking (NPR) to

¹ <https://www.cpsc.gov/s3fs-public/Proposed%20Rule%20-%20Safety%20Standard%20for%20Crib%20Bumpers-Liners%20Under%20the%20Danny%20..pdf?5hFdMjEn.83TQ4ntV87FYuukqtJkptW>

incorporate by reference, ASTM F1917-12 with several modifications. The Commission had not voted by the close of FY19.

Planned FY20

Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Crib Mattresses (including Supplemental and Aftermarket Mattresses)

Staff Contact

Nesteruk, Hope

Voluntary Standard(s)

Standard Consumer Safety Performance Specification for Crib Mattresses (ASTM F2933-19)

Mandatory Standard(s)

Petition CP 15-2: *Petition Requesting Ban on Supplemental Mattresses for Play Yards with Non-Rigid Sides*, and Section 104 of the CPSIA (to be developed)

Standard(s) Update

Standard Consumer Safety Specification for Crib Mattresses was revised during FY19 as ASTM F2933-19 and includes a revision to the terminology section.

Purpose

To work with ASTM on revising the standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with crib and supplemental mattresses.

FY19 Activities

Staff participated in the subcommittee meeting held on October 15, 2018. During the meeting, the task group chairs for the following task groups provided updates:

- Cyclic testing,
- Mattress firmness,
- Standard language improvements, and
- Non-segmented mattresses.

On March 28, 2019, ASTM issued a ballot with three ballot items pertaining to crib mattresses: title change, revision to the definition of “conspicuous,” and a revision to Section 5.1, where federal standards are referenced. Staff wrote a comment letter about the ballot but did not vote on the ballot.

Staff participated in the subcommittee meeting held on May 5, 2019. The subcommittee reviewed the results from the March 28 ballot, where two of the items (title change and revision to Section 5.1) had negative votes that were found to be persuasive. Thus, only the item redefining the term “conspicuous” passed.

ASTM revised the standard to include the new definition of “conspicuous” and published the revision in June 2019. Staff also supplied updated incident data to the ASTM subcommittee in June 2019.

Staff participated in several task group meetings during the year: Mattress compression (May 2, 2019); Non-segmented mattresses (June 5, 2019); Cyclic testing (July 24, 2019) and Ad hoc language (July 25, 2019).

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Electric Fans

Staff Contact Lee, Arthur

***Voluntary
Standard(s)*** *Standard for Electric Fans (UL 507)*

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** The 10th Edition of UL 507, Standard for Electric Fans was revised and published on November 6, 2018. The revisions include changes to the reference standards, the addition of a static load test for ceiling inset fans, and modifications to the ceiling fan blade-edge requirements.

Purpose To work with UL on revising the standard to strengthen its safety provisions addressing hazards associated with electric fans in unattended fires.

FY19 Activities Staff led a UL working group tasked with implementing new thermal aging and end-of-life, forced-failure testing requirement for fans or motors in unattended areas. Staff led and participated in working group meetings held in November and December 2018. The working group submitted a proposal that was discussed and edited at the STP meeting held in February 2019. UL issued the proposal for Preliminary Comment in June 2019. UL received comments on the proposal and staff and the working group are reviewing the comments.

***Planned FY20
Activity*** Staff and the working group will continue to review comments to the proposal then address each comment, and the working group will make updates to the proposal, as needed.

Expansion Gates and Expandable Enclosures

Staff Contact Nesteruk, Hope

Voluntary Standard(s) *Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures* (ASTM F1004-19)

Mandatory Standard(s) *NPR Safety Standard for Gates and Enclosures* 16 CFR part 1239 (84 FR 32346) was published on July 8, 2019.

Standard(s) Update ASTM F1004-19 *Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures* was updated during FY19 to include revisions to the horizontal push-out test requirement and to related labeling requirements.

Purpose To work with ASTM on revising the standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with gates and enclosures.

FY19 Activities Staff participated in a subcommittee meeting held on October 16, 2018. During the meeting, the subcommittee reviewed the ballot results for two ballot items: (1) raising the minimum average push-out force for all gates from 10 pounds to 30 pounds and allow for the use of wall- cups to meet this requirement; and (2) warning label language (regarding the installation and use of wall cups). The ballot received a negative vote, and the subcommittee found the negative to be persuasive.

Staff participated in the push-out task group meeting on November 5, 2018, where the ballot item for the push-out requirement was reworked. ASTM published the new ballot item a week later, and it received one negative vote. The subcommittee met again on January 23, 2019 (staff was unable to attend due to the government furlough). During the meeting, the subcommittee voted and found the negative to be non-persuasive. ASTM sent out another ballot on March 6, 2019, to uphold the subcommittee's non-persuasive vote and it passed. The revised standard was approved and published in June 2019.

Staff participated in the subcommittee meeting held on May 7, 2019. During the meeting, staff reviewed the status of the NPR.

Staff submitted a briefing package to the Commission on June 19, 2019, recommending that the Commission issue a proposed rule, under section 104 of the Consumer Product Safety Improvement Act of 2008, to incorporate by reference the voluntary standard ASTM F1009-19, as the mandatory federal

safety standards for children's gates and enclosures. Staff also noted an intent to work with ASTM to further address installation-related hazards related to the placement of a wall cup warning label and visual indicators for pressure gates and requested comment on these issues. The Commission approved publication of the NPR, and it published in the *Federal Register* in July 2019, as 16 CFR part 1239 (84 FR 32346).

Planned FY20 Activity

Staff will participate at the next ASTM subcommittee meeting, when scheduled. Staff will develop a final rule briefing package in FY20.

Fireworks

Staff Contact Valliere, Rodney

Voluntary Standard(s) *Standard for Construction and Approval for Transportation of Fireworks, Novelties, and Theatrical Pyrotechnics (APA 87-1)*
AFSL Standards for Consumer Fireworks (AFSL 101 – 115)

Mandatory Standard(s) 16 CFR § 1500.17, *Banned Hazardous Substances* and 16 CFR part 1507, *Firework Devices*

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with AFSL and APA on revising the standards to strengthen safety provisions addressing hazards associated with consumer fireworks.

FY19 Activities At the end of FY2018, staff submitted a briefing package to the Commission recommending that the Commission amend the regulations in 16 CFR parts 1500 and 1507. On October 3, 2018, staff briefed the Commission on how the recommended final rule would, among other things, incorporate by reference sections of APA 87-1 to define terms used in the regulation. Various sections in APA 87-1, including definitions, metal content, 1 percent allowance for metal content, device limits, and base attachment provisions remain consistent with staff's recommended final rule. The only difference between the recommended final rule and APA 87-1A is how the break charge ratio is determined. In September 2019, the Commission voted 3-1 to not amend the current regulations.

In January 2019, AFSL held a Standards Committee Meeting that staff could not attend due to the government furlough. In February 2019, staff attended the APA Winter Educational Conference where no updates were made to their current standard. In August 2019, staff attended the AFSL Standards Committee meeting where various topics were discussed to amend their standards, notably the use of

titanium in nitrocellulose fountains and possible alternatives. In September 2019 at the APA 2019 Convention and Annual Meeting, staff attended a standards committee meeting, where new proposed language for APA 87-1 was discussed.

**Planned FY20
Activity**

Staff will continue to attend and participate in AFSL and APA meetings, when scheduled.

Flammable Refrigerants

Staff Contact Ayers, Scott

**Voluntary
Standard(s)**

Safety Requirements for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances, and Ice-Makers (CANENA/UL 66335-2-24)
Standard for Dehumidifiers (UL 474 Edition 10)
Standard for Room Air Conditioners (UL 484 Edition 9)
Safety Standard for Refrigeration Systems (ANSI/ASHRAE 15)
Designation and Safety Classification of Refrigerants (ANSI/ASHRAE 34)
Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers (UL 60335-2-40)
Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Unit or Compressor (UL 60335-2-89)

**Mandatory
Standard(s)**

N/A

**Standard(s)
Update**

No standards associated with this product were updated during FY19.

Purpose

To work with standards developers to revise the standards to strengthen the safety provisions addressing hazards associated with flammable refrigerants (also known/marketed as “natural refrigerants”) used in household refrigerators, freezers, and air conditioners.

FY19 Activities

Staff participated in several task group meetings during FY19 between October 2018 and June 2019, regarding flammable refrigerants in HVAC units. The next edition to UL60335-2-40, which includes new provisions allowing for flammable refrigerants, has reached consensus at UL and will be issued as an ANS. It is also currently under review by CSA as a National Standard of Canada. Once approved, the standard will allow A2L refrigerants in HVAC systems.

Staff participated in several task group meetings between April 2019 and July

2019 regarding flammable refrigerants in refrigerators. Revisions to the current edition of UL60335-2-24, including provisions for flammable refrigerants in refrigerators, were agreed to. These revisions remove ambiguities manufacturers have discovered in implementing the current edition of the standard.

Staff participated in an industry meeting in July 2019 regarding flammable refrigerants in refrigeration units. The meeting developed a proposal for the next edition of UL60335-2-89, which will mirror UL60335-2-40 in as many flammable refrigerant aspects as possible. Industry believes using mirrored requirements will make implementation and adoption of a future next edition easier.

Staff participated in several AHRI Safe Transition Task Force meetings during the fiscal year, between May 2019 and September 2019. This group was empaneled to ensure a safe transition to flammable refrigerants by all those potentially affected.

Staff also participated in two ASHRAE flammable refrigerant odorant project meetings in October 2018 and November 2018. During the meetings, ASHRAE's contractor reviewed the progress on the odorant study.

***Planned FY20
Activity***

Staff will continue to participate in the revisions and development of standards intended to allow flammable refrigerants. Staff will continue to work with industry in promoting the safe transition to flammable refrigerants.

Flame-Mitigation Devices (FMDs) on Disposable Fuel Containers

Staff Contact Scott Ayers

***Voluntary
Standard(s)*** ASTM WK60590 (potential new standard for FMDs in development)

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM to develop a voluntary safety standard with requirements for flame-mitigation devices (FMDs) for disposable flammable liquid fuel containers used in open-flame consumer applications.

FY19 Activities ASTM published a revised standard for Gasoline Containers (see the section on Gasoline Containers in this report for more details) with a requirement for a flame-mitigation device. That published requirement will help with the

development of the new standard for disposable fuel containers.

The ASTM task group, led by CPSC staff (Ayers), met four times during the fiscal year, in November 2018, December 2018, March 2019, and September 2019. During these meetings, the group discussed ongoing research to develop a test protocol for FMDs on disposable fuel containers, sponsored by CPSC. The group also refined a scope to the standard. In the final meeting, the task group reviewed a draft standard and agreed it was ready to ballot to the ASTM subcommittee. ASTM balloted the draft standard to the F15.72 subcommittee on September 16, 2019. At the end of FY19, the ballot results were not known.

