



**UNITED STATES  
CONSUMER PRODUCT SAFETY COMMISSION  
4330 EAST WEST HIGHWAY  
BETHESDA, MARYLAND 20814**

This document has been electronically  
approved and signed.

**Memorandum**

Date: November 28, 2017

**TO:** The Commission  
Alberta E. Mills, Acting Secretary

**THROUGH:** Patricia M. Hanz, General Counsel  
Patricia H. Adkins, Executive Director  
DeWane Ray, Deputy Executive Director for Safety Operations  
George A. Borlase, Ph.D., Assistant Executive Director for Hazard Identification  
and Reduction

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

**SUBJECT:** Voluntary Standards Activities FY 2017 Annual Report

Attached is U.S. Consumer Product Safety Commission staff's Voluntary Standards Activities FY 2017 Annual Report (October 1, 2016–September 30, 2017), which is forwarded for your information. If you have any question, please contact Patricia Edwards at: 301-987-2224, or at: pedwards@cpsc.gov.

# ***VOLUNTARY STANDARDS TRACKING ACTIVITY REPORT***



## ***CPSC STAFF VOLUNTARY STANDARDS ACTIVITIES***

**FY 2017 ANNUAL REPORT  
(October 1, 2016– September 30, 2017)**

**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, 2016 – September 30, 2017**

### **SUMMARY**

This document is the current Voluntary Standards Tracking Activity Report (VSTAR), which shows, among other things, product or product areas associated with voluntary standards work, the name of the U.S. Consumer Product Safety Commission (CPSC or Commission) employee 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 the reporting period, and staff's next actions associated with the voluntary standard. The VSTAR report is issued bi-annually in the form of: (1) a Mid-Year Report, covering the period from October 1 through March 31, and (2) an Annual Report of the CPSC fiscal year, which covers the period from October 1 to September 30. This document is the FY 2017 Annual 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 either 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.

The FY 2017 CPSC Operating Plan, as modified during mid-year, outlines 76 different products for which staff was actively involved in the development of associated voluntary standards during the fiscal year. There are 35 CPSC employees serving as designated representatives for the standards work covering the 76 products outlined in this report. This Annual Report describes CPSC's staff's activity in providing technical support and the results (when applicable) of the activity, during the fiscal year. Other information, such as the standard(s) designation, associated mandatory standard (if applicable), contact person, purpose, next action, is also included for all 76 products covered in this report.

### **UPDATED STANDARDS**

Twenty-one new, revised, or reaffirmed<sup>1</sup> voluntary safety standards covered in the FY 2017 annual VSTAR report were published during the period October 1, 2016 to September 30, 2017, as outlined in Table 1 below. Three of the 21 standards were revised more than once in the reporting period. Additionally, as noted in Table 1, staff did not participate in the reaffirming of

---

<sup>1</sup> Re-approval of the existing standard without any changes.

two of the 21 standards. For those two standards, staff's activity commenced following their reaffirmation.

**Table 1: New, Revised or Reaffirmed Voluntary Standards Approved  
October 2016–September 2017**

<b>SDO</b>	<b>Standard</b>	<b>Product</b>	<b>Approval</b>	<b>Publication Date (Month/Year)</b>
ASTM	F3186-17	Adult Bed Rails	8/1/2017	Aug-17
ANSI/SVIA	ANSI/SVIA 1-2017	ATVs	6/30/2017	Jun-17
ASTM	F2388-17	Baby Changing Tables	6/1/2017	Aug-17
ASTM	F2640-16	Booster Seats	12/1/2016	Mar-17
ASTM	F2640-17	Booster Seats	3/1/2017	Mar-17
ASTM	F2640-17e1	Booster Seats	3/1/2017	Apr-17
ASTM	F2613-17	Children's Chairs and Stools	6/15/2017	Aug-17
ASTM	D3475-17	Child-Resistant Packages	3/1/2017	Apr-17
UL	2034 (Ed 4)	CO Alarms	3/31/2017	Mar-17
CANENA/UL	66335-2-24	Flammable Refrigerants (Refrigerators)	4/28/2017	Apr-17
ASTM	F404-17	High Chairs	2/1/2017	Mar-17
ASTM	F1148-17	Home Playground Equipment	3/1/2017	Apr-17
ASTM	F2670-17	Infant Bath Tubs	1/1/2017	Jan-17
ASTM	F2167-17	Infant Bouncer Seats	4/1/2017	Jul-17
ASTM	F3116-16a	Infant Inclined Sleep Products	10/1/2016	Oct-16
ASTM	F3118-17	Infant Inclined Sleep Products	1/1/2017	Mar-17
ASTM	F2369-16	Non-Integral Firearm Locking Devices*	10/1/2016	Oct-16
ASTM	F1487-17	Playground Equipment for Public Use	2/15/2017	Apr-17
ASTM	F1292-17	Playground Surfacing/Impact Attenuation	5/1/2017	May-17
UL	2272 (Ed 1)	Self-Balancing Scooters	11/21/2016	Nov-16
UL	217 (Ed 8)	Smoke Alarms	11/21/2016	Nov-16
ASTM	F1821-16	Toddler Beds	10/1/2016	Oct-16
ASTM	F963-16	Toys	8/1/2016	Oct-16
ASTM	F963-17	Toys	6/1/2017	Aug-17
ASTM	F2456-16	Youth-Resistant Firearm Containers*	10/1/2016	Oct-16

\*Staff was not involved in the revision of these standards.

## **VOLUNTARY STANDARDS AND THE CONSUMER PRODUCT SAFETY IMPROVEMENT ACT OF 2008 (CPSIA)**

During the reporting period, CPSC staff's involvement continued on voluntary standards activities associated with implementing the Consumer Product Safety Improvement Act of 2008 (CPSIA) (Pub. L. No. 110-314).

CPSC staff worked with ASTM and its subcommittees during the reporting period to fulfill certain requirements of the CPSIA. The Danny Keysar Child Product Safety Notification Act, 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.

A "durable infant or toddler product" is defined in the CPSIA as "a durable product intended for use, or that may be reasonably expected to be used, by children under the age of 5 years and includes: full-size and non-full-size cribs; toddler beds; high chairs, booster chairs, and hook-on chairs; bath seats; gates and other enclosures for confining a child; play yards; stationary activity centers; infant carriers; strollers; walkers; swings; and bassinets and cradles." Since the CPSIA's inception, the Commission has added eight additional categories of products to the list of durable infant or toddler products: children's folding chairs; changing tables; infant bouncers; infant bathtubs; bed rails; infant slings; crib bumper pads and crib mattresses/supplemental mattresses.

ASTM subcommittees develop and maintain voluntary safety standards for durable infant or toddler products, as well as other products. These subcommittees generally are comprised of consumer groups, juvenile product manufacturers, independent child product engineers and experts, and they may also include other interested stakeholders. Selected subcommittees, with input from CPSC staff, develop revised voluntary safety standards. Cooperative activities among CPSC staff and the ASTM voluntary standards subcommittees include evaluating death and injury data, hazard patterns, and recent recalls to identify gaps or potential safety hazards not covered in existing ASTM safety standards. These activities also include developing new testing protocols and conducting laboratory validation of testing approaches.

Before issuing a durable infant or toddler product safety standard, the Commission, in consultation with representatives of consumer groups, juvenile product manufacturers, and independent child product engineers and experts, is required to examine and assess the effectiveness of any voluntary consumer product safety standard for the relevant durable infant or toddler product. All Section 104 rulemaking goes through a notice of proposed rulemaking (NPR) stage that includes seeking public comment, followed by issuance of a final rule. After the Commission promulgates a safety standard that references an ASTM voluntary standard, ASTM is required to notify the Commission if the referenced voluntary standard is revised. Staff

evaluates the revised ASTM standard and assesses whether the revision improves the safety of the product. Unless the Commission determines that the revision does not improve the safety of the product, the revision becomes the new CPSC mandatory standard.

During the reporting period, the Commission approved three final rules under Section 104 of the CPSIA; infant slings, infant bathtubs and infant bouncer seats. In addition, the mandatory standard for toddler beds was revised during the period, to refer to the recently revised voluntary standard.

Section 106 of the CPSIA requires that the voluntary standard ASTM F963-07 be considered a consumer product safety standard for toys. The statute also requires ASTM to notify the Commission when a revision to F963 is proposed. Revisions to F963 will then become the new consumer safety product standard for toys, issued by the Commission, effective 180 days after notification, unless, within 90 days after receiving that notice, the Commission notifies ASTM that it has determined that the proposed revision does not improve the safety of the toys.

During the reporting period, ASTM notified the Commission twice that a revision of the toy standard, F963, had been published. CPSC received the first notification on November 1, 2016, for the F963-16 revision. The Commission approved a direct final rule referencing the 2016 version of the toy standard, and the final rule published on February 2, 2017. ASTM F963-16 took effect as the revised consumer product safety standard for toys on April 30, 2017. CPSC received the second notification on September 1, 2017, for the F963-17 revision. At the end of the reporting period for this report, the Commission has not yet acted on this notification.

## **VOTING AND LEADERSHIP ROLES ON VOLUNTARY STANDARDS**

In accordance with the Commission's vote on the 2016 revision of 16 C.F.R. part 1031, "*Commission Participation and Commission Employee Involvement in Voluntary Standards Activities*," staff and the Executive Director's office recently submitted a report to the Commission, outlining staff's assessment of the activities associated with voting and leadership positions on voluntary standards. As the Commission directed, the report summarized staff's views on the value of any voting and leadership activity occurring within the 12-month period covered by the report. The report described the resources expended for the voting and leadership activities during the same period and included any recommendations staff had regarding voting or leadership activities in light of experience. In accordance with the Commission's direction, information about staff voting and leadership activities is also now included in the VSTAR report. Below is an excerpt from the report outlining staff's voting and leadership roles for the period September 13, 2016 through September 30, 2017.