***Planned FY20
Activity***

Once the ballot closes, staff will work with the task group to address comments and prepare the standard for ballot to the full F15 committee.

Frame Child Carriers

Staff Contact Nesteruk, Hope

***Voluntary
Standard(s)*** *Standard Consumer Safety Specification for Frame Child Carriers (ASTM F2549-14a)*

***Mandatory
Standard(s)*** 16 CFR part 1230, *Safety Standard for Frame Child Carriers*

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with frame child carriers.

FY19 Activities Staff participated in the ASTM task group meeting held on August 27, 2019. During the meeting, two new task groups were established, one to work on the ad hoc warning and packaging statements and the other will look to update the test torso included in the standard, to match the torso used in EN standards.

***Planned FY20
Activity*** Staff participated in the October 2019 ASTM subcommittee meeting. Staff will participate in future task group activities and attend any meetings held during the remainder of FY20.

Full-Size Cribs

Staff Contact Nesteruk, Hope

Voluntary Standard(s) *Standard Consumer Safety Specification for Full-Size Cribs* (ASTM F1169-19)

Mandatory Standard(s) 16 CFR part 1219, *Safety Standard for Full-Size Cribs*

Standard(s) Update ASTM F1169-19 *Standard Consumer Safety Specification for Full-Size Cribs* was updated during FY19 and includes a revision to the labeling requirements. The mandatory standard, 16 CFR part 1219, *Safety Standard for Full-Size Cribs*, updated during the reporting period to reference the most recent version of the voluntary standard, ASTM F1169-19.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with full-size cribs.

FY19 Activities Staff attended the ASTM subcommittee meeting on October 15, 2018. ASTM balloted two items in September 2018, and the ballot results were discussed at the subcommittee meeting on October 15, 2018. The crib accessories ballot received one negative regarding the terminology used in the ballot item. The subcommittee found the negative persuasive, and the item was withdrawn. A new task group was formed to address the concerns. The ballot item regarding the location of the warning labels for full-size cribs passed with comments only and the revised standard was published in April 2019.

ASTM F1169-19 was revised in March 2019. Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified CPSC of the revision on May 1, 2019. On July 10, 2019, staff submitted a briefing memorandum to the Commission, recommending the Commission accept the revision. The Commission voted to accept revision. On July 23, 2019, the *Federal Register* published a direct final rule incorporating ASTM F1169-19 by reference into 16 CFR part 1219 (84 FR 35293).

Planned FY20 Activity Staff will participate in the next subcommittee meeting, when scheduled.

Gas Appliances, CO Sensors (formerly Furnaces – CO Sensors)

Staff Contact Jordan, Ronald

**Voluntary
Standard(s)**

Gas-Fired Central Furnaces (ANSI Z21.47)
Gas-Fired Low Pressure Steam and Hot Water Boilers (ANSI Z21.13)
Vented Gas-Fired Space Heating Appliances (ANSI Z21.86)

**Mandatory
Standard(s)**

An ANPR for Performance Requirements for Residential Gas Furnaces and Boilers, was published in the *Federal Register* on August 19, 2019 (84 FR 42847).

**Standard(s)
Update**

No standards associated with this product were updated during FY19.

Purpose

To work with technical committees on revising the standards to strengthen safety provisions addressing hazards associated with carbon monoxide risks due to failure modes, such as disconnected vents and partially blocked vents.

FY19 Activities

Staff sent a letter to CSA informing the committee of CPSC’s ANPR for “Performance Requirements for Residential Gas Furnaces and Boilers,” concerning the risk of injuries and death associated with residential gas furnaces and boilers. The letter invited the ANSI/CSA Z21/83 Joint Technical Committee for Gas-fired Appliances and Accessories, the ANSI/CSA Joint Technical Subcommittees for gas furnaces, boilers, and vented space heating appliances, and the ANSI/CSA Cross Functional Working Group for Carbon Monoxide Detector Sensors in Gas Appliances to review and comment on the ANPR.

**Planned FY20
Activity**

Staff participated in the October 2019 CSA working group meetings. Staff will continue to participate in CSA activities related to gas appliances and CO sensors.

Gas Grills

Staff Contact

Ayers, Scott

**Voluntary
Standard(s)**

Outdoor Cooking Gas Appliances (ANSI Z21.58b-2018/CSA 1.6-2018)

**Mandatory
Standard(s)**

N/A

**Standard(s)
Update**

No standards associated with this product were updated during FY19.

Purpose To work with CSA on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard addresses hazards associated with gas grills and other outdoor gas cooking appliances.

FY19 Activities Staff attended a Technical Subcommittee working group meeting at CSA offices in Cleveland, OH in April 2019. At the meeting, requirements to prevent consumers from storing an unused LP-gas cylinder under an operating gas grill were discussed. The group formed a proposed revision which will be address by the Technical Subcommittee at their meeting in October 2019.

Planned FY20 Activity Staff will continue to participate with the Technical Subcommittee on any safety related issues that arise.

Gasoline Containers, Child Resistance

Staff Contact Ayers, Scott

Voluntary Standard(s) *Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use (ASTM F2517-17)*
Standard Specification for Portable Fuel Containers (ASTM F852 / F852M-19)

Mandatory Standard(s) 16 CFR part 1460, *Children's Gasoline Burn Prevention Act Regulation*

Standard(s) Update ASTM F852 / F852M-19 *Standard Specification for Portable Gasoline, Kerosene, and Diesel Containers* was reinstated and published in September, it replaced the withdrawn ASTM F852-08 and ASTM F839. ASTM F852 / F852M updated the title and scope of F852-08, harmonized requirements for gasoline, diesel, and kerosene containers, added requirements for FMDs that meet F3326 and child resistance that meets F2517.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with the poisoning of children from gasoline associated with portable fuel containers.

FY19 Activities During the fiscal year, staff worked with the task group to reissue ASTM F852 with harmonized requirements for gasoline, diesel, and kerosene containers. This revised standard included a requirement that the containers have FMDs that meet F3326 and that the containers have child resistance features than meets F2517. Staff also attended an NFPA 30 committee meeting in July 2019 where the committee agreed to add a requirement to the NFPA 30 code that gasoline containers for sale must meet F852, F3326, and F2517 in the next edition of the

code, which is due in calendar year 2020.

**Planned FY20
Activity**

Staff will attend the ASTM F15.10 subcommittee meeting on November 21, 2019 in Rockville, MD. The subcommittee has several open items that will be addressed including, expanding the scope of products to include metal containers, adding a flow-out test to F3326, and reviewing the senior testing in F2517.

Gasoline Containers, Flame-Mitigation Devices (FMD)

Staff Contact Ayers, Scott

**Voluntary
Standard(s)**

Standard Specification for Portable Fuel Containers (ASTM F852 / F852M-19)
Standard Specification for One Time Use Portable Emergency Fuel Containers (PEFC) for Use by Consumers (ASTM F2874-12)
Standard Specification for Flame Mitigation Devices on Portable Fuel Containers (ASTM F3326-19a)
Standard for Metal Safety Cans (UL30)
Standard for Nonmetallic Safety Cans for Petroleum Products (UL1313)
Standard for Special-Purpose Metal Containers (UL1314)

**Mandatory
Standard(s)**

NA

**Standard(s)
Update**

ASTM F3326-19a *Standard Specification for Flame Mitigation Devices on Portable Fuel Containers* was first approved and published as ASTM F3326-19 during FY19 then revised later in FY19 to remove the requirement that the container meet F852 and to add a requirement that FMDs are required in all openings.

ASTM F852 / F852M-19 *Standard Specification for Portable Gasoline, Kerosene, and Diesel Containers* was reinstated and published in September, it replaced the withdrawn ASTM F852-08 and ASTM F839. ASTM F852 / F852M updated the title and scope of F852-08, harmonized requirements for gasoline, diesel, and kerosene containers, and added requirements for FMDs that meet F3326 and child resistance that meets F2517.

Purpose

To work with ASTM on revising the standards to strengthen safety provisions addressing hazards associated with flammable liquid containers.

FY19 Activities

During the fiscal year, staff worked with the task group to approve then revise a new standard for FMDs on gasoline containers, F3326. Staff also worked with the task group to reissue ASTM F852 with harmonized requirements for gasoline, diesel, and kerosene containers, that included a requirement that the containers

have FMDs that meet F3326 and that the containers have child resistance features than meets F2517. Staff also attended an NFPA 30 committee meeting in July 2019 where the committee agreed to add a requirement to the NFPA 30 code that gasoline containers for sale must meet F852, F3326, and F2517 in the next edition of the code, the next edition of this code is due in calendar year 2020. Finally, staff participated in a joint UL and ULC working group meeting in September 2019 where the group decided to propose consolidating UL30, UL1313, and ULC/ORD-C30 (Canadian safety container standard) into a single joint UL/ULC standard for both metal and plastic safety containers; the group also decided that UL would withdraw UL1314 as products covered by this standard may need to be covered by ASTM F852 / 852M.

***Planned FY20
Activity***

Staff will attend the ASTM F15.10 subcommittee meeting in November 2019 in Rockville, MD. The subcommittee has several open items that will be addressed including, expanding the scope of products to include metal containers, adding a flow-out test to F3326, and reviewing the senior testing in F2517. Staff also plans on monitoring the consolidation of UL30, U11313, and ORD-C30.

Hand-Held Infant Carriers

Staff Contact Nesteruk, Hope

***Voluntary
Standard(s)*** *Standard Consumer Safety Performance Specification for Hand-Held Infant Carriers (ASTM F2050-16)*

***Mandatory
Standard(s)*** 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers*

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with hand-held carriers.

FY19 Activities Staff participated in ASTM subcommittee meetings for handheld carriers on October 17, 2018, where the following task groups reported:

- Falls from shopping carts: The task group shared an example pictogram, and the subcommittee made several suggestions. The subcommittee chair agreed to make the modification and send to ballot.
- Handle strength: The subcommittee chair presented the results of the task group work, which included a recommendation to add static and dynamic tests

for non-rigid, non-rotating handles. The proposal was discussed, and the task group agreed to continue to work on the proposal.

- Incident data: The subcommittee chair described the recent incident data, which the task group agreed to review at the next meeting.

The subcommittee also formed a new task group to address the ad hoc formatting requirements for warnings, along with other warning issues.

Staff participated in the May 8, 2019 subcommittee meeting. During the meeting, task group chairs for the handle strength, warnings and shopping cart task groups gave reports. The latter two task groups were in the process of drafting ballot items.

On September 5, 2019, ASTM issued a ballot containing two items pertaining to hand-held carriers. One ballot item contained revisions to the marking and labeling sections (per ad hoc requirements) and the other contained a new warning regarding hand-held carriers being used on shopping carts. At the end of FY19, the ballot results were not known.