On September 13, 2016, Tim Smith of the CPSC's Human Factors Division of the Engineering Sciences Directorate cast his vote on an ASTM voluntary standard for high chairs, after

receiving approval from the Office of the Executive Director. Since then, and through September 30, 2017, staff has voted on five other voluntary standards ballots. Scott Ayers voted on an ASTM ballot for gasoline containers; Janet Buyer voted on two ballots regarding portable generators; Hope Nesteruk voted on an ATV ballot; and Suad Wanna-Nakamura voted on a bouncer seat standard. In addition, two staff members are currently serving in leadership positions for ASTM standards. Ian Hall serves as the task group chair for headgear sensors, and Scott Ayers serves as task group chair for the development of flame-mitigation devices for flammable liquid containers. All of these activities are summarized in Table 2 below:

**Table 2: Summary of Staff Voting and Leadership Activity on Voluntary Standards from September 2016 through September 2017**

<b>Staff</b>	<b>Request</b>	<b>Standard</b>	<b>Product</b>	<b>Approval Date</b>
Smith, Tim	Vote	ASTM F404	High Chairs	Sep-16
Ayers, Scott	Vote	ASTM F2517	Gasoline Containers	Nov-16
Buyer, Janet	Vote	PGMA G300-2015	Portable Generators	Nov-16
Buyer, Janet	Vote	UL 2201	Portable Generators	Nov-16
Hall, Ian	Leadership	ASTM - TBD	Headgear Sensors	Nov-16
Nesteruk, Hope	Vote	ANSI/SIVA 1-2010	ATVs	Nov-16
Wanna-Nakamura, Suad	Vote	ASTM F2167	Infant Bouncers	Feb-17
Ayers, Scott	Leadership	ASTM - TBD	Flammable Liquids - Containers	Apr- 17

## **STANDARD DEVELOPMENT ORGANIZATION ABBREVIATIONS**

The following list contains abbreviations for standard development organizations or affiliates that staff is working with in the development of the standards covered by this VSTAR report.

ACBMA      American Circuit Breaker Manufacturers Association

AFSL        The American Fireworks Standards Laboratory

AHAM        Association of Home Appliance Manufacturers

AHFA        American Home Furnishing Alliance

ANSI	The American National Standards Institute
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
CAN	Health Canada Regulation
CANENA	Council for Harmonization of Electrotechnical Standards of the Nations in the Americas
CSA	Canadian Standards Association
ICC	International Code Council
IEEE	The Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization <ul style="list-style-type: none"> <li>• TAG – Technical Advisory Group</li> <li>• TC – Technical Committee</li> </ul>
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association <ul style="list-style-type: none"> <li>• NEC – National Electrical Code</li> </ul>
NIST	National Institute of Standards and Technology
NOCSAE	National Operating Committee on Standards for Athletic Equipment
OPEI	Outdoor Power Equipment Industry
PGMA	Portable Generator Manufacturers Association
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"> <li>• STP – Standard Technical Panel</li> </ul>
WCMA	Window Covering Manufacturers Association

## Table of Contents

Adult Bath Tubs .....	10
All-Terrain Vehicles (ATVs).....	10
Baby Monitors .....	11
Bassinets/Cradles .....	12
Batteries (Button, Coin Cell, Lithium, Toy, and Electronic Devices).....	13
Bed Rails (Adult) .....	14
Bedside Sleepers .....	15
Booster Seats.....	15
Candles and Candle Accessories .....	16
Carbon Monoxide Alarms.....	17
Changing Tables .....	18
Child-Resistant Packaging (CRP).....	19
Clothes Dryers .....	19
Constant-Air Inflatable Play Devices (for Home Use) .....	20
Crib Bumpers.....	20
Cribs (Commercial) .....	21
Cribs (Full-Size).....	22
Cribs (Non-Full-Size) and Play Yards.....	22
Fireworks.....	23
Flammable Liquids (Flame Mitigation Devices for Disposable Fuel Containers).....	24
Flammable Refrigerants.....	25
Folding Chairs and Stools (Children’s) .....	26
Formaldehyde in MDF.....	26
Formaldehyde in Particleboard.....	27
Frame Child Carriers.....	27
Fuel Tanks (Leakage) .....	28
Furniture Tip-Over.....	29
Gas Furnaces (CO Sensors).....	30
Gas Ranges (Control Panels) .....	31
Gasoline Containers (Child-Resistant Containers) .....	32
Gasoline Containers (Flame Mitigation) .....	32
Gates and Other Enclosures .....	33
Hand-Held Carriers.....	34
Helmets (Recreational) .....	35
High Chairs .....	35
Hook-On Chairs .....	36
Inclined Sleep Products.....	37
Infant Bath Seats .....	38
Infant Bath Tubs .....	38
Infant Bouncers.....	39
Infant Slings (Sling Carriers) .....	40
Infant Swings .....	41
Infant Walkers.....	41
Liquid Laundry Packets .....	42

Mattresses.....	42
Nanotechnology .....	43
National Electrical Code (NEC) .....	44
Non-Integral Firearm Locking Devices .....	45
Phthalates (Testing Methods) .....	45
Playground Equipment (Home) .....	46
Playground Equipment (Public).....	46
Playground Surfacing.....	47
Pools, Portable Unprotected (Child Drowning).....	48
Portable Bed Rails (Children’s).....	48
Portable Fireplaces (Firepots and Unvented Alcohol Appliances).....	49
Portable Generators.....	50
Power Equipment (formerly Table Saws).....	51
Recreational Off-Road Vehicles (ROVs) .....	51
Safety Locks and Other Household Child- Inaccessibility Devices .....	52
Self-Balancing Scooters .....	52
Smoke Alarms.....	53
Soft Infant and Toddler Carriers .....	54
Sports Protective Gear .....	55
Spray Polyurethane Foam Insulation .....	55
Strollers .....	57
Swimming Pools and Spas (Drain Covers).....	58
Swimming Pools and Spas (Vacuum Relief Systems) .....	58
Tents.....	59
Toddler Beds.....	59
Torch Fuel and Lamp Oil.....	60
Toys.....	61
Upholstered Furniture .....	62
Washing Machines, Top Loading .....	63
Window Coverings (Blind Cords) .....	63
Youth-Resistant Firearms Security Containers.....	64

***CPSC Staff Voluntary Standards Activities  
FY 2017 Mid-Year Report  
(October 1, 2016–March 31, 2017)***

<b><i>Product</i></b>	<b>Adult Bath Tubs</b>
<b><i>Staff Contact</i></b>	McCallion, Richard
<b><i>Voluntary Standard(s)</i></b>	<i>Consumer Safety Specification for Slip-Resistant Bathing Facilities (ASTM F462-withdrawn)</i>
<b><i>Mandatory Standard(s)</i></b>	NA
<b><i>Purpose</i></b>	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.
<b><i>Activities</i></b>	In 2016, ASTM withdrew the standard ASTM F462, due to inactivity of more than 5 years. To help re-establish the standard, or to develop a new standard, CPSC staff attended an ASTM meeting on January 31, 2017. Staff also provided incident data to the subcommittee. During the meeting, test methods, equipment, and requirements relating to slip resistance were discussed.
<b><i>Next Action</i></b>	Staff will participate in the next subcommittee meeting when scheduled.
<b><i>Product</i></b>	<b>All-Terrain Vehicles (ATVs)</b>
<b><i>Staff Contact</i></b>	Paul, Caroleene
<b><i>Voluntary Standard(s)</i></b>	<i>Four Wheel All-Terrain Vehicles (ANSI/SVIA 1-2017)</i>
<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. part 1420, <i>Standard for All-Terrain Vehicles</i>
<b><i>Purpose</i></b>	To work with SVIA 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 ATVs.

**Activities**

On October 31, 2016, CPSC staff attended a meeting with SVIA regarding the pre-canvas draft of ANSI/SVIA 1. The draft included a table detailing proposed new requirements for vehicle conspicuity, headlamps, tail lamps, stop lamps, and reflectors. The discussions also included the definition of “low-pressure tires,” owner’s manuals, and the effective date of the standard. SVIA issued a canvas ballot on December 5, 2016. The canvas ballot included many of the changes discussed at the October 31 meeting, including requirements to increase the conspicuity of the vehicles. Staff exercised its right to vote on the canvas ballot (after obtaining approval from the Executive Director) and submitted an “affirmative with comment” vote on January 26, 2017. As part of their comments, staff urged SVIA to express the effective date in terms of production date (rather than the “2019 model year vehicles” proposed in the ballot). The revised standard was approved and published in June 2017. The standard did not reflect any change to the wording of effective date, as requested by staff. The Commission published an NPR on September 13, 2017, which proposed to incorporate by reference, the revised SVIA standard.

Staff also provided incident data (summary of fatal incident reports from a two year period) to SVIA during the reporting period. Additionally, on September 6, 2017, CPSC staff hosted a meeting of the ANSI/SVIA committee. The purpose of this meeting was to update the ANSI/SVIA committee on the recent, present, and future ATV work being performed by CPSC staff and the contractor. CPSC staff encouraged the committee to make comments on technical reports and to observe and participate with CPSC staff in conducting tests and evaluating ATVs.