Planned FY20 Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

High Chairs

Staff Contact Marques, Stefanie

Voluntary Standard(s) *Standard Consumer Safety Specification for High Chairs (ASTM F404-18a)*

Mandatory Standard(s) 16 CFR part 1231, *Safety Standard for High Chairs*

Standard(s) Update *Standard Consumer Safety Specification for High Chairs*, was revised in FY19 as ASTM F404-18a, to exempt reclining high chairs to the stability requirements in the standard.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing high chair hazards.

FY19 Activities

Staff participated in the October 18, 2018 meeting, where the subcommittee reviewed recent ballot results pertaining to the proposal to exempt reclined seat high chair products intended for infants who are unable to sit upright unassisted and under 20 pounds from the stability requirements. The ballot received four negative votes which were all later withdrawn. Since the negatives were withdrawn, the ballot passed, and ASTM F404-18a was approved and published.

Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified the CPSC of the F404-18a revision on April 3, 2019. On June 5, 2019, staff submitted a briefing memorandum to the Commission, recommending that the Commission direct staff to notify ASTM that the Commission; (1) has determined that the revised high chair standard does not improve the safety of high chairs, and (2) is retaining the existing consumer product safety standard for high chairs. The Commission voted to accept staff's recommendation. Staff sent the notification letter to ASTM on June 19, 2019.

On Oct 30, 2018, ASTM issued a ballot containing four items for the high chair standard:

- 1) Addition of a note explaining what products are subject to the stability testing. This ballot item received two negative votes.
- 2) Revision (ad hoc) of the toy accessories requirement. This ballot item passed but is being held till resolution of the other items.
- 3) Revision of the instructional literature section to be consistent with the labeling section. This ballot item received a negative vote.
- 4) Revision of the tray disengagement pull test to add front torso supports to the requirement. This ballot item passed but is being held till resolution of the other items.

CPSC hosted a reclined seat task group meeting at CPSC's National Product Testing and Evaluation Center on March 20, 2019. The task group observed staff's testing of reclined seat products, and staff demonstrated several methods for stability testing of reclined high chairs. The task group discussed the pros and cons of each test method and is developing a method to present for ballot consideration.

CPSC staff also participated in subcommittee meetings held on April 4, 2019, and May 6, 2019. During the April meeting, the October 2018 ballot results were reviewed and the results from the March task group meeting were discussed. During the May meeting, the subcommittee chair discussed a proposed timeline to develop stability requirements for reclined infant seats by October 2019.

On July 24, 2019, ASTM issued a ballot containing one item for the high chair standard. This item was an update to item #3 in the October 30, 2018, ballot mentioned above, and it also received a negative vote.

**Planned FY20
Activity**

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Infant Bath Seats

Staff Contact Kish, Celestine

**Voluntary
Standard(s)** *Standard Consumer Safety Specification for Infant Bath Seats (ASTM F1967-19)*

**Mandatory
Standard(s)** 16 CFR part 1215, *Safety Standard for Infant Bath Seats*

**Standard(s)
Update** ASTM F1967 *Standard Consumer Safety Specification for Infant Bath Seats* was revised twice during FY19. In December 2018, a revision was published and included several changes including updated stability requirement and test procedures, definition of and requirements for attachment components, static load requirements, suction cup requirements and test procedure, latching and locking requirements, and warning labels. In May, ASTM F1967-19, was published; this revision included a change to the test surface requirements.

The mandatory standard, 16 CFR part 1215, *Safety Standard for Infant Bath Seats*, was updated during the reporting period to reference the most recent version of the voluntary standard, ASTM F1967-19.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant bath seats.

FY19 Activities Staff attended the subcommittee meeting held on October 16, 2018, where the results of the most recent ballot were reviewed. A new revision of the standard was approved and published in December 2018, and during review of the revised standard, staff found an issue in the test surface requirement. On March 21, 2019, ASTM issued a ballot item to change the test surface requirement for consistency and it passed. ASTM approved and published a revised standard, F1967-19 in May 2019.

ASTM F1967 was revised in May 2019. Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified CPSC of the revision on June 25, 2019. On August 28, 2019, staff submitted a briefing memorandum to the Commission, recommending the Commission accept the revision. The Commission voted to accept revision.

On July 23, 2019, the *Federal Register* published a direct final rule incorporating ASTM F1967-19 by reference into 16 CFR part 1215 (84 FR 35293).

On September 27, 2019, staff sent a letter to inform ASTM of the Commission decision to update 16 CFR part 1215 to reference ASTM F1967-19.

***Planned FY20
Activity***

Staff will continue to review incident data on bath seats and will participate in the next subcommittee or task group meeting, when scheduled.

Infant Bath Tubs

Staff Contact Kish, Celestine

***Voluntary
Standard(s)*** *Consumer Safety Specification for Infant Bath Tubs* (ASTM F2670-18)

***Mandatory
Standard(s)*** 16 CFR part 1234, *Safety Standard for Infant Bath Tubs*

***Standard(s)
Update*** The mandatory standard, 16 CFR part 1234, *Safety Standard for Infant Bath Tubs* was updated during the reporting period to reference the latest revision of the voluntary standard, ASTM F2670-18.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant tubs.

FY19 Activities ASTM F2670 was revised in March 2018. Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified CPSC of the revision. On October 3, 2018, staff submitted a briefing memorandum to the Commission, recommending the Commission accept the revision. The Commission voted to accept revision. On October 23, 2019, the *Federal Register* published a direct final rule incorporating ASTM F2670-18 by reference into 16 CFR part 1234 (83 FR 53371).

Staff participated in the ASTM subcommittee meeting held on October 16, 2018, where the Commission vote was discussed.

***Planned FY20
Activity***

Staff will also participate in the next ASTM subcommittee meeting, when scheduled.

Infant Bouncer Seats

Staff Contact Wanna-Nakamura, Suad

Voluntary Standard(s) *Standard Consumer Safety Specification for Infant Bouncer Seats (ASTM F2167-19)*

Mandatory Standard(s) 16 CFR part 1229, *Safety Standard for Infant Bouncer Seats*

Standard(s) Update ASTM F2167-19 *Standard Consumer Safety Specification for Infant Bouncer Seats* was revised during FY19 to include revisions to the warnings that align it with the federal regulation 16 CFR 1229.

The mandatory standard, 16 CFR part 1229, *Safety Standard for Infant Bouncer Seats* was updated during FY19 to reference the latest revision of the voluntary standard, ASTM F2167-19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant bouncer seats.

FY19 Activities ASTM F2167-19 was revised in May 2019. Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified CPSC of the revision on June 17, 2019. On August 21, 2019, staff submitted a briefing memorandum to the Commission, recommending the Commission accept the revision. The Commission voted to accept the revision. On September 6, 2019, the *Federal Register* published a direct final rule incorporating ASTM F2167-19 by reference into 16 CFR part 1229 (84 FR 46878).

Staff sent a letter to ASTM on September 16, 2019, with a notification of the direct final rule that will become effective on December 14, 2019.

Planned FY20 Activity Staff will continue to provide technical assistance to the subcommittee, participate in task groups, and attend the next subcommittee meetings, when scheduled.

Infant Inclined Sleep Products

Staff Contact Kish, Celestine

Voluntary Standard(s) *Standard Consumer Safety Specification for Infant Inclined Sleep Products*

(ASTM F3118-17a)

***Mandatory
Standard(s)***

NPR *Standard Consumer Safety Specification for Infant Inclined Sleep Products* (82 FR 16963 (April 7, 2017)).

***Standard(s)
Update***

No standards associated with this product were updated during FY19.

Purpose

To work with ASTM on revising the standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with inclined sleep products.

FY19 Activities

During FY19, staff became aware of numerous additional deaths in infant inclined sleep products. CPSC issued several recalls of millions of IISP products, staff urged the subcommittee to reconsider the standard, and staff prepared a supplemental NPR to address these hazards, which was presented to the Commission in October 2019.

Staff also participated in the ASTM subcommittee and task group meetings held throughout FY19. During the October 16, 2018 subcommittee meeting, the previous ballot activity was discussed. There were three ballot items that passed but had not been incorporated into the standard, including changes to the scope and electrical requirements. The roll-over task group also discussed revised labeling requirements, including visibility requirements for the roll-over warning label. The visibility requirement is similar to the restraints label visibility requirement found in the CPSC infant bouncer regulation (16 CFR part 1229). After much discussion, the subcommittee decided to send out the new markings and labeling requirements and also the test method to determine visibility of the warning label.

The roll-over task group met on March 19, 2019, and finalized a ballot item. The ballot was issued March 28, 2019. Staff sent a letter to ASTM, stating that it was staff's assessment that warnings alone are insufficient to address the serious hazards posed by inclined sleep products. Staff also urged the subcommittee to reconsider the whole standard, rather than focus only on warning labels as the solution. In addition to staff's comment letter, the ballot received several negatives, many that disagreed with the ballot as a whole.

Staff participated in the ASTM subcommittee meeting held on May 8, 2019. During the meeting, recent recalls for infant inclined sleep products were discussed. Subcommittee members questioned the category of inclined sleep products. Staff encouraged the subcommittee to take another look at all aspects of the standard for infant safety.

In August and September 2019, staff participated in many different task group meetings, where topics, including scope, title, side height, labeling, seat back angle, and hazard identifications, were discussed.

Planned FY20

Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Infant Swings

Staff Contact

Kish, Celestine

Voluntary Standard(s)

Standard Consumer Safety Specification for Infant Swings (ASTM F2088-15)

Mandatory Standard(s)

16 CFR part 1223, *Safety Standard for Infant Swings*

Standard(s) Update

No standards associated with this product were updated during FY19.

Purpose

To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant swings.

FY19 Activities

Staff participated in the ASTM subcommittee meeting held on October 16, 2018. Future ballot items were discussed, and a task group to address battery-related issues was established. Staff also attended two task group meetings in March 2019. In addition, staff participated in a subcommittee meeting on May 8, 2019. During the May subcommittee meeting, ballot results were reviewed. In addition, a new task group was formed to address gliders and other swings with non-horizontal types of motion.

On October 30, 2018, ASTM issued two ballot items regarding infant swings: (1) incorporating ad hoc language in the marking and labeling sections, and (2) adding requirements to prevent entanglement for products with tethered straps. Both ballot items received negative votes.

On March 13, 2019, a task group met to discuss the entanglement requirement ballot. One of the negatives was found to be persuasive, and the task group developed new language to address the negative.

On March 28, 2019, ASTM issued another ballot containing the revised entanglement requirement. That ballot also received negative votes.

On September 5, 2019, ASTM issued another ballot with three items pertaining to infant swings: tethered strap terminology and test method, revision to the introduction, and scope and terminology revisions. At the end of FY19, the ballot results were not known.