**Next Action**

Staff will be providing SVIA with in-depth investigation reports regarding fatal incidents and will be conducting more testing. Staff will also prepare a final rule to update 16 C.F.R. part 1420, accordingly. Staff will also continue to work and meet with SVIA, as needed, regarding additional improvements to the standard.

**Product**

**Baby Monitors**

**Staff Contact**

Lee, Doug

**Voluntary Standard(s)**

*Consumer Safety Specification for Baby Monitors (ASTM F2951-13)*

**Mandatory Standard(s)**

NA

**Purpose**

To work with ASTM on revising the standard to address strangulation and fire hazards associated with the use of baby monitors.

**Activities** On April 4, 2017, ASTM met. During the meeting, incident data supplied by staff in 2016 were discussed. A task group was formed to review the data in more detail. A battery task group was formed to consider adopting requirements from applicable UL standards or from the new battery requirements from the ASTM toy standard, F963. In addition, a task group considering wearable baby monitoring devices was formed. Staff is participating on all of these task groups. On May 22, 2017, the battery task group met to consider various safety requirements for baby monitor batteries. As a result of the meeting, a ballot was issued that required battery-powered baby monitors to comply with specific electrical requirements from other voluntary standards. That ballot received one negative vote and one comment.

**Next Action** Staff will participate in the next subcommittee meeting scheduled for October 24, 2017, and will continue to monitor and participate in task groups, as needed.

**Product** **Bassinets/Cradles**

**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Bassinets and Cradles (ASTM F2194-16e<sup>1</sup>)*

**Mandatory Standard(s)** 16 C.F.R. part 1218, *Safety Standard for Bassinets and Cradles*

**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 bassinets and cradles.

**Activities** During the reporting period, staff attended and participated in task group meetings for warning/labeling requirements, baby boxes, low standing bassinets, compact bassinets, barrier/side height requirements, and folding mechanisms. The baby box task group, which was formed from the “low standing bassinet” task group, had substantial activity, meeting on November 9, 2016, March 22, 2017, and June 15, 2017. On April 3, 2017, the full subcommittee met and the task groups reported their progress. No new requirements were proposed for ballot in the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting in October 2017.

*Product*

## **Batteries (Button, Coin Cell, Lithium, Toy, and Electronic Devices)**

*Staff Contact*

Lee, Doug

*Voluntary Standard(s)*

*Standard for Safety for Products that Incorporate Button or Coin Cell Batteries Using Lithium Technologies, (UL 4200A);*  
*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);*  
*Safety Standards for Primary, Secondary and Lithium Batteries (ANSI/NEMA C18);*  
*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);*

*Mandatory Standard(s)*

None for batteries exclusively

*Purpose*

To work with the various standard developers on revising battery and battery charger safety standards and support developing certification programs for batteries to address hazards, including overheating, fire, thermal burns, ingestion, exposure to electrolytes, explosions, and electrical shock from chargers.

*Activities*

See activity reports for ***Baby Monitors, Self-Balancing Scooters*** and ***Toys*** for activity relating to those specific products. This report will cover other battery-related work.

Staff has been very active in efforts related to battery safety, including significant work outside of voluntary standards development. The voluntary standards work includes working with UL to develop a Lithium Battery Safety Training seminar in China in May 2017. Staff also participated in a federal interagency lithium battery safety working group to coordinate lithium battery safety issues among agencies. Staff attended NEMA meetings on October 18-19, 2016, February 21-22, 2017 and June 7-8, 2017, regarding ANSI/NEMA C18 standard for lithium batteries. Topics discussed included coin cell ingestion hazard-mitigation strategies, counterfeit batteries and lithium-ion battery safety. NEMA issued a letter ballot in 2017 for ANSI/NEMA C18.3M Part 2. Staff provided written ballot comments regarding the proposed pictogram for ingestion hazards. Staff also participated in a UL 4200A meeting held on November 11, 2016, to define requirements for button/coin batteries that are other than lithium chemistry.

In April 2017, staff met with CTIA, the trade association for wireless communications, regarding IEEE 1725 and IEEE 1625. The purpose of the first part of the meeting was to consider proposed requirements to address recent field incidents and recalls with cellular phones and laptop computers. The second part of the meeting was to review battery life requirements. During the meeting, staff presented recommendations to improve the two voluntary standards. In June, staff participated in ANSI/NEMA C18 battery meetings, where various items related to the revision of the C18 standards were on the agenda. International efforts dealing with the “keep batteries away from children” pictograms and labeling of button batteries were discussed. Also discussed were lithium battery incidents and potential standards improvements. A button battery task force meeting was held on April 25, 2017, to discuss updates on lithium coin cell mitigation efforts and incident data. This meeting was followed by a UL 4200A task group meeting in May. During the task group meeting, the requirements for button/coin cells used in electronic products that are other than lithium chemistry continued to be defined. In addition, comments from the task force were provided for consideration.

**Next Action** In FY 2018, the VSTAR reports will separate the battery activity on voluntary standards into two separate entries: ingestion hazards (button batteries) and fire/explosion hazards (lithium ion batteries). Staff will continue to participate in ANSI/NEMA and UL meetings to draft and harmonize requirements to eliminate or reduce ingestion and chemical burn hazards associated with button/coin cell batteries and to reduce overheating and fire hazards with high energy density batteries. Staff will continue to monitor other battery standards to address fire and other hazards with batteries.

**Product** **Bed Rails (Adult)**

**Staff Contact** Taylor, Michael

**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.

**Purpose** To work with ASTM to develop a standard to address hazards associated with adult portable bed rails.

**Activities** In August 2017, ASTM published a new standard, ASTM F3186-17 *Standard Specification for Adult Portable Bed Rails and Related Products*. Staff has participated in the development of this new standard since 2014. During the

reporting period, staff provided comments in support of the ballot.

**Next Action** Staff will review and monitor the standard and the related incidents to ensure adequacy of the standard.

**Product** **Bedside Sleepers**

**Staff Contact** Nesteruk, Hope

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

**Mandatory Standard(s)** 16 C.F.R. part 1222, *Safety Standard for Bedside Sleepers*

**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 bedside sleepers.

**Activities** Staff reviewed and analyzed incident data associated with bedside sleepers in the reporting period. The data summary was provided to ASTM in September 2017. No ASTM meetings occurred during the reporting period.

**Next Action** Staff will continue to review and analyze incident data annually and participate in the next ASTM subcommittee meeting when it is scheduled.

**Product** **Booster Seats**

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Booster Seats (ASTM F2640-17<sup>e1</sup>)*

**Mandatory Standard(s)** NPR 16 C.F.R. part 1237, *Safety Standard for Booster Seats (82 FR 22925 (May 19, 2017))*

**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 booster seats.

**Activities**

ASTM approved and published two new versions and an errata correction of the booster seat voluntary standard in the reporting period. The first revision, ASTM F2640-16, includes new requirements for providing booster seat measurements. The second revision, ASTM F2640-17, includes new warnings and labeling requirements, and testing requirements for attachment to adult chairs. The errata correction (ASTM F2640-17<sup>e1</sup>) contained minor editorial changes.

During the reporting period, staff attended and participated in subcommittee meetings held on January 17 and April 3, 2017. Staff also analyzed incident data and supplied a summary to ASTM. Staff participated in several task groups during the reporting period. In May 2017, staff submitted a briefing package for a NPR on booster seats. Staff recommended, and the Commission approved, that the Commission propose to incorporate by reference ASTM F2640-17<sup>e1</sup>, without modification, as the safety standard for booster seats under Section 104 of the CPSIA.

**Next Action**

Staff will attend the October 2017 ASTM subcommittee meeting on booster seats. In addition, staff's briefing package for the final rule under Section 104 of the CPSIA is expected to go to the Commission in FY 2018.

**Product**

**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 F2417-16)*  
*Standard Specification for Fire Safety for Candle Accessories (ASTM F2601-16)*  
*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 F1972-13)*

**Mandatory Standard(s)**

NA

**Purpose**

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

**Activities**

Staff attended several ASTM subcommittee and task group meetings during the reporting period. Staff participation included working with task groups associated with rewriting standards to improve readability, candle fire safety,

candle emissions, and candle incident reviews. ASTM issued two ballot items associated with candles on January 30, 2017. One was a substantial rewrite of ASTM F2417-16, and the other was the re-balloting of requirements for tea light and taper candle holders for ASTM F2601-16. Both of these ballots received negative votes. The ballot items were reworked and reissued in July 2017. Both ballot items received negatives again. The task groups made editorial changes to both F2417 and F2601, which led the negative votes to be withdrawn.

**Next Action** Staff expects that the next revision of ASTM F2417 will be approved and published in early FY 2018. Staff will continue to participate in ASTM subcommittee teleconferences and attend subcommittee meetings scheduled during FY 2018.

**Product** **Carbon Monoxide Alarms**

**Staff Contact** Brookman, Matt

**Voluntary Standard(s)** *Single and Multiple Station Carbon Monoxide Alarms* (UL 2034)

**Mandatory Standard(s)** NA

**Purpose** To work with UL on revising the standard to address the hazards associated with carbon monoxide.

**Activities** On February 16, 2017, CPSC hosted a workshop entitled, “Survey on Usage and Functionality of Smoke Alarms and CO Alarms in Households.” CPSC staff intends to conduct a national census (or representative in-home survey) on the prevalence and characteristics of smoke alarms and carbon monoxide alarms. Staff held the workshop to gather feedback from stakeholder groups for this planned survey. The feedback gathered will help inform the questions and methodology of the survey, as well as obtain information on how the survey is communicated (*i.e.*, what are the really important pieces of data that need to be gathered and included in the overall data set?). During the reporting period, staff also reviewed UL 2034 revision proposals. A new revision of the standard was approved and published on March 31, 2017. Staff continues to monitor the development of UL 2034 and develop the national survey. To date, a preliminary survey questionnaire has been drafted.