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Infant Walkers

Staff Contact Mordecai, Ben

***Voluntary
Standard(s)*** ASTM *Standard Consumer Safety Performance Specification for Infant Walkers* (ASTM F977-18)

***Mandatory
Standard(s)*** 16 CFR part, 1216 *Safety Standard for Infant Walkers*

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant walkers.

FY19 Activities Staff participated in the subcommittee meeting held on October 18, 2018. During the meeting, the subcommittee chair announced his intention to hold the notice to CPSC (under Pub. L. No. 112-28), until after the next round of revisions, which are expected to contain more substantive changes. A task group evaluating the standard for improvements met on October 3, 2018, and provided a report to the subcommittee at the meeting held on October 18, 2018.

Staff also attended the subcommittee meeting held on May 9, 2019. During the meeting, the standard improvement task group chairman shared an outline of the task group goals. The task group is still working to develop a ballot proposal. As of the end of FY19, ASTM has not issued the ballot for infant walkers, nor has ASTM notified CPSC of the most recently revised standard, ASTM F977-18.

***Planned FY20
Activity***

Staff will continue to participate on the task group and also will attend and participate in the next subcommittee meeting, when it is scheduled.

Liquid Laundry Packets

Staff Contact Hurley, Jill

Voluntary Standard(s)	<i>Standard Safety Specification for Liquid Laundry Packets (ASTM F3159-15)</i>
Mandatory Standard(s)	N/A
Standard(s) Update	No standards associated with this product were updated during FY19.
Purpose	To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with liquid laundry detergent packets.
FY19 Activities	<p>Staff participated in the ASTM Additional Measures task group meeting held on December 11, 2018. The focus of the group is to examine other measures to decrease poisoning and injuries with liquid laundry packets. The intent of the task group is to gather best practices from other industries and bring ideas to the larger subcommittee.</p> <p>The group discussed the European Union (EU) report from the International Association for Soaps, Detergents and Maintenance Products. The report noted that EU will be making improvements to their child-impeding closures testing in their voluntary standard, as well as creating an education campaign to raise awareness for safe product use.</p> <p>The group reviewed the current compression test requirement in ASTM F3159-15 to explore a method of testing that mimics more closely the bite of children. However, the only known test is one that is associated with toy testing, which the task group did not consider to be an accurate representation of a child's bite.</p> <p>Staff attended a task group meeting on July 16, 2019. During the meeting, a new task group, focused on the scope of the standard, was created.</p>
Planned FY20 Activity	In October 2019, staff supplied ASTM with an update to the 2018 report regarding injuries associated with liquid laundry packets. Staff will also participate in the next task group meeting, when scheduled.

LP Gas Outdoor Fire Pits

Staff Contact	Kim, Yeon
Voluntary Standard(s)	<i>Outdoor Decorative Gas Appliances (ANSI Z21.97-2017/CSA 2.41-2017)</i>
Mandatory Standard(s)	N/A

Standard(s) Update	No standards associated with this product were updated during FY19.
Purpose	To work with CSA on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard addresses hazards associated with outdoor gas decorative appliances, such as fire pits.
FY19 Activities	Staff conducted background research and developed recommended modifications to the standard. Staff drafted a letter to CSA, requesting that a requirement to protect the venturi from items such as insects and spider webs be added to the standard.
Planned FY20 Activity	Staff will send the letter to CSA staff before the end of the calendar year and attend any meetings necessary to advocate for the proposed requirement.

Nanotechnology

Staff Contact	Matheson, Joanna
Voluntary Standard(s)	<i>New Guide for Detection and Characterization of Manufactured Silver Nanomaterials in Textiles</i> (ASTM E3025-16) and other ASTM standards under the E56 Nanotechnology Committee and ISO standards under the 229 Technical Committee (TC /229).
Mandatory Standard(s)	N/A
Standard(s) Update	Staff had no activity with any revisions or reaffirmations of nanotechnology related standards during FY19.
Purpose	To work with ASTM and ISO technical committee on revising the standards to strengthen safety provisions addressing hazards associated with nanotechnology.
FY19 Activities	Staff participated in the ASTM E56 Nanotechnology committee meetings held on November 5-6, 2018. During the meeting on Nano-enabled Consumer Products, ballot results were reviewed for a new standard on the determination of total nano silver in textiles by ICP-OES or ICP-MS. The subcommittee discussed changes to the draft so that it could be sent out again for ballot. Also discussed at the ASTM E56 meetings were: potential projects that would fall under the E56 guide (ASTM E3025-16) on tools, an umbrella guidance document for specific methods for measuring silver in textiles. Other standards organizations were listed that might

want to collaborate on the proposed work (e.g., ISO, ASTM D13, ASTM E56.08, AATCC).

Staff also participated in the AATCC session on Electronically Integrated Textiles, held on November 13, 2018. Members of the ASTM subcommittee on Smart Textiles also attended the meeting. Updates were given on the ballot for the evaluation procedure to measure electrical resistance of electronically integrated textiles. Brief updates were provided on the ASTM subcommittee work on definitions and on a potential ISO-IEC joint project on wearables.

On February 25, 2019, ASTM committee E56 issued a ballot with three new draft standards: *Guide for Reporting the Physical and Chemical Characteristics of Nan-objects*, *Guide for Reporting the Physical and Chemical Characteristics of a Collection of Nano-objects*, and *Test Method for Determination of Total Silver in Textiles by ICP-OES or ICP-MS*. The three ballots each received a negative vote. As of the end of FY19, the negative votes remained unresolved.

On February 27, 2019, staff participated in a meeting of the US TAG for ISO/TC 229 Nanotechnologies. Highlights of the meeting included a review of a technical report entitled, "Evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial containing polymer composites." This report is the result of the Nanorelease project that received significant support from CPSC staff. There was also a discussion of developing a work item based on research conducted through an interagency agreement between staff from CPSC and EPA, to research methods to evaluate the release of nanoparticles from treated surfaces.

Planned FY20 Activity

Staff will continue to be active in the ASTM E56 subcommittee and the U.S. TAG to ISO TC/229. Staff participated in the U.S. TAG to ISO TC/229 meeting held in October 2019, and the ASTM E56 subcommittee meetings in November 2019.

National Electrical Code

Staff Contact Lee, Doug

***Voluntary
Standard(s)*** *National Electrical Code, NFPA 70 (2020)*

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** *National Electrical Code, NFPA 70* was revised during FY19; the current edition of the code is 2020, and incorporates numerous revisions.

Purpose To work with the NFPA on revising the code, to strengthen its safety provisions addressing hazards associated with electrical fires, carbon monoxide poisoning, and shock incidents involving consumer products, including appliances, pools and spas, generators, electrical equipment, and wiring products.

FY19 Activities Staff participated in two code-making panels (CMP2 and CMP17) during the fiscal year. The panels are tasked with creating a second draft revision for the 2020 NEC, based on consideration of public comments. On October 4-5, and October 22-26, 2018, staff attended the CMP2 task group and panel meetings, which covered branch circuits, feeders, and service calculations. During the panel meetings, CMP2 discussed and acted on 120 public comments on the first draft revisions for the 2020 edition of the *National Electrical Code* (NEC), Articles 210, 215, and 220. CMP2 continued to support the expansion of ground-fault circuit-interrupters (GFCIs) to reduce electrical shock and electrocution hazards and the use of arc-fault circuit-interrupters (AFCIs) to mitigate the effects of arcing hazards that cause fires in electrical wiring and power cords. However, CMP2 did not support expanding AFCI technology at this time, due to some concern in addressing reports of unwanted tripping.

CPSC staff participated in the CMP17 meeting held on October 29-31, 2018. CMP 17 covers NEC Articles 422 (Appliances), 424 (Fixed Electric Space Heating Equipment), 426 (Fixed Outdoor Electric Deicing and Snow-Melting Equipment), 427 (Fixed Electric Heating Equipment for Pipelines and Vessels), 680 (Swimming Pools, Fountains, and Similar Installations) and 682 (Natural and Artificially Made Bodies of Water). CMP 17 acted on 141 public comments and also developed and approved panel revisions.

Staff met with National Electrical Manufacturers Association staff and its members in July 2019 to discuss industry efforts to mitigate AFCI unwanted tripping from AFCI circuit breakers and certain appliances in support of NEC AFCI requirements. Staff also discussed industry efforts to improve safety and performance of AFCIs and to educate stakeholders (consumers, electricians, installers, and NEC panel members) at the meeting.

Planned FY20 Activity Staff will attend future meetings in support of NEC safety requirements and consider revisions for the next edition of the NEC.

Non-Full-Size Cribs and Play Yards

Staff Contact Nesteruk, Hope

Voluntary Standard(s) *Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards* (ASTM F406-19)
Standard Consumer Safety Specification for Crib Mattresses (ASTM F2933-19)

Mandatory Standard(s)

16 CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs* and 16 CFR part 1221, *Safety Standard for Play Yards*

Standard(s) Update

ASTM F406-19 *Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards* was updated during FY19 and includes new definitions, and a revision to a performance requirement pertaining to the vertical displacement of the mattress. ASTM F2933-19 *Standard Consumer Safety Specification for Crib Mattresses* was revised during FY19 and includes an update to the terminology section.

The mandatory standards 16 CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs* and 16 CFR part 1221, *Safety Standard for Play Yards* were updated during FY19 to reference the latest version of the voluntary standard, ASTM F406-19.

Purpose

To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with non-full-size cribs and play yards.

FY19 Activities

On October 15, 2018, staff participated in a subcommittee meeting where ballot results were discussed and two task groups (fit and thickness and ad hoc language) provided updates during the meeting. The subcommittee also discussed balloting a revision to the entrapment test requirement to include both products under the scope of the requirement.

Staff also participated in the May 6, 2019 subcommittee meeting. During the May meeting, the subcommittee chair announced the publication of the new version of F406. The thickness task group chairman (Nesteruk) provided a report as to the task group progress. The task group has been working on a ballot item to allow for 2 inches of total mattress pad thickness. Also during the May meeting, the subcommittee established two new task groups: scope interpretation regarding rigid products with mesh panels and entrapment in accessories exemption. Following the May meeting, staff provided the subcommittee with incident data for both non-full-size cribs and play yards.

Staff participated in several task group meetings during the fiscal year: mattress fit and thickness (December 5, 2018, May 2, 2019 and July 10, 2019); ad hoc language (July 25, 2019), accessory scope (July 31, 2019 and September 9, 2019) and scope interpretation (August 5, 2019).

Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified the CPSC of the 2019 revision of F406 on July 24, 2019. Staff developed a briefing memorandum with recommendations to the Commission, regarding the updating of referenced standards in both 16 CFR part 1220 and 16 CFR part 1221, to reflect the revised

ASTM standard. As of the end of FY19, the briefing memorandum had not yet been submitted to the Commission.