**Next Action** Staff intends to use the information gained during the workshop to continue to develop the national survey and support the development of UL 2034.

**Product** **Changing Tables**

**Staff Contact** Torres, Carlos

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Baby Changing Tables for Domestic Use (ASTM F2388-17)*

**Mandatory Standard(s)** *NPR Safety Standard for Baby Changing Products (81 FR 66881 (September 29, 2016))*

**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 changing tables.

**Activities** This standard was very active during the reporting period, with many ballot items issued throughout several ballots. Ballot items regarding a name change for the standard (from *Baby Changing Tables* to *Baby Changing Products*), terminology, labeling and instructional literature changes; and revised requirements for barriers and restraints were issued during the fiscal year.

Staff provided comments to support the first round of ballot items and also urged ASTM to continue to work on requirements for threaded fasteners, as was included in the NPR. A second set of ballots was issued on February 28, 2017, and an item relating to threaded fasteners was included, as were other items pertaining to terminology and labeling. A revised standard was approved on June 1, 2017, and it published in August 2017. The ballot items that did not pass the first two rounds, plus some new items, were balloted again between May and September 2017. As of the end of the reporting period, the results of the September ballots were unknown.

During the reporting period, staff also attended task group meetings and subcommittee meetings on December 21, 2016, January 17, 2017, and February 8 and 17, 2017. The meetings reviewed and discussed the recently balloted items. Staff also attended ASTM subcommittee meetings on April 3 and June 27, 2017, where ballot results were reviewed. In addition, staff attended several task group meetings in the second half of FY 2017.

**Next Action** Staff will participate in the next ASTM subcommittee meeting scheduled for October 2017. In addition, staff is expected to prepare a briefing package for the final rule for changing products in FY 2018.

**Product**

**Child-Resistant Packaging (CRP)**

**Staff Contact**

Eilbert, Mark

**Voluntary Standard(s)**

*Standard Classification of Child-Resistant Packages ASTM D3475-17*

**Mandatory Standard(s)**

Poison Prevention Packaging Act of 1970 (PPPA)

**Purpose**

To work with ASTM F02.50 on package design and development to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with child-resistant packaging.

**Activities**

Staff reviewed a ballot issued in January 2017 to revise D3475. The ballot contained one addition, one correction, and a company name update. The ballot passed and the revised standard was approved on March 1, 2017.

**Next Action**

Staff will participate in the next ASTM D10.32 subcommittee meeting scheduled for April 2018.

**Product**

**Clothes Dryers**

**Staff Contact**

Lee, Arthur

**Voluntary Standard(s)**

*Standard for Electric Clothes Dryers (UL 2158)*

**Mandatory Standard(s)**

NA

**Purpose**

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

**Activities**

On November 1, 2016, staff participated in a joint task group meeting for clothes dryer safety. The meeting centered on the testing of surrogate lint materials. The task group also discussed a special study to gather fire incident data to see if changes made to dryer designs beginning in 2013 to incorporate fire containment requirements have been effective. Staff also met with AHAM in November 2016, to review the various proposals and activities of AHAM members, including research on ignition sources of lint in clothes dryers. On August 16, 2017, staff attended the Joint Clothes Dryer Safety Working Group. During the meeting, proposals for revisions to UL 2158 were discussed. As of the end of the reporting period, the proposals had not been

submitted to UL for consideration.

**Next Action** CPSC staff will continue to participate on the UL STP, and any related working group, to review and develop any proposals presented to the STP, as appropriate.

**Product** **Constant-Air Inflatable Play Devices (for Home Use)**  
(e.g., Noncommercial “Bounce Houses” and Inflatable Slides)

**Staff Contact** Amodeo, Vince

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Constant Air Inflatable Play Devices for Home Use (ASTM F2729-12)*

**Mandatory Standard(s)** NA

**Purpose** To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with inflatable play devices intended for home use.

**Activities** Staff attended a subcommittee meeting on November 16, 2017, where past ballot items were reviewed. The ballot items revised the anchoring and stake requirements and also provided new warnings associated with wind conditions. Negatives were received on all balloted items, and the subcommittee found the negatives non-persuasive. In April 2017, ASTM issued a ballot item consisting of a new figure relating to visibility. Staff submitted written comments on the ballot, providing suggested editorial changes to the text regarding the figure. The ballot item received negative votes that have not been resolved as of the end of the reporting period.

**Next Action** Staff will participate at the next subcommittee meeting set for November 2017.

**Product** **Crib Bumpers**

**Staff Contact** Smith, Tim

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

<b><i>Mandatory Standard(s)</i></b>	12-2 <i>Petition on Crib Bumpers</i> docketed in June 2012; Petition granted in May 2013; Section 104 of the CPSIA (to be developed)
<b><i>Purpose</i></b>	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.
<b><i>Activities</i></b>	<p>In late FY 2016, staff presented a briefing package to the Commission entitled, “CPSC Staff Response to the Record of Commission Action on Crib Bumpers.” On October 19, 2016, the Commission voted to amend the FY 2017 Operating Plan to include rulemaking activity for crib bumpers under Section 104 of the CPSIA and to develop an NPR in FY 2018.</p> <p>On December 6, 2016, staff advised ASTM by letter of the Commission’s vote and asked ASTM’s subcommittee on infant bedding to form task groups to update ASTM F1917-12as follows: (1) develop firmness requirements, (2) develop airflow requirements, and (3) improve warning and instructional requirements for crib bumpers.</p> <p>Staff attended and participated in ASTM subcommittee meetings on April 6 and June 27, 2017. The task groups that staff requested were established at the April meeting and the members provided reports at the June meeting. In addition, staff attended task group meetings in May and June regarding firmness and airflow.</p>
<b><i>Next Action</i></b>	Staff will prepare a briefing package for an NPR on crib bumpers in FY 2018 and will also participate in ASTM task group and subcommittee meetings on infant bedding.
<b><i>Product</i></b>	<b>Cribs (Commercial)</b>
<b><i>Staff Contact</i></b>	Nesteruk, Hope
<b><i>Voluntary Standard(s)</i></b>	<i>Standard Consumer Safety Performance Specification for Commercial Cribs</i> (ASTM F2710-13)
<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. part 1219, <i>Safety Standard for Full-Size Cribs</i> , and C.F.R. part 1220, <i>Safety Standard for Non-Full-Size Baby Cribs</i>
<b><i>Purpose</i></b>	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.

*Activities* During the reporting period, staff reviewed incident data relating to commercial cribs, and supplied the data to ASTM.

*Next Action* CPSC staff will participate at the next subcommittee meeting, when scheduled.

*Product* **Cribs (Full-Size)**

*Staff Contact* Nesteruk, Hope

*Voluntary Standard(s)* *Standard Consumer Safety Specification for Full-Size Cribs (ASTM F1169-13)*

*Mandatory Standard(s)* 16 C.F.R. part 1219, *Safety Standard for Full-Size Cribs*

*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.

*Activities* During the reporting period, staff reviewed incident data relating to full-size cribs, and supplied the data to ASTM.

*Next Action* Staff will participate in the next subcommittee meeting, scheduled for October 2017.

*Product* **Cribs (Non-Full-Size) and Play Yards**

*Staff Contact* Nesteruk, Hope

*Voluntary Standard(s)* *Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards (ASTM F406-15)*  
*Standard Consumer Safety Specification for Crib Mattresses (ASTM F2933-16)*

*Mandatory Standard(s)* 16 C.F.R. part 1220, *Safety Standard for Non-Full-Size Baby Cribs* and 16 C.F.R. part 1221, *Safety Standard for Play Yards*

<i>Purpose</i>	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.
<i>Activities</i>	<p>The play yard task groups looking at accessory entrapment and play yard mattress pad breathability were active during the reporting period. Staff participated in several task group meetings for those two task groups. In addition, under ASTM F2933-16, a task group dealing with play yard replacement mattresses was active. Staff also attended subcommittee meeting on April 3, 2017, and a task group meeting on September 20, 2017.</p> <p>For non-full size cribs, there were no voluntary standards meetings during the reporting period. However, staff sent a letter to the subcommittee chair asking the group to meet and look at revising the standard to match what is in 16 C.F.R part 1220 because ASTM F406-15 contains a requirement for hardware to be retightened during testing, which was removed from the federal standard. ASTM issued a ballot on September 22, 2017, addressing this issue. If it passes, the voluntary standard will align with the mandatory standard.</p>
<i>Next Action</i>	CPSC staff will continue to provide technical assistance to the subcommittee, participate in task group activities, and attend the next subcommittee meeting, scheduled for October 2017.

*Product*                    **Fireworks**

*Staff Contact*            Valliere, Rodney

*Voluntary Standard(s)*    Various AFSL standards and APA 87-1

*Mandatory Standard(s)*    16 C.F.R. § 1500.17, *Banned Hazardous Substances* and 16 C.F.R. part 1507, *Firework Devices*

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

*Activities*                 Staff attended the AFSL Consumer Fireworks Standards committee meeting on December 2 and 3, 2016. On the first day, various fireworks were tested to identify issues related to tip over. In addition, the Commission’s Proposed Statement of Policy regarding the Commission's recent interpretation of the phrase “intended to produce audible effects” in the fireworks regulations was discussed.