On September 5, 2019, ASTM issued a ballot with one item pertaining to non-full-size cribs and play yards. The item revises the entrapment test requirement to refer to “product” rather than “crib” to include both play yards and cribs. As of the end of FY19, the ballot results were not known.

***Planned FY20
Activity***

In October 2019, staff submitted a briefing memorandum to the Commission regarding the updating of referenced standards in both 16 CFR part 1220 and 16 CFR part 1221. Staff also participated in the ASTM crib mattress subcommittee meeting, Staff will also continue to serve in a leadership role for the Fit and Thickness task group and will continue to provide technical assistance to the subcommittee, and participate in task group activities.

Playground Equipment (Home)

Staff Contact Lee, Kevin

***Voluntary
Standard(s)*** *Standard Consumer Safety Performance Specification for Home Playground Equipment (ASTM F1148-18)*

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with home playground equipment.

FY19 Activities Staff participated in the subcommittee meeting held in November 2018. During the meeting, ballot results on tolerances and slide bed measurements were reviewed. The subcommittee also discussed using a “fish probe,” as used in the public playground standard and European standards.

On February 8, 2019, ASTM sent out a ballot with two items for the home playground equipment standard: (1) revision of the slide geometry requirements, and (2) revision of the section on acute angles. The first item passed with comments only; and the second item had a negative, plus three comments. Staff submitted comments with suggested edits but did not vote. The acute angle ballot item was re-balloted in July. That ballot item received two negatives.

On May 13, 2019, staff participated in the ASTM home playground subcommittee meeting. The subcommittee discussed the February 2019 ballot results. Staff was asked to provide injury data about lateral discharge from slide beds, which the current standard does not address. The task group created a sketch of a slide deck transition area to be used for clarification. Staff also agreed to product a digitized copy of the sketch in the form of a line drawing.

On August 14, 2019, staff participated in an ASTM F15.29 working group meeting that included home playground, public playground and playground surfacing stakeholders. The purpose of the meeting was to provide recommendations for updating the CPSC’s Outdoor Home Playground Safety Handbook, including rationales. The group created a draft list of recommendations with rationale and are continuing revise the list in the future meetings. Once the draft recommendation list is finalized, ASTM will send CPSC a request to change the Handbook, providing the list of recommendations and rationale.

***Planned FY20
Activity***

Staff will provide the requested incident data and participate in the next subcommittee meeting, scheduled for November 2019.

Playground Equipment (Public)

Staff Contact Lee, Kevin

***Voluntary
Standard(s)*** *Standard Consumer Safety Performance Specification for Public Playground Equipment (ASTM F1487-17)*

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with public playground equipment.

FY19 Activities Staff participated in the subcommittee meeting held in November 2018. During the meeting, ballot results were reviewed. The ballot items for trolley rides and the title change (to “Public Use Playgrounds”); both had many negatives and will be re-balloted.

On March 6, 2019, ASTM issued a ballot with two items for public playgrounds: (1) an exemption to all performance requirements for locations 84” or higher above any underlying climbing component, and (2) the title and scope changes.

The first item received a negative vote that was later voted to be non-persuasive. The second item received many negative votes, later found to be persuasive.

On May 14, 2019, staff participated in the public playground subcommittee meeting. During the meeting, ballot results from the March 6th ballot were reviewed. The subcommittee discussed a new ballot item to address the negatives from the previous ballot. The subcommittee reviewed potential other new ballot items pertaining to trolley rides, rotating equipment, bannister rails and impact attenuating surfaces. In addition, task group chairman and working group chairman provided updates of their group activity during the subcommittee meeting regarding developing performance requirements for non-climbable structures. The task groups are continuing to draft the requirements. Staff discussed the surfacing study, mentioning that CPSC is preparing a report and will provide the report after it has gone through proper review. During the meeting, the subcommittee discussed creating a working group to develop recommendations to provide to CPSC, regarding the Handbook for Public Playground Safety. Staff is part of the working group.

On July 24, 2019 ASTM issued a ballot containing several items for public playgrounds, as discussed at the May 14, 2019 subcommittee meeting. All of the new ballot items received negative votes. On September 20, 2019, ASTM issued another ballot, containing one item for public playgrounds: changes to the scope. At the end of FY19, the ballot results were not known.

On August 14, 2019, staff participated in an ASTM F15.29 working group meeting that included home playground, public playground, and playground surfacing stakeholders. The purpose of the meeting was to provide recommendations for updating the CPSC playground handbook, including rationales. The group created a draft list of recommendations with rationale and will continue revising the list in the future meetings. Once the draft recommendation list is finalized, ASTM will send CPSC a request to change the Handbook, providing the list of recommendations and rationale.

***Planned FY20
Activity***

Staff will participate in the next meeting, scheduled for November 2019.

Playground Surfacing

Staff Contact Lee, Kevin

***Voluntary
Standard(s)*** *Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment (ASTM F1292-18)*
Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment (ASTM F1951-14)

Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface under and around Playground Equipment (ASTM F3012-14)
Standard Guide for ASTM Standards on Playground Surfacing (ASTM F2223-19)
Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field (ASTM 3313-19)

Mandatory Standard(s)

N/A

Standard(s) Update

ASTM F1292-18, the latest revision of the *Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment* was revised in December 2018 to remove the field test requirements (to be included in a new standard, ASTM F3313).
ASTM F2223-19, the latest revision of the *Standard Guide for ASTM Standards on Playground Surfacing* was published in July 2019 and includes a revision to the background section of the standard.
ASTM F3313, *Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field* was published as a new standard in December 2018 and was revised and published as ASTM F3313-19 in September 2019. This standard contains the field testing requirements from F1292.

Purpose

To work with ASTM on revising the standard to address the hazard patterns associated with playground surfacing.

FY19 Activities

Staff participated at the ASTM subcommittee meeting F08.63 on playground surfacing held on November 17, 2018. Ballot results were discussed and CPSC staff provided an update on the surfacing study.

On November 21, 2018, ASTM issued a ballot with three items pertaining to playground surfacing. Two of the items were reapprovals of ASTM F1951-14 and ASTM F3012-14 and both received negative votes that were found to be persuasive. Both of these standards will be edited with the proposed changes and rebaloted. The third ballot item was for a new standard dealing with impact testing in a laboratory environment. This item also received persuasive negative votes and thus will be redrafted.

On February 12, 2019, ASTM issued another ballot containing five items relating to playground surfacing. The first four items were revisions to ASTM F2223 and all received negative votes. At the close of FY19, only one of the four ballots passed, and Section 5.2 of the standard (Background and Rationale) was updated to reflect the most recent revision dates of the standard. The other ballot items for ASTM F2223 had negative votes. The fifth ballot item revised an angle measurement in the data analysis section of ASTM F3313-18. This ballot item passed and the standard was revised in 2019.

On March 21, 2019, ASTM issued another ballot with an item for a new standard titled, *Test Method for Playground Surface Impact Testing in a Laboratory at a Specified Test Height*. There were many negative votes and thus the ballot item did not pass.

On May 16, 2019 staff attended the ASTM F08.63 subcommittee meeting. During the meeting the ballot results from previous ballots were reviewed. In addition, the subcommittee discussed the standards under the scope of F08.63 that require review.

On August 14, 2019, staff participated in an ASTM F15.29 working group meeting that included home playground, public playground and playground surfacing stakeholders. The purpose of the meeting was to provide recommendations for updating both the CPSC home use and public playground handbooks, including rationales. The group created a draft list of recommendations with rationale and are continuing revise the list in the future meetings. Once the draft recommendation list is finalized, ASTM will send CPSC a request to change the handbooks, providing the list of recommendations and rationale.

Also in August, ASTM issued another ballot containing four surfacing items. Three of the items were follow up ballots to the February 12th ballot for ASTM F2223. One of the three items passed and the other two had negative votes, which will be reviewed at the next subcommittee meeting. The fourth item was a re-ballot to the March 21st ballot for the new laboratory testing standard. It too received negative votes that will be discussed at the next subcommittee meeting.

On September 27, 2019, ASTM issued another ballot containing an item for ASTM F2223-19. This ballot items contains a revision to the background section of the standard. At the end of FY19, the ballot results were not known.

***Planned FY20
Activity***

Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2019.

Pools, Portable (Child Drowning)

Staff Contact Bathalon, Susan

***Voluntary
Standard(s)*** *Standard Specification for Aboveground Portable Pools for Residential Use (ASTM F2666-16)*
American National Standard for Aboveground/Onground Residential Pools (ANSI/APSP/ICC-4a-2013)

American National Standard Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs (ANSI/APSP/ICC-8 2005 (R2013))

Mandatory Standard(s)

N/A

Standard(s) Update

No standards associated with this product were updated during FY19.

Purpose

To work with ASTM and PHTA on revising the standard to strengthen its safety provisions addressing hazards associated with residential drowning in aboveground pool products.

FY19 Activities

On October 26, 2018, staff participated in an ICC Swimming Pool and Spa public hearing, where potential code amendments to barriers and other safety features in residential pools were discussed.

On November 20, 2018, staff participated in an ASTM task group meeting to discuss an incident where a toddler scaled a child resistant, above-ground pool ladder and accessed the pool. The incident was captured on video. The task group discussed EN and Australian ladder standards and reviewed the interviews with the toddler's parent. The task group, including CPSC staff, developed anthropometrics data for arm-span distances and slot-width for feet. The task group intends to improve ladder child barrier requirements using the anthropometric data.

Planned FY20 Activity

Staff will participate in future ASTM above-ground pool subcommittee meetings, scheduled for October and November.

Portable Bed Rails (Children's)

Staff Contact

Nesteruk, Hope

Voluntary Standard(s)

Standard Consumer Safety Specification for Portable Bed Rails (ASTM F2085-12)

Mandatory Standard(s)

16 CFR part 1224, *Safety Standard for Portable Bed Rails*

Standard(s) Update

No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with portable bed rails for children.

FY19 Activities ASTM did not hold any subcommittee or task group meetings on children's bed rails during the fiscal year. On March 6, 2019, ASTM issued a ballot for ASTM F2085-12. There were no revisions to ASTM F2085-12 on the ballot; thus, it was a re-approval ballot. The ballot passed with no negative votes or comments. On September 5, 2019, ASTM issued a ballot with two items for portable bed rails. The ballot items pertained to the composition of the sheets used for testing. The subcommittee balloted this change due to the difficulty in obtaining sheets that conformed to the original specification. At the end of FY19, the ballot results were not known.

Staff also reviewed and supplied incident data to the subcommittee during the fiscal year.

Planned FY20 Activity

Staff will review incident data annually and participate in the next ASTM subcommittee meeting, when it is scheduled. Following the review of the ballot results, ASTM is expected to approve and publish the updated standard in the fall of 2019. Staff will provide a briefing memo to the Commission, after publication of the updated standard and notification by ASTM.