Also on the regulatory side, on December 14, 2016, staff submitted a briefing package to the Commission recommending proposed changes to current fireworks regulations. Staff briefed the Commission on January 11, 2017, and on February 2, 2017, the Commission published an NPR proposing the recommended revisions.

On February 14, 2017, staff attended the APA's Winter Educational Conference where the recent rulemaking efforts were discussed. In addition, staff attended the National Fireworks Association Expo Conference in early September. At that conference, staff answered technical questions regarding the NPR and current testing methods.

**Next Action** Staff will continue to attend and participate in AFSL and APA meetings, when scheduled. Staff also intends to prepare a briefing package for a final rule on fireworks in FY 2018.

**Product** **Flammable Liquids (Flame-Mitigation Devices for Disposable Fuel Containers)**

**Staff Contact** Ayers, Scott

**Voluntary Standard(s)** None at this time

**Mandatory Standard(s)** NA

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

**Activities** In December 2016, staff submitted a comment to the revision of NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, regarding laboratory experiments or demonstrations involving flammable liquids and open flames. The comment recommended that containers less than 1 gallon without straight sides and full openings (like a beaker) have a flame arrestor or another flame-mitigation device to prevent flames from igniting a flammable atmosphere inside the container. In addition, staff attended an NFPA 45 meeting on April 19, 2017, during which the next revision of the standard was discussed.

In March 2017, staff submitted a request to CPSC's Executive Director to serve as the task group chair for a new ASTM task group for FMDs. The request was approved on April 6, 2017. Staff sent a letter on April 7, 2017, requesting that ASTM develop a voluntary standard for FMDs on disposable fuel containers. The task group was established and is under subcommittee

ASTM F15.72. A kick-off meeting for the new task group was held on August 9, 2017. CPSC staff organized and participated in the meeting.

*Next Action* Staff will continue to lead and participate in the ASTM task group.

*Product* **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)*

*Mandatory Standard(s)* NA

*Purpose* To work with CANENA, UL, and ASHRAE on revising the standard to strengthen its safety provisions addressing hazards associated with flammable refrigerants (also known/marketed as “natural refrigerants”) used in household refrigerators and freezers.

*Activities* Staff participated in two meetings during the reporting period (November 8 and 17, 2016) regarding flammable refrigerants in household refrigerators. During the meetings, CSA shared testing data regarding the charge limit for flammable refrigerants used in household refrigerators. A UL ballot was issued regarding a proposal to change the charge limit, and staff provided comments to the ballot item on January 12, 2017. Staff did not oppose the proposal to increase the maximum charge size but recommended a task group investigate adding odorant requirements to the refrigerants. The ballot item passed, and the revised CANENA/UL standard was published in April, 2017.

Staff attended and participated in a UL task group meeting held on April 24, 2017, regarding flammable refrigerants and the UL standards on dehumidifiers and Room Air Conditioners. In addition, staff joined the ASHRAE standards committee responsible for the general safety of flammable refrigerants and flammable refrigerant systems.

*Next Action* Staff will continue participating in the UL task groups that are investigating flammable refrigerants in air conditioners and the ASHRAE standards committee investigating the general safety of flammable refrigerants and flammable refrigerant systems.

**Product**                    **Folding Chairs and Stools (Children’s)**

**Staff Contact**            Amodeo, Vince

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

**Mandatory Standard(s)**    *NPR Safety Standard for Children’s Folding Chairs and Stools (80 FR 63155 (October 19, 2015))*

**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 children’s folding chairs and stools.

**Activities**                ASTM issued a ballot in December 2016, with changes to the warnings and labeling section. The ballot received many negatives, most objecting to the amputation hazard labeling requirement for all chairs, even chairs without an amputation hazard. ASTM redrafted the warnings and labelling ballot. Another ballot item (also issued on February 28, 2017) contained clarifications to the locking mechanism requirements. ASTM held a subcommittee meeting on January 18, 2017, where participants, including CPSC staff, discussed several ballot issues. The revised warning and labeling ballot, along with the locking mechanism ballot, were issued on February 28, 2017, and closed on March 30, 2017. The locking mechanism ballot received negative votes, while the warning and labelling ballot passed. In April, staff participated in a subcommittee meeting to discuss ballot negatives and to address new issues. ASTM balloted revised locking mechanism requirements, along with new ballots regarding placement of the test cylinder during the stability test and modification to the standard’s scope to exempt children’s potties. All three ballots passed and ASTM F2613-17 was published in August 2017. ASTM issued a new ballot to remove the requirement for side stability testing for stools in July 2017. This ballot item passed.

**Next Action**             Staff anticipates that a revised standard, ASTM F2613-17a, will be issued by ASTM in early FY 2018. Staff will attend and participate in the next subcommittee meeting scheduled for October 2017. Staff will also be preparing a briefing package for the final rule on children’s folding chairs and stools. The package is expected to be submitted to the Commission in FY 2018.

**Product**                    **Formaldehyde in MDF**

**Staff Contact**            Carlson, Kent

<b><i>Voluntary Standard(s)</i></b>	<i>Medium Density Fiberboard Standard (ANSI 208.2-2016)</i>
<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. § 1500.13 (d)
<b><i>Purpose</i></b>	To work with Composite Panel Association in the revision of the ANSI standard on formaldehyde emissions from composite wood products.
<b><i>Activities</i></b>	Staff evaluated the current version of the ANSI standard as it relates to the U.S. Environmental Protection Agency’s (EPA) and the U.S. Department of Housing and Urban Development’s (HUD) regulations. A letter was drafted to recommend to ANSI to close the gaps between the EPA regulation and the voluntary standard. That letter was in clearance at the time this report was issued.
<b><i>Next Action</i></b>	Staff does not anticipate any additional work on this standard in FY 2018.

***Product***                    **Formaldehyde in Particleboard**

***Staff Contact***             Carlson, Kent

***Voluntary Standard(s)***    *Particleboard Standard (ANSI 208.1-2016)*

***Mandatory Standard(s)***    16 C.F.R. § 1500.13(d)

***Purpose***                        To work with the Composite Panel Association in the revision of the ANSI standard on particleboard.

***Activities***                    Staff evaluated the current version of the ANSI standard as it relates to the U.S. Environmental Protection Agency’s (EPA) and the U.S. Department of Housing and Urban Development’s (HUD) regulations. A letter was drafted to recommend to ANSI to close the gaps between the EPA regulation and the voluntary standard. That letter was in clearance at the time this report was issued.

***Next Action***                Staff does not anticipate any additional work on this standard in FY 2018.

***Product***                    **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 C.F.R. part 1230, *Safety Standard for Frame Child Carriers*

**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.

**Activities** During the reporting period, staff reviewed incident data relating to frame child carriers, and staff supplied the data to ASTM.

**Next Action** Staff will review incident data and participate in the next ASTM subcommittee meeting when scheduled.

**Product** **Fuel Tanks (Leakage)**

**Staff Contact** Lim, Han

**Voluntary Standard(s)** *Standard for Off-Road Ground-Supported Outdoor Power Equipment Gasoline Fuel Systems - Performance Specifications and Test Procedures (ANSI/OPEI B71.10-2013)*

**Mandatory Standard(s)** NA

**Purpose** To work with OPEI on revising the standard to strengthen safety provisions addressing hazards associated with leaks from fuel tanks.

**Activities** OPEI issued a canvas ballot for a revision to the voluntary standard in August 2017. Included in the ballot were additional requirements for fuel filters, vent grommets, fuel shut-off valves, impact tests, ultraviolet (UV) light exposure tests, ozone exposure tests, and test sample conditioning to cold environments. Staff subsequently drafted a letter supporting the changes to the standard. At the end of the reporting period, the letter was being finalized.

**Next Action** Staff will send the comment letter in response to the canvas ballot. Staff anticipates monitoring the changes to the standard, following its revision.

**Product**

**Furniture Tip Over**

**Staff Contact**

Taylor, Michael

**Voluntary Standard(s)**

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

**Mandatory Standard(s)**

NA

**Purpose**

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

**Activities**

Staff attended the ASTM meeting held on November 10, 2016, and presented an overview of staff's September 2016 briefing package. Kids In Danger also made a presentation, which reviewed testing results from their work. Ikea's presentation outlined potential new testing methods to consider. Lastly, AHFA's presentation rebutted CPSC's briefing package. The subcommittee meeting also reviewed the results of two ballot items issued in May 2016. The subcommittee approved the ballot item to revise the preamble, despite three negatives received that were found to be non-persuasive. The subcommittee did not approve a ballot item to revise the warning label and sent the item back to the task group for further work. A motion to ballot a revised minimum height requirement failed. The subcommittee decided to establish a new task group to examine different testing methods.

Staff also attended several task group meetings during the reporting period. The task group to review the operational sliding length met on December 6, 2016, and again on March 8, 2017. As of the close of the reporting period, the task group is not ready to ballot any changes to the standard relating to operational sliding length or outstops.

The task group for test methods met on February 2, 2017. The task group was charged with looking at different test methods for stability, yet the task group meeting spent most of the time discussing data and whether there was sufficient rationale to change the current test. The task group agreed to explore four different testing areas (load, multiple drawer, alternative surfaces, and top surface loads).