Portable Fireplaces

Staff Contact Ayers, Scott

Voluntary Standard(s) *Standard Specification for Unvented Liquid/Gel Fuel-Burning Portable Devices* (ASTM F3363-19)

Mandatory Standard(s) ANPR published in December 2011

Standard(s) Update ASTM F3363-19, the new *Standard Specification for Unvented Liquid/Gel Fuel-Burning Portable Devices* was approved and published in February 2019.

Purpose To work with ASTM to develop a standard to address fire hazards associated with portable, unvented liquid-fuel burning appliances.

FY19 Activities Staff reviewed the ASTM ballot issued on October 30, 2018, containing the draft new standard for Unvented Liquid/Gel Fuel-Burning Portable Devices. The ballot received one negative vote, and some comments. Staff worked with the task group chair to review the ballot results. Based on staff input, the task group chair

contacted the negative voter and discussed issues with the voter. The negative vote was withdrawn, and the new standard was approved in February 2019.

***Planned FY20
Activity***

This product is not included in the voluntary standards section of the FY20 Operations Plan. Staff will monitor the standard and will answer any questions that may arise.

Portable Generators

Staff Contact Buyer, Janet

***Voluntary
Standard(s)*** *Safety and Performance of Portable Generators (ANSI/PGMA G300-2018)
Carbon Monoxide (CO) Emission Rate of Portable Generators
(UL 2201–2nd Ed/2018)*

***Mandatory
Standard(s)*** NPR published on November 21, 2016 (81 FR 83556)

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with UL and PGMA on revising the standards to strengthen safety provisions addressing hazards associated with portable generator carbon monoxide (CO) deaths and injuries.

FY19 Activities The testing and modeling work performed by NIST and CPSC to support staff's effort to evaluate the effectiveness of the two voluntary standards continued during the fiscal year. NIST published Technical Note 2048, the plan for the effectiveness evaluation, in June 2019. CPSC put this report out for public comment from July 9 to Sept 9, 2019. CPSC and NIST are evaluating the comments and are revising the plan as appropriate. NIST also published Technical Note 2049, a report documenting testing that was done on generators that were shut off using the shutoff criteria in both voluntary standards in June 2019. This will be used to support the modeling that will be performed in the evaluation plan.

In October 2018, CPSC hosted a technical meeting to present aspects of how staff will approach evaluating the effectiveness of the CO hazard mitigation requirements in PGMA's and UL's voluntary standards. Representatives from UL and PGMA were present at the meeting.

In August 2019, CPSC hosted a public meeting to answer questions on NIST Technical Note 2048. Staff provided clarifying information on approximately 18 items and staff encouraged comments on a number of other items raised during the meeting.

***Planned FY20
Activity***

Staff will participate in any additional voluntary standards meetings, when scheduled. Staff will continue working with NIST to review comments, refine, and then execute a simulation and analysis plan to estimate the effectiveness of the voluntary standards in addressing the CO hazard associated with portable generators.

Portable Hook-On Chairs

Staff Contact Nesteruk, Hope

***Voluntary
Standard(s)*** *Standard Consumer Safety Specification for Portable Hook-On Chairs (ASTM F1235-18)*

***Mandatory
Standard(s)*** 16 CFR part 1233, *Safety Standard for Hook-On Chairs*

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with hook-on chairs.

FY19 Activities On October 18, 2018, staff participated in an ASTM subcommittee meeting for portable hook-on chairs. There were no ballots or old business discussed.

***Planned FY20
Activity*** Staff will attend and participate in the next subcommittee meeting, when scheduled.

Pressure Cookers

Staff Contact McCallion, Richard

***Voluntary
Standard(s)*** *Pressure Cookers (UL 0136)*

***Mandatory
Standard(s)*** NA

**Standard(s)
Update**

No standards associated with this product were updated during FY19.

Purpose

To work with UL on revising the standard to strengthen its safety provisions addressing hazards associated with pressure cookers.

FY19 Activities

Staff is continuing to review new incident data and communicate with UL on potential standards updates dealing with hazards associated with pressure cooker lids prematurely coming off before the pressure fully normalizing. Staff has also discussed the tests required to review and/or update the standard as needed.

**Planned FY20
Activity**

Staff will provide UL with incident data relating to premature lid disengagement. Staff will participate in the next subcommittee meeting, when scheduled.

Recreational Headgear Sensors

Staff Contact Hall, Ian

**Voluntary
Standard(s)**

Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear (ASTM F1446-15b)
Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating (ASTM F1447-18)
Standard Specification for Headforms (ASTM F2220-15)

**Mandatory
Standard(s)**

N/A

**Standard(s)
Update**

Staff was not involved in any standards that were revised during FY19.

Purpose

To work with ASTM to develop and revise helmet and headgear standards, and to work with ASTM to develop a new voluntary standard for headgear sensors.

FY19 Activities

In November 2018, staff participated in the ASTM F08.53 subcommittee meeting on helmets. The subcommittee discussed multiple standards that required review. The subcommittee was in the process of developing task groups to work on reviewing those standards.

In addition to discussing current standards, various subcommittee task groups were developing entirely new standards. Of particular interest is the head impact sensor task group. During the meeting the head impact sensor task group agreed on the draft standard's abstract and scope, and the task group is in the process of developing various methodologies to test sensor systems.

Staff participated in the May 21, 2019 subcommittee meeting where the head impact sensor task group discussed the test methods under development. The task group has continued to develop a draft standard and plans to review it with the subcommittee at the next meeting.

***Planned FY20
Activity***

Staff will participate in the next ASTM subcommittee meeting, set for November 2019 in Houston, TX.

Recreational Off-Highway Vehicles (ROVs)

Staff Contact Paul, Caroleene

***Voluntary
Standard(s)***

*Recreational Off-Highway Vehicles (ANSI/ROHVA 1-2016) and
American National Standard for Multipurpose Off-Highway Utility Vehicles
(ANSI/OPEI B71.9-2016)*

***Mandatory
Standard(s)***

NPR Recreational Off-Road Vehicles (79 FR 68964 November 19, 2014)

***Standard(s)
Update***

No standards associated with this product were updated during FY19.

Purpose

To work with ROHVA on: (1) assessing the new safety provisions in the standard addressing hazards associated with lateral stability, vehicle steering and occupant protection, and (2) to develop additional revisions, as appropriate, to the standards.

FY19 Activities

Early in FY19, staff provided ROHVA (as well as SVIA and OPEI) with 121 CPSC IDI reports, completed between 2004 and 2017, regarding fire hazard-related, off-highway vehicle incidents. On June 27, 2019, staff met with SVIA, ROHVA and OPEI representatives about fire hazards and debris penetration hazards, where some of the supplied IDI reports were reviewed and discussed.

***Planned FY20
Activity***

For fire hazards and debris penetration, staff will provide ROHVA, OPEI and SVIA additional analysis, in the form of a spreadsheet that includes probable causes of the fire or fire hazard (based on CPSC staff assessment). Staff will also request a meeting to discuss the data that has been provided. To date, no dates are scheduled for the future meeting.

Safety Locks and Other Household Child Inaccessibility Devices

Staff Contact Lee, Kevin

Voluntary Standard(s) None at this time

Mandatory Standard(s) N/A

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM to develop a standard to address hazards associated with safety locks and child-inaccessibility devices.

FY19 Activities Staff participated in ASTM F15.76 task group meetings on child safety locks and latches in March 2019, July 2019, and August 2019. The task groups discussed the following topics pertaining to the standard:

- Limit the scope of the standard to internally mounted cabinet locks (in the interest of publishing a standard as soon as possible. The subcommittee will work on externally mounted cabinet locks after publication of this standard).
- Emphasis that this standard is not intended to examine anti-tip over devices. Add a section to evaluate magnetic keys.
- CPSC staff provided the subcommittee with the rationale for allowing a 1.25 inch drawer gap. The subcommittee agreed the standard should require that instructions address the access gap to the draw/cabinet
- The breaking pull force of 45.3 lbf is based on the pull strength of a 95th percentile 3-year old male with a 10 percent factor of safety.
- The subcommittee agreed to continue discussing the location and minimum spacing for instructions. Some manufactures believe they should inform consumers where and how to properly install their product as opposed to the standard requiring certain wordage.
- CPSC staff performed an incident data review and informed the subcommittee of which incidents were commercial environments (*e.g.*, day care facilities, preschools).
- Staff also provided the subcommittee with an analysis on failure mechanisms of internal latches.

Planned FY20 Activity Staff will continue working with the subcommittee and task group to develop a standard; the next teleconference is scheduled for November 2019.

Self-Balancing Scooters and Light Electric Vehicles

Staff Contact Mella, Lawrence

Voluntary Standard(s) *Electrical Systems for Self-Balancing Scooters* (UL 2272-2019)
Recreational Powered Scooters and Pocket Bikes (ASTM F2641-15)
Standard Consumer Safety Specification for Safety Instructions and Labeling for Recreational Powered Scooters and Pocket Bikes ASTM F2642-08 (2015)
ASTM WK57360 Standard Consumer Product Specification for Self-Balancing Scooters (Hoverboards) – Draft standard under development

Mandatory Standard(s) N/A

Standard(s) Update UL 2272 *Electrical Systems for Self-Balancing Scooters* was revised in February 2019. This revision includes requirements for battery cell connections.

Purpose To work with ASTM and UL on developing a new standard or revising the existing standard to strengthen the safety provisions addressing hazards associated with self-balancing scooters.

FY19 Activities The revision to the first edition of UL 2272 was published in February 2019.

Staff reviewed the ASTM ballot for the draft standard issued on June 3, 2019. At the end of FY19, many negative comments from the ballot were still unresolved.

Planned FY20 Activity Staff will participate in the next ASTM task group meeting, scheduled for November 2019.

Sling Carriers (Infant and Toddlers)

Staff Contact Nesteruk, Hope

Voluntary Standard(s) *Consumer Safety Specification for Sling Carriers* (ASTM F2907-15)

Mandatory Standard(s) 16 CFR part 1228, *Safety Standard for Sling Carriers*

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with sling carriers (sometimes called “infant slings”).

FY19 Activities On October 17, 2018, staff participated in the subcommittee meeting for sling carriers. During the meeting, two task groups provided updates: multi-occupant slings/dynamic test method and baby wearing apparel. A new task group was formed to consider incorporating the ad hoc formatting requirements into the sling carrier standard.

On March 6, 2019, ASTM issued a ballot item revising ASTM F2907-15 to address issues associated with multi-occupant slings. The ballot item received several persuasive negative votes.

Staff participated in the May 7, 2019 subcommittee meeting where the ballot results from the March ballot were discussed. In addition, the task group chair on baby wearing apparel provided an update report.

On September 5, 2019 ASTM issued a ballot with an item on sling carriers proposing several revisions to the current standard, to address the aspect that several sling carrier models allow/provide accommodations and instructions from the manufacturer to carry more than one child occupant at a time. Some of the revisions were re-balloted items as per comments and negative votes seen in the previous ballot. Other revisions were to the testing procedure to accommodate multiple occupants. This ballot item also addressed removing the upper weight limit of 35 pounds to allow the manufacturer to set an increased upper weight limit. At the end of FY19, the ballot results were not known.

Planned FY20 Activity

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Smoke Alarms

Staff Contact Lee, Arthur

Voluntary Standard(s) *Standard for Single and Multiple Station Smoke Alarms (UL 217)*
National Fire Alarm and Signaling Code (NFPA 72)

Mandatory Standard(s) N/A

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with UL, NFPA, and other stakeholders on potential revisions to standards and codes to strengthen safety provisions addressing hazards mitigated by smoke alarms.

FY19 Activities CPSC staff participated in a NFPA 72 committee meeting in July 2019. Public inputs were reviewed and the committee developed proposed revisions for the next edition of the code. Staff also participated on a technical panel for smoke alarm waking effectiveness. Staff reviewed a draft report by the Fire Protection Research Foundation.

In January of 2019, under the guidance of CPSC staff, the contractor began administering the National Smoke and CO Alarm Survey (SCOA) regarding the use and perception of smoke and CO alarms. Staff is working with the contractors to continue to execute the survey and enhance participation. There was no activity during the fiscal year on the UL standard for smoke alarms.

Planned FY20 Activity

Staff will continue working with contractor in completing Smoke and CO alarms survey. Staff will continue working with UL regarding the revision and improvement of the standard and will continue to participate in the NFPA 72 technical group to develop the next edition of the code. Staff will work with NPFA and UL in possibly developing proposals regarding to the audible frequency of smoke alarms.

Soft Infant and Toddler Carriers

Staff Contact Nesteruk, Hope

Voluntary Standard(s) *Standard Consumer Safety Specification for Soft Infant and Toddler Carriers (ASTM F2236-16a)*

Mandatory Standard(s) 16 CFR part 1226, *Safety Standard for Soft Infant and Toddler Carriers*

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with soft infant and toddler carriers.

FY19 Activities On October 17, 2018, staff participated in the subcommittee for soft infant and toddler carriers. During the meeting, the following task groups provided updates reports: round-robin testing, flammability, fastener strength.

Staff also participated in the May 7, 2019 subcommittee meeting. Three task groups provided update reports: unbounded leg openings, flammability and fastener strength.

On September 5, 2019, ASTM issued a ballot with two ballot items pertaining to soft infant and toddler carriers. The first item was a revision to the flammability requirements. The second item pertained to a negative vote regarding nursing warnings. At the end of FY19, the ballot results were not known.

Staff also reviewed and provided incident data to the subcommittee during the fiscal year.

***Planned FY20
Activity***

Staff participated in the ASTM October 2019 subcommittee meeting. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Sports Protective Gear/Football Helmets

Staff Contact McCallion, Richard

***Voluntary
Standard(s)*** Various headgear standards developed by NOCSAE.

***Mandatory
Standard(s)*** N/A

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with NOCSAE on revising the standards to strengthen safety provisions addressing hazards associated with football helmets.

FY19 Activities Staff participated in NOCSAE's summer standards meeting held on July 26, 2019 where ongoing NOCSAE research to advance a new youth football helmet was discussed. NOCSAE is considering the development of a new flag football helmet and shoulder pad standards. During the meeting, the committee discussed the research on youth football injuries conducted by the University of Ottawa and also reviewed the status of the standard under development.

***Planned FY20
Activity***

Staff participated at the NOCSAE Scientific Advisory Committee meeting, held in October 2019, to further development of the youth football helmet standard began in 2011. CPSC staff will continue to monitor NOCSAE standards and participate in future NOCSAE board meetings.

Spray Polyurethane Foam (SPF) Insulation

Staff Contact Layton, Adrienne

**Voluntary
Standard(s)**

Standard Practice for Spraying, Sampling, Packaging, and Test Specimen Preparation of Spray Polyurethane Foam (SPF) Insulation for Testing of Emissions Using Environmental Chambers (ASTM D7859-19)
Standard Test Method for Determining Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation using Micro-Scale Environmental Test Chambers (ASTM D8142-17)

Proposed New Standards under the jurisdiction of D22.05:
New Test Method for Determination of Vapor-Phase Organic Compounds Emitted from Spray Polyurethane Foam (SPF) Using Sorbent Tubes Analyzed by Thermal Desorption Gas Chromatography and Mass Spectrometry (WK40292)
Measuring Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Samples in a Large-Scale Spray Room (WK58354)
Estimating Emissions of Methylene diphenyl di-isocyanate (MDI) from Spray Polyurethane Foam (SPF) Insulation using Emission Cells or Micro-Scale Environmental Test Chambers (WK58355)
Conducting emission and fate modeling for Spray Polyurethane Foam (SPF) insulation in an indoor environment (WK58356)

**Mandatory
Standard(s)**

N/A

**Standard(s)
Update**

ASTM D7859-19, the latest revision of the *Standard Practice for Spraying, Sampling, Packaging, and Test Specimen Preparation of Spray Polyurethane Foam (SPF) Insulation for Testing of Emissions Using Environmental Chambers* was approved and published in 2019. This standard was revised to be consistent with other ASTM standards using micro-scale chambers.

Purpose

To work with ASTM on developing new standards to address hazards associated with chemical emissions from spray polyurethane foam insulation.

FY19 Activities

Staff participated two ASTM D22.05 subcommittee meetings on Indoor Air, one in October 2018 and the other in April 2019. In October, the subcommittee discussed recent ballot results and the status of all the standards in the subcommittee. Also at the October meeting, the subcommittee discussed an intra-laboratory study with standardized foam to measure the emissions from the foam in a statistical manner. In April, the subcommittee discussed a new full-scale SPF chamber emission test protocol. Also at the April meeting, the subcommittee discussed procedures for measuring the chemical emissions of semi-volatile and

volatile organic compounds from SPF insulation samples in a spray booth,

**Planned FY20
Activity**

Staff will continue to provide technical support to the subcommittee and participate in future subcommittee meetings.

Stationary Activity Centers

Staff Contact Lee, Kevin

**Voluntary
Standard(s)** *Standard Consumer Safety Specification for Stationary Activity Centers* (ASTM F2012-18^{e1})

**Mandatory
Standard(s)** *Standard Consumer Safety Specification for Stationary Activity Centers*, 16 CFR part 1238 (84 FR 28205), June 18, 2019, was approved and published during FY19.

**Standard(s)
Update** The mandatory safety standard 16 CFR 1238, *Standard Consumer Safety Specification for Stationary Activity Centers*, was approved and published during FY19.

Purpose To work with ASTM on revising the standard to: (1) strengthen its safety provisions addressing hazards, and (2) form the basis of a federal standard intended to reduce hazards associated with stationary activity centers.

FY19 Activities Staff participated in the F15.17 subcommittee meeting held in October 2018. During the meeting, staff provided a review of the strap integrity activity and recommendations for the standard to address incidents associated with strap failures due to fraying. CPSC-provided incident data were also reviewed. During the meeting, a new task group was formed to investigate similarities between stationary activity centers and infant floor seats. Staff will participate in the new task group.

Staff also attended the strap integrity task group meeting held in December 2018. The task group discussed an option to perform a life cycle test (25 pounds, 120,000 cycles) or to include a redundant strap that would encapsulate the entire system with a separate anchoring point. Staff attended task group teleconferences in May, July, and August focused on drafting requirements for a redundant strap safety system and a life cycle test.

ASTM F2012-18^{e1} was published in March 2018. On June 5, 2019, staff submitted a final rule briefing package to the Commission, recommending the Commission accept the standard as a mandatory safety standard. The Commission

voted to accept the standard. On July 23, 2019, the *Federal Register* published a final rule mandating ASTM F2012-18^{e1} as 16 CFR part 1238 (84 FR 28205).

**Planned FY20
Activity**

Staff will continue to attend and participate in future subcommittee meetings.

Swimming Pools/Spas, Drain Entrapment

Staff Contact Baker, Brian

Voluntary Standard(s) *American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP 16-2017).*

Mandatory Standard(s) 16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

Standard(s) Update The *Virginia Graeme Baker Pool and Spa Safety Act*, 16 CFR part 1450, was updated during FY19 to reference the most recent version of the voluntary standard, ANSI/APSP 16-17.

Purpose To work with PHTA to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing entrapment hazards in swimming pools, wading pools, spas, and hot tubs available to the general public, as well as products like pool drain covers.

FY19 Activities The National Swimming Pool Foundation® and APSP announced on January 22, 2019 that the organizations will unify to form the Pool & Hot Tub Alliance (PHTA). PHTA will be the official trade organization to manage certifications, standards, etc. for the pool, hot tub and spa industry.

Staff informed the voluntary standards committee on May 23, 2019 that the Commission voted to adopt ANSI/APSP-16-2017 as a standard referenced in the *Virginia Graeme Baker Pool and Spa Safety Act*.

**Planned FY20
Activity**

Staff will continue to work with the committee to monitor the effectiveness of the standard and make any revisions necessary.

Swimming Pools/Spas Safety, Vacuum Relief System

Staff Contact Baker, Brian

Voluntary Standard(s) *Standard for Safety Vacuum Release Systems, Automatic Pump Shut-Off Systems, and Shut-Off Systems, and Vacuum Limiting Systems for Swimming Pools, Spas, Wading Pools, Hot Tubs, and Catch Pools - APSP 17 (proposed standard, not yet approved).*

Mandatory Standard(s) 16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with PHTA on revising the standards to strengthen safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with safety vacuum release systems (SVRS) for swimming pools, spas, wading pools, and hot tubs.

FY19 Activities The National Swimming Pool Foundation® and APSP announced on January 22, 2019 that the organizations will unify to form the Pool & Hot Tub Alliance (PHTA). PHTA will be the official trade organization to manage certifications, standards, etc. for the pool, hot tub and spa industry.

Staff received a draft version of APSP-17 from the standards committee and has begun to review it.

Planned FY20 Activity Staff will complete the review of the draft standard and provide comments to the standards committee.

Table Saws (formerly Power Equipment)

Staff Contact Paul, Caroleene

Voluntary Standard(s) *Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-1: Particular Requirements for Transportable Table Saws (ANSI/UL 62841-3-1)*

Mandatory Standard(s) *NPR Safety Standard Addressing Blade-Contact Injuries on Table Saws (82 FR 22190 (May 12, 2017))*

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with UL on revising the standard to strengthen its safety provisions addressing hazards associated with blade-contact injuries from table saws.