The task group for age/weight also met on January 4, 2017, and again on March 21, 2017, to review updated data. The task group has not yet recommended any new ballot items to revise the weight and or age descriptors in the standard.

The labeling/warnings task group met on October 6, 2016, November 29, 2016, February 8, 2017, and March 2, 2017. A ballot was issued on January

30, 2017, which contained revisions to the warnings and labeling language. The ballot received many negatives. All the negatives, except one, were found to be non-persuasive; therefore, the ballot did not pass. Staff attended a subcommittee meeting held on April 6, 2017. All of the task groups reported during this meeting, but only one was close to issuing a ballot. On April 21, 2017, ASTM issued another ballot pertaining to the permanency of labels. The ballot item passed.

Staff also participated in several task group meetings held in June and August 2017. As of the close of the reporting period, there have been no additional ballot items issued.

**Next Action** Staff will continue to participate in the task groups established by the subcommittee and will attend and participate in the next subcommittee meeting set for November 9, 2017. Staff will also prepare a briefing package for an ANPR, and staff intends to submit the ANPR briefing package to the Commission in November 2017.

**Product** **Gas 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)** NA

**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.

**Activities** Staff met with CSA staff on November 30, 2016, to provide background information on how the agency conducts cost/benefit analysis. CSA expressed an interest in conducting cost/benefit analysis on using CO/Combustion sensors in gas appliances. As of the end of the reporting period, the cost/benefit analysis has not been started. CSA is drafting an RFP, but no funding has been secured for the effort.

Staff also met with the ANSI/CSA Cross-Functional Working Group on Carbon Monoxide Detector Sensors in Gas Appliances on February 9, March 2, 2017, and September 21, 2017. During the reporting period, CPSC staff provided incident data (redacted IDIs) and proposed recommendations for improvements to the standards.

**Next Action** In October 2017, CPSC staff plans to participate in the next Cross-Functional Working Group meeting. Staff will also participate in other voluntary standards meetings of the Technical Committees for gas appliances and equipment (Z21/83) and the Technical Subcommittees for gas furnaces (Z21.47), gas boilers (Z21.13), and gas wall and floor furnaces (Z21.86).

**Product** **Gas Ranges (Control Panels)**

**Staff Contact** Lim, Han

**Voluntary Standard(s)** *American National Standard for Household Cooking Gas Appliances (ANSI/CSA Z21.1-2016/CSA 1.1-2-16)*  
*Automatic Electrical Controls for Household and Similar Use – Part 2-5: Particular Requirements for Automatic Electrical Burner Control Systems (ANSI Z21.20-2014, CAN/CSA-C22.2 No. 50730-2-5-14)*

**Mandatory Standard(s)** NA

**Purpose** To work with technical committees on revising the standards to strengthen safety provisions addressing hazards associated with gas ranges and their control panels.

**Activities** During the reporting period, staff participated in several teleconferences with two ANSI/CSA Z21.1/Z21.20 working groups (main working group and an electronics terminology sub-working group). The working groups examined revisions to the standards to address overheating electronic components, ovens turning on by themselves, and loss of temperature control. A proposal for gas range redundant line breaks was submitted to CSA. The two work groups made progress in developing proposals for the nichrome wire test, wet sponge test, and electronic controls terminology. An engineering test report by contractor Southwest Research Institute (SwRI) was posted on the CPSC website. This report contains test data from test scenarios designed to duplicate incidents of control panel malfunctions on three freestanding range/ovens of different brands.

**Next Action** Staff will attend the Z21.1 technical subcommittee meeting for Domestic Gas Ranges in October 2017, and staff will continue to provide technical support related to the ANSI/CSA Z21.1 and/or Z21.20 and other related standards and their revisions.

**Product** **Gasoline Containers (Child-Resistant Containers)**

**Staff Contact** Ayers, Scott

**Voluntary Standard(s)** *Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use (ASTM F2517-15)*

**Mandatory Standard(s)** 16 C.F.R. part 1460, *Children’s Gasoline Burn Prevention Act Regulation*

**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.

**Activities** ASTM issued a ballot on November 3, 2016, to revise ASTM F2517-15. The balloted revision contained substantial changes. Staff received approval to vote from the Executive Director on November 17, 2016, and staff voted negative on the ballot and provided comments expressing concern over the revisions. Staff felt that some of the changes would reduce the child resistance of portable gasoline containers, and thus, lessen the effectiveness of the standard. There were several other negative votes on the ballot. Accordingly, the revision did not move forward, as balloted. ASTM F15.10 met on December 16, 2016, and again on January 11, 2017. Staff participated in both meetings. Changes to the ballot were reviewed and discussed. On July 24, 2017, ASTM issued another ballot, reflecting the comments received on the earlier ballot. Staff voted affirmative on the ballot and supplied supportive and editorial comments. There was one negative cast for the ballot, which was withdrawn with editorial changes.

**Next Action** ASTM is expected to publish the revision to the standard in early FY 2018. Staff will review that standard and continue to monitor and participate in the standard over the next year.

**Product** **Gasoline Containers (Flame Mitigation)**

**Staff Contact** Scott Ayers

**Voluntary Standard(s)** *Standard Specification for Cautionary Labeling of Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use (ASTM F839-15)*  
*Standard Specification for One Time Use Portable Emergency Fuel Containers (PEFC) for Use by Consumers (ASTM F2874-12)*

<b><i>Mandatory Standard(s)</i></b>	NA
<b><i>Purpose</i></b>	To work with ASTM on revising the standards to strengthen safety provisions addressing hazards associated with flammable liquid containers.
<b><i>Activities</i></b>	Staff participated in the ASTM F15.10 subcommittee meeting on January 11, 2017. Worcester Polytechnic Institute (WPI) is developing a written test protocol for FMDs on gasoline containers. Staff participated in the ASTM F15.10 subcommittee meeting on January 11, 2017, to discuss the draft test protocol. Follow-up subcommittee and task group meetings were held on March 31, April 14, April 28, June 13, June 20, and July 11, 2017, to continue discussing test protocols for a new FMD standard. A new draft standard was balloted to the ASTM F15.10 Subcommittee on June 27, 2017. There was one negative vote, and a new task group was formed to address the issues in the negative.
<b><i>Next Action</i></b>	Staff plans to attend future ASTM F15.10 task group and subcommittee meetings and will continue to participate in the drafting of requirements for FMDs.

***Product***                    **Gates and Other Enclosures**

<b><i>Staff Contact</i></b>	Torres, Carlos
<b><i>Voluntary Standard(s)</i></b>	<i>Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures (ASTM F1004-16b)</i>

<b><i>Mandatory Standard(s)</i></b>	Under development in accordance with Section 104 of the CPSIA
<b><i>Purpose</i></b>	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.
<b><i>Activities</i></b>	Staff sent a letter to the ASTM chair on November 10, 2016, regarding the push-out test provisions in the standard. Subsequently, the push-out task group met on November 15, 2016, and discussed staff’s letter. The task group decided to conduct round-robin testing using four laboratories, including CPSC’s National Product Testing and Evaluation Center. Staff shared the testing results with the subcommittee at the meeting on January 17, 2017. The results showed poor repeatability. Staff sent a letter to the subcommittee

chairman on February 27, 2017, outlining several concerns with the test, as written in the standard and with the round-robin testing.

On March 28, 2017, the testing task group met to discuss the next steps needed to address the inconsistencies with the push-out test. During the meeting on April 4, 2017, each test lab shared photos of their test fixture to determine whether the specifications for the test fixture have resulted in discrepancies in the fixture. Variances between test fixtures were noted. CPSC staff hosted a meeting on May 16, 2017, to identify the variables associated with the push-out testing, and to determine the best way to minimize them. There was a follow-up meeting on August 24, 2017, where many recommendations to revise the requirement were suggested. As of the end of the reporting period, the recommendations have not yet been balloted.

**Next Action** Staff will attend and participate at the next ASTM subcommittee meeting set for October 2017. Staff expects to present the NPR briefing package to the Commission in FY 2018.

**Product** **Hand-Held 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 C.F.R. part 1225, *Safety Standard for Hand-Held Infant Carriers*

**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.

**Activities** Staff attended and participated in ASTM meeting on hand-held carriers on January 18, 2017. Topics discussed included definitions for “semi-rigid sides” and “non-rigid sides.” In addition, the testing of non-rigid handles was discussed. A task group was established to look at incorporating the ad hoc warning language for F2050. Staff also attended and participated in a subcommittee meeting on April 6, 2017. During this meeting, the warnings ad hoc labeling were discussed and incident data were requested of staff. The subcommittee requested and received IDIs associated with incidents involving restraints.

**Next Action** Staff will provide the requested incident data to the subcommittee and attend the next subcommittee meeting scheduled for October 2017.

**Product Helmets (Recreational)**

**Staff Contact** Hall, Ian

**Voluntary Standard(s)** ASTM standards under the scope of the ASTM F08.53 subcommittee on Headgear and Helmets.

**Mandatory Standard(s)** NA

**Purpose** To work with ASTM to develop a new voluntary standard for headgear sensors.

**Activities** In November 2016, Ian Hall was approved by the Executive Director to serve in a leadership position for the ASTM task group on sensors. ASTM specifically requested Mr. Hall to serve as the task group chairman. The subcommittee met on November 17, 2016, and staff participated. The sensor task group reported that there are test labs that have volunteered to test sensors, but they still need to be obtained from the various manufacturers.

On May 11, 2017, an ASTM task group meeting on sensors was held. CPSC staff led the meeting, and discussed the issues associated with the development of a new standard. The first order of business was to develop a scope for the new standard. Staff is leading the effort on that task.

**Next Action** CPSC staff will participate in the next ASTM subcommittee meeting set for November 2017.

**Product High Chairs**

**Staff Contact** Marques, Stefanie

**Voluntary Standard(s)** *Standard Consumer Safety Specification for High Chairs* (ASTM F404-17)

**Mandatory Standard(s)** *NPR Safety Standard for High Chairs* (80 FR 3353 November 9, 2015)

**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 high chairs.

**Activities**

ASTM issued a ballot on December 1, 2016, containing a revision to the warnings and labeling section of the high chair standard. Staff had previously voted negative on the prior version. Although the newly balloted version addressed most of staff's concerns, there were a few outstanding issues. Staff sent a letter to the ASTM chairman on December 28, 2016, which outlined the outstanding issues, but staff did not cast a vote. The ballot results were reviewed at the subcommittee meeting on January 17, 2017, and the negative votes were withdrawn. Consequently, the ballot item was approved. The revised standard was approved on February 1, 2017, and published on March 31, 2017.

Staff attended a subcommittee meeting on April 4, 2017, and two labeling task group meetings on April 28 and May 25, 2017. In July 2017, ASTM issued a ballot item pertaining to the labeling requirements in the standard. Staff did not vote, but submitted a letter in support of the changes and also provided some suggested changes to the ballot. The ballot item passed. Staff also provided incident data to ASTM.

**Next Action**

Staff will participate in the next ASTM subcommittee meeting scheduled for October 2017. Staff is continuing to work on the rulemaking project and intends to present the final rule briefing package to the Commission in FY 2018.

**Product**

**Hook-On Chairs**

**Staff Contact**

Nesteruk, Hope

**Voluntary Standard(s)**

*Standard Consumer Safety Specification for Hook-On Chairs (ASTM F1235-15)*

**Mandatory Standard(s)**

16 C.F.R. part 1233, *Safety Standard for Hook-On Chairs*

**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.

**Activities**

Staff attended a subcommittee meeting held on April 3, 2017. A draft proposal for flexible (*i.e.*, fabric) passive crotch restraints was discussed.

**Next Action**

Staff will continue to monitor incident data and participate in the next subcommittee meeting scheduled for October 2017.

**Product**                    **Inclined Sleep Products**

**Staff Contact**            Kish, Celestine

**Voluntary Standard(s)**    *Standard Consumer Safety Specification for Infant Inclined Sleep Products (ASTM F3118-17)*

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

**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.

**Activities**                ASTM approved and published two revisions of the standard during the reporting period. The first revision, F3118-16a, was approved and published in October 2016. The latest revision of the standard, ASTM F3118-17, was approved on January 1, 2017, and published in March 2017. As part of the development of that standard, staff sent a letter to ASTM on November 22, 2016, indicating support of a ballot for the standard; staff also provided editorial suggestions. Staff contacted ASTM again on December 22, 2016, suggesting that the voluntary standard include requirements pertaining to electrical hazards and also recommending revisions to the definition of “accessory,” to include hammock-style accessories. During the reporting period, staff also attended a subcommittee meeting on January 18, 2017, as well as task group meetings on March 23, and 30, 2017.

On March 31, 2017, the Commission voted unanimously to approve publication in the *Federal Register* of an NPR incorporating by reference ASTM F3118-17, with one modification (pertaining to the revised “accessory” definition).

Staff attended and participated in subcommittee meetings held April 5 and on June 27, 2017. Discussions at these meetings pertained to scope clarification, adding an “accessory” definition and electrical requirements. Staff attended task group meetings throughout the reporting period to discuss these items further.

ASTM issued two ballot items in spring 2017, one to revise the scope of the standard and the other to add the “accessory” definition, to match what was in the NPR. The former item had negative votes; thus, it did not pass, but the latter item passed. In July, ASTM issued a ballot to revise the labeling requirements. Negatives were received on that ballot. In addition, the scope was rebaloted in September 2017, and staff wrote a letter, without casting a vote, objecting to one section of the revision. The subcommittee chair responded, informing staff that there were negative votes cast on this ballot, for the same reasons staff provided.

**Next Action** CPSC staff will participate in the next ASTM subcommittee meeting scheduled for October 2017.

**Product** **Infant Bath Seats**

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Infant Bath Seats (ASTM F1967-13)*

**Mandatory Standard(s)** 16 C.F.R. part 1215, *Safety Standard for Infant Bath Seats*

**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.

**Activities** On February 27, 2017, staff participated in a task group meeting regarding the test platform for the standard. The standard defines the test platform as a bath tub with specified dimensions. These dimensions are specified in the text and on a figure contained in the standard. The task group determined that some of the dimensions on the figure were incorrect, and thus, decided that the figure needs to be redrawn. Staff is working with the test platform task group and has prepared a new draft figure for subcommittee consideration.

**Next Action** Staff will attend the next ASTM subcommittee meeting, anticipated to be held in October 2017.

**Product** **Infant Bath Tubs**

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)** *Consumer Safety Specification for Infant Bath Tubs (ASTM F2670-17)*

**Mandatory Standard(s)** 16 C.F.R. part 1234, *Safety Standard for Infant Bath Tubs*

**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.

**Activities**

The ASTM standard was revised during the reporting period. The current version, ASTM F2670-17, was approved on January 1, 2017. Staff attended several task group and subcommittee meetings during the reporting period. Staff also sent a letter to ASTM chairman on November 22, 2016, providing support and a comment regarding a ballot item for warnings and labeling requirements. In addition, the final rule for infant bath tubs was approved by the Commission and published in March 2017.

Staff attended a subcommittee meeting on April 4, 2017, where several task groups dealing with bath tub “accessories” reported. Several ballot items, including changes to the scope, definition sections, referenced documents section, and more were issued in July 2017. Many of the ballot items received negatives and/or comments.

**Next Action**

Staff will continue to provide technical assistance to the subcommittee and will participate in the next ASTM subcommittee meeting scheduled October 2017.

**Product**

**Infant Bouncers**

**Staff Contact**

Wanna-Nakamura, Suad

**Voluntary Standard(s)**

*Standard Consumer Safety Specification for Infant Bouncer Seats (ASTM F2167-17)*

**Mandatory Standard(s)**

*NPR Safety Standard for Infant Bouncer Seats (16 C.F.R. part 1229)*

**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.

**Activities**

Staff sent a letter to the subcommittee chair supporting the November 2016 ballot, but also offered some editorial recommendations. Staff participated in a task group on warning labels held on December 12, 2016. During the meeting, the task group voted to ballot additional language for the warnings addressing weight limits on the product. Staff followed up that meeting with a letter to ASTM expressing concern about some of the other current labeling requirements dealing with warning label placement and suffocation label wording. The weight limit ballot was issued on January 30, 2017, and staff voted (after obtaining approval from the Executive Director) affirmative on the ballot. The ballot passed and the new language will be incorporated into the next revision of the standard.

Staff also participated in the subcommittee meeting for bouncers on January 18, 2017. During the meeting, some of the modifications included in the NPR were discussed. The subcommittee decided not to change anything related to the placement of the warning label. A task group was set up to look at the “fit snugly” warning language.

On April 1, 2017, ASTM approved the latest revision of the bouncer standard. It was subsequently published in July 2017. On April 3, 2017, staff attended and participated in a subcommittee meeting for bouncers. During the meeting, it was noted that the task group set up to discuss warning label wording had not met during the last 6 months. As of the end of this reporting period, the task group still had not met.

On September 1, 2017, the Commission approved the final rule for infant bouncers. The mandatory standard references ASTM F2167-17, with modifications to the warning label requirements.

***Next Action*** Staff will continue to provide technical assistance to the subcommittee, participate in task groups, and attend the next subcommittee meetings scheduled for October 2017.

***Product*** **Infant Slings (Sling Carriers)**

***Staff Contact*** Nesteruk, Hope

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

***Mandatory Standard(s)*** 16 C.F.R. part 1228, *Safety Standard for Sling Carriers*

***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”).

***Activities*** On December 21, 2016, staff submitted a briefing package recommending that the Commission publish the draft final rule that incorporates by reference the voluntary standard, ASTM F2907-15, with a modification to address concerns about the ease with which the required warning labels can be removed if attached by only one seam. The Commission approved the recommendation, and the final rule published on January 30, 2017. Staff also sent a letter to ASTM on November 30, 2016, recommending that ASTM consider adding requirements to address this issue. The issue was discussed at the subcommittee meeting held on January 17, 2017, and the subcommittee agreed to send out the

modification to ballot. The ballot was issued on March 14, 2017, and it received negatives and comments. Staff met with the subcommittee on April 5, 2017, where the ballot results were discussed. In addition, staff shared incident data with the subcommittee. A task group was formed to look at the effect on the standard with products designed for twins.

**Next Action** Staff will participate in the next ASTM subcommittee meeting in October 2017.

**Product** **Infant Swings**

**Staff Contact** Kish, Celestine

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

**Mandatory Standard(s)** 16 C.F.R. part, 1223 *Safety Standard for Infant Swings*

**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 for infant swings.

**Activities** Staff participated in a task group meeting on March 20, 2017, regarding hazards associated with straps that can fall underneath the swing seat. This task group was set up to address an incident where a child crawling on the floor encountered the straps and nearly strangled. Staff also participated in the April 6, 2017, subcommittee meeting. The strap hazard testing proposal developed by the task group was discussed and will be prepared for ballot. In addition, a task group to use the Ad Hoc warning requirements was established. Staff will participate.