FY19 Activities In January 2019, UL issued a proposal for preliminary review and comments. The proposal contained additional wording to clarify instruction requirements to address workpiece feed and jamming. Staff provided comments in support of the additional wording changes. The proposal did not reach consensus and no further action will be taken on the proposal.

Staff contacted UL staff regarding table saws on the market that list compliance to UL 987 but appear to have a single-hood blade guard design. UL clarified the differences in table saw requirements between UL 62841-3-1 and UL 987, and performance requirements that eliminate single-hood guard designs. UL also informed CPSC staff that UL 987 will be revised at the end of 2019 to remove all table saw requirements; after which time, all table saws will be covered under UL 62841-3-1.

Planned FY20 Activity Staff will review the UL proposal to delete table saw requirements from UL 987.

Tents

Staff Contact Tenney, Allyson

Voluntary Standard(s) ASTM (Under development, not yet published)

Mandatory Standard(s) N/A

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with ASTM on the development of a standard addressing hazards associated with tent flammability.

FY19 Activities Staff participated in the ASTM tent flammability task group meetings held in November 2018, March 2019, and June 2019. In November, the group discussed the status of available background and data on tents and related products. The task group will review data from the USA and Canada as well as data from other countries, as it becomes available. The task group also reviewed possible product definitions and scope and some proposed provisions and requirements that might be considered for an initial draft method.

In March 2019, the task group discussed the draft test specification on tent flammability including the definitions and scope.

In June, the task group discussed the surface area and composition of the fabrics outlined in the testing exemptions section of the draft test specification. The task group also discussed the status of the Canadian General Standards Board's revisions of the tent requirements. Canada's final draft standard, Flammability and Labeling Requirements for Tents, was submitted for review. Comments were received and are being reviewed by the task group.

***Planned FY20
Activity***

Staff will participate in the future subcommittee meetings, including a meeting scheduled for either November 2019 or January 2020 at the Outdoor Retailer Show.

Toddler Beds

Staff Contact Kish, Celestine

***Voluntary
Standard(s)*** *Standard Consumer Safety Specification for Toddler Beds (ASTM F1821-19^{e1})*

***Mandatory
Standard(s)*** 16 CFR part 1217, *Safety Standard for Toddler Beds*

***Standard(s)
Update*** ASTM F1821 *Standard Consumer Safety Specification for Toddler Beds* was revised twice during FY19. First, in December 2018, the standard was revised to include an updated definition of a corner post. In July 2019, the standard was revised again as ASTM F1821-19 and contained clarifications to the end structures and side rails testing requirements. Finally in August 2019, the standard was revised as ASTM F1821-19^{e1} with editorial corrections that did not affect the requirements within the standard.

Purpose To work with ASTM to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with toddler beds.

FY19 Activities On October 15, 2018, staff participated in the ASTM subcommittee meeting and discussed clarification/revision of the wording for mattress support and side rail attachment. The clarification is meant to explain that the testing is not for quality control, and therefore, every corner attachment point doesn't have to be tested. The testing is intended to cover any/all different types of attachments. This clarification was sent out to ballot on October 30, 2018, and the revision received two negative votes; those negatives were subsequently withdrawn. Additionally, during the October 15 subcommittee meeting, a new task group was formed to

look into possibly changing the scope of the standard to include mini cribs that convert to toddler beds.

On February 14, 2019, staff participated in the mini crib task group meeting. The purpose of the meeting was to discuss how mini cribs that convert to toddler beds should be handled since they don't fall within the scope of toddler beds because they don't use full-size crib mattresses. After much discussion, the task group decided to monitor these products for incidents, before proposing any changes to the scope of the standard.

Staff participated in the May 6, 2019 subcommittee meeting. The subcommittee chair indicated he planned to notify CPSC of the revised standard, once the 2019 version was published.

ASTM published ASTM F1821-19^{e1} in July 2019². Pursuant to section 104(b)(4)(B) of the CPSIA, ASTM notified the CPSC of the revision on August 13, 2019. CPSC staff prepared a briefing memorandum to the Commission, with recommendations regarding the revised standard. As of the end of the FY19, staff had not completed the briefing memorandum.

***Planned FY20
Activity***

Staff presented a briefing memorandum, with recommendations, to the Commission in October 2019. Staff will participate in future task group and subcommittee activities held during the remainder of FY20.

Toys

Staff Contact

Mordecai, Ben

***Voluntary
Standard(s)***

Standard Consumer Safety Specification for Toy Safety (ASTM F963-17)

***Mandatory
Standard(s)***

16 CFR part 1250, *Safety Standard for Toys*

***Standard(s)
Update***

No standards associated with this product were updated during FY19.

Purpose

To work with ASTM on revising the standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with toys.

² ASTM F1821-19 was published in July 2019. Upon publication, ASTM informed staff of an editorial mistake in the standard, that was promptly corrected and published an errata version, ASTM F1821-19^{e1}.

FY19 Activities Staff participated in the ASTM F15.22 subcommittee meeting on toy safety held on October 29, 2018. During the meeting, the subcommittee reviewed ballot items that were ready to be issued for acoustics, phthalates and expanding materials.

On November 12, 2018, ASTM issued a ballot with four items pertaining to the toy standard: (1) acoustics section revision, (2) expanding materials section revision, (3) tolerance correction on a Figure, and (4) phthalates section revision. All four items received negative votes. Following the ballot, the acoustics task group worked on the ballot item, taking the negative votes into consideration. In March 2019, staff provided input to the acoustics task group.

On March 7, 2019, the CPSC Office of General Counsel sent a letter to The Toy Association, Inc., in response to questions on the phthalates ballot and recent discussions between staff and the subcommittee leadership.

On April 24, 2019, staff attended an ASTM subcommittee meeting where U.S. and Canadian alignment on toy standards was discussed. Seven working groups will continue to address several areas of the standard with the goal to have recommendations for alignment identified in FY20.

Planned FY20 Activity

Staff will participate in the next ASTM subcommittee meeting when scheduled.

Upholstered Furniture

Staff Contact Lock, Andrew

Voluntary Standard(s) *Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture (ASTM E1353-16)*
Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture (NFPA 260 – 2019 Edition)

Mandatory Standard(s) N/A

Standard(s) Update NFPA 260 -2019 Edition of *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*, was revised and includes substantial revisions to the standard cover fabric and the foam substrate cited in Chapter 4 (Test Apparatus). Chapter 6 (Test Procedures) and Annex A (Explanatory Material) also contained revisions.

Purpose To work with ASTM, NFPA, and other stakeholders on revising standards to strengthen safety provisions addressing hazards associated with fires involving upholstered furniture.

FY19 Activities In November 2018, staff presented at the AHFA Regulatory Summit. Staff presented information regarding fire loss statistics and provided an update on the upholstered furniture flammability project at CPSC.

In December 2018, staff attended the ASTM E05 committee meetings on fire testing, including meetings associated with the test methods on upholstered furniture. The attendees discussed the ongoing round robin testing to evaluate foam thickness in smoldering tests.

In March 2019, staff participated in a BIFMA flammability subcommittee teleconference. A number of issues were discussed relating to the flammability of furniture items, included the repeal of California's Technical Bulletin (TB) 133, round robin testing in ASTM E05, changes to NFPA 260, and the current status of the SRM 1196 cigarette. California is considering adopting the CPSC SRM cigarette guidance provided for 16 CFR part 1632 for California's TB 117.

In August 2019, CPSC hosted a tech-to-tech meeting on upholstered furniture flammability. At this meeting stakeholders discussed with CPSC ways in which CPSC could contribute to improved consumer education. Also during the meeting, stakeholders discussed efforts, challenges, and concerns with current technology surrounding flame retardant chemicals.

Planned FY20 Activity

Staff will continue to work with ASTM, NFPA, and other stakeholders to address hazards associated with fires involving upholstered furniture.

Washing Machines

Staff Contact Kim, Yeon

Voluntary Standard(s) *Electric Clothes Washing Machines and Extractors (UL 2157)*

Mandatory Standard(s) N/A

Standard(s) Update No standards associated with this product were updated during FY19.

Purpose To work with UL on revising the standard to strengthen its safety provisions addressing hazards associated with an unbalanced load condition of top-loading washing machines.

FY19 Activities Staff is continuing its work with the UL working group to develop repeatable and reproducible testing with different washer configurations. In May 2019 staff

attended a meeting in Iowa where staff witnessed three industry-developed test methods to create a dynamically unbalanced load condition when the drum reaches a specific spin speed. AHAM is hoping to draft a proposed test method for consideration in UL 2157.

***Planned FY20
Activity***

Staff will continue to work with the manufacturers in the development of new test methods and requirements for top-loading clothes washing machines.

Window Coverings

Staff Contact Balci-Sinha, Rana

***Voluntary
Standard(s)*** *Standard for Safety of Corded Window Covering Products (ANSI/WCMA A100.1-2018)*

***Mandatory
Standard(s)*** ANPR published in January 2015 (80 FR 2327, January 16, 2015).

***Standard(s)
Update*** No standards associated with this product were updated during FY19.

Purpose To work with WCMA on revising the standard to strengthen its safety provisions addressing hazards associated with window covering cords.

FY19 Activities On March 12, 2019 staff participated in a WCMA steering committee meeting. The purpose of the meeting was to gather feedback on the new requirements that went into effect and to discuss potential proposals for the standard, which WCMA committed to open in mid-June 2019. During the meeting, the attendees agreed on the need for more education for online sellers on the difference between stock and custom products, such as a guidance document for online sellers. Additionally, staff provided ideas for the next revision and for the committee to consider, including: (1) segmenting custom products by size and/or type to meet stock product requirements, (2) considering cord retractors for custom products as an option (which is not allowed for stock products); (3) investigating complete inoperability of the product if tension device is not installed (current requirement is partial inoperability), and (4) considering cordless as default operating system for custom orders.

On May 16, 2019 staff sent a letter to WCMA requesting segmentation of custom window coverings by size and/or type and applying the requirement for stock products to these segments of custom products, presenting the cordless/short cords/inaccessible cords as the default operating system for custom product ordering process as an interim measure as well as interrupting the ordering process with an alert on hazardous cords if consumer wants to switch to corded

system, and balloting the rigid cord shroud requirement that was finalized by the task group, reaching out to online sellers and developing a guidance document for online sellers and providing clarification on whether the standard applies to curtain and drapery products. WCMA responded on August 12, 2019 and stated that they have put on hold the planned revision of ASNI/WCMA standard because the Government of Canada published a new regulation on corded window coverings. WCMA also stated that they are still moving forward with balloting the rigid shroud language for the standard. The letter did not state when this ballot would be issued.

*Planned FY20
Activity*

Staff will encourage WCMA to open its standard to address custom products and will attend and participate in upcoming committee meetings as they are scheduled and will review and comment on any ballots issued by WCMA.