**Next Action** Staff will continue to provide technical assistance to the subcommittee and task groups, as needed. At this time, there is no upcoming subcommittee meeting planned.

**Product** **Infant Walkers**

**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** *ASTM Standard Consumer Safety Performance Specification for Infant Walkers (ASTM F977-12)*

<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. part, 1216 <i>Safety Standard for Infant Walkers</i>
<b><i>Purpose</i></b>	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.
<b><i>Activities</i></b>	Staff attended and participated in the subcommittee meeting held on April 5, 2017. During the meeting, the incident data, which staff had provided in fall 2016, were reviewed. In addition, the Ad Hoc warnings requirements were discussed.
<b><i>Next Action</i></b>	Staff will participate in the next subcommittee meeting, scheduled for October 2017.

***Product***      **Liquid Laundry Packets**

<b><i>Staff Contact</i></b>	Hanway, Steve
<b><i>Voluntary Standard(s)</i></b>	<i>Standard Safety Specification for Liquid Laundry Packets</i> (ASTM F3159-15)

***Mandatory Standard(s)***      NA

***Purpose***      To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with liquid laundry detergent packets.

***Activities***      The incident data ASTM task group met several times during the reporting period, and staff was actively involved in the meetings. The full subcommittee met on November 30, 2016, and staff participated in a presentation of the data from task group findings. The incident data task group last met on August 14, 2017. At that meeting, CPSC staff and others gave presentations regarding the recommended analytical approaches to be used in analyzing the data.

***Next Action***      Staff will continue to be actively involved in the data task group and will present an update at the next subcommittee meeting scheduled in October 2017.

***Product***      **Mattresses**

***Staff Contact***      Scott, Lisa

<b><i>Voluntary Standard(s)</i></b>	<i>Standard Test Method for Measuring the Heat Release Rate of Low Flammability Mattresses and Mattress Sets (ISO 12949)</i>
<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. part 1633, <i>Standard for the Flammability (Open Flame) of Mattress Sets</i> 16 C.F.R. part 1632, <i>Standard for the Flammability of Mattresses and Mattress Pads</i>
<b><i>Purpose</i></b>	To participate in any voluntary standards development activities related to mattresses, including the technical review of ISO 12949.
<b><i>Activities</i></b>	During the reporting period, staff prepared a draft request for information (RFI) regarding mattress materials for Commission consideration, which the Commission approved in January 2017. CPSC staff requested information on the materials, components, and methods of assembly currently being used to comply with both of the federal standards for mattresses. This information will be used to inform the staff of current industry practices and to determine whether the current testing protocols used in 16 C.F.R. § 1632.6 are adequate or need revision. Staff reviewed the ISO standard as part of the periodic technical review process. The technical committee confirmed the standard for another 5-year period.
<b><i>Next Action</i></b>	There is no additional planned activity on the ISO standard until the next review cycle.

***Product***                    **Nanotechnology**

***Staff Contact***                Matheson, Joanna

***Voluntary Standard(s)***        *New Guide for Detection and Characterization of Manufactured Silver Nanomaterials in Textiles (ASTM E3025-16) and many other ASTM standards under the E56 Nanotechnology Committee and ISO standards under the 229 Technical Committee (TC /229).*

***Mandatory Standard(s)***        NA

***Purpose***                                To work with ASTM and ISO technical committee on revising the standards to strengthen safety provisions addressing hazards associated with nanotechnology.

***Activities***                            On November 14, 2016, staff attended and participated in two

nanotechnology-related ASTM subcommittee meetings; Nano-Enabled Consumer Products and Physical and Chemical Characterization. Various issues were discussed, including the development of new guides to help characterize nanoparticles. In May 2017, staff participated in follow-up ASTM E56 committee and subcommittee meetings. Work began on developing a new ASTM test method for the determination of total nano silver in textiles.

Staff also participated in a working group meeting for ISO TC/229 and in meetings for the US TAG to ISO TC/229 in February, March, and September 2017.

**Next Action** Staff will continue to be active in both ASTM subcommittee groups and with the US TAG to ISO TC/229.

**Product** **National Electrical Code (NEC)**

**Staff Contact** Lee, Doug

**Voluntary Standard(s)** *National Electrical Code, NFPA 70 (2017)*

**Mandatory Standard(s)** NA

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

**Activities** Staff participated in a meeting with ACBMA on October 19, 2016, regarding arc-fault circuit-interrupter (AFCI) installation requirements in the NEC. Future meetings are anticipated, but not yet scheduled.

In August 2017, staff participated in a teleconference with an independent working group looking to discuss proposals for the 2020 edition of the NEC. This independent group was associated with marinas and the primary hazard addressed in the proposals is electrical shock drowning.

**Next Action** Staff will attend and participate in the first draft meetings for the next revision of the *National Electrical Code (2020)* in January 2018.

**Product**                    **Non-Integral Firearm Locking Devices**

**Staff Contact**            Brookman, Matt

**Voluntary Standard(s)**    *Standard Safety Specification for Non-Integral Firearm Locking Devices (ASTM F2369-16)*

**Mandatory Standard(s)**    NA

**Purpose**                    To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with children defeating firearm locking devices.

**Activities**                During the reporting period, staff compiled incident data and began reviewing the data. Market research was performed to identify currently available products with new technologies, such as biometric and RFID interfaces. On April 17, 2017, staff sent a letter informing ASTM that the review and analysis were being conducted and that staff would provide results, when complete.

**Next Action**            Upon completing the data review and standards analysis, staff intends to contact ASTM with our findings regarding the adequacy of the standard.

**Product**                    **Phthalates (Testing Methods)**

**Staff Contact**            Dreyfus, Matt

**Voluntary Standard(s)**    *Standard Test Method for Determination of Low-Level, Regulated Phthalates in Poly (Vinyl Chloride) Plastics by Thermal Desorption – Gas Chromatography/Mass Chromatography (ASTM D7823-16)*

**Mandatory Standard(s)**    NA

**Purpose**                    To work with ASTM on revising the standard to develop new test methods for determining the presence of low-level, regulated phthalates in poly (vinyl chloride) plastics.

**Activities**                Staff attended and participated in an ASTM D20.70 subcommittee meeting regarding test methods of phthalates held on November 14, 2016. Results from the round-robin testing of the prototype phthalates were reviewed. Staff

met with ASTM again on April 3, 2017, regarding the draft test method. The group is planning to do round-robin testing using a new test method.

**Next Action** Staff will participate in future ASTM meetings when scheduled.

**Product** **Playground Equipment (Home)**

**Staff Contact** Lee, Kevin

**Voluntary Standard(s)** *Standard Consumer Safety Performance Specification for Home Playground Equipment (ASTM F1148-17)*

**Mandatory Standard(s)** NA

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

**Activities** Staff participated in the subcommittee meeting held on November 14, 2016. Older, outstanding ballots were discussed, and task groups reported. The latest version of the standard was approved on March 1, 2017, and the standard contains revisions relating to older balloted items.

Three new ballot items regarding “S” hooks and labeling and instructional literature revisions were issued in January 2017. All three ballots received negative votes. Most negatives were found to be non-persuasive, but one on the “S” hooks was found to be persuasive. Another ballot was issued in July 2017, and it contained two items: (1) a revision to the “Holes and Slots” requirement (no negatives, only comments received), and (2) a revision to the Use Zone figure, which received a negative.

Staff also supplied ASTM with incident data in spring 2017.

**Next Action** Staff will participate in the next subcommittee meeting scheduled for November 2017.

**Product** **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)***

NA

***Purpose***

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

***Activities***

A new version of the standard was approved on February 15, 2017. Staff participated in the subcommittee meeting for public playground equipment held in November 2016 and May 2017. Staff provided incident data to the subcommittee in spring 2017.

On December 1, 2016, a ballot was issued to revise the installation requirements. The ballot received several negatives and many were found to be persuasive. In July 2017, ASTM balloted the installation revision again, along with six other ballot items, including revisions or new definitions, revisions to performance requirements and test procedures, clarifications and updated references. Of all of the ballot items, only two did not receive negatives. As of the end of the reporting period, the negative votes had not been resolved.

***Next Action***

CPSC staff will participate in the next subcommittee meeting scheduled for November 2017.

***Product***

**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 F1292-13)*

***Mandatory Standard(s)***

NA

***Purpose***

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

***Activities***

Staff attended the ASTM meeting on November 17, 2016, to provide an overview of the work being done on crumb rubber in conjunction with the Federal Research Action Plan, and the study on impact attenuation and maintenance. During the reporting period, staff managed two contracts: (1) to test public playground surfaces on a national scale, and (2) to gather experiences and perceptions from parents, caregivers, and recreational facility employees regarding toddlers' interaction with playground surfacing material.

In July 2017, ASTM balloted two items pertaining to F1292. The first was a revision of the standard to remove the field testing from the standard. The second ballot was issued to create a new standard for the field testing. In addition, there were various edits made to F2192 in the first ballot. Negative votes were received on both ballot items, and as of the end of the reporting period, they have not been resolved.

**Next Action** Staff will attend the next ASTM subcommittee meeting scheduled for November 2017.

**Product** **Pools, Portable Unprotected (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)*

**Mandatory Standard(s)** NA

**Purpose** To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with residential drowning in portable pool products.

**Activities** During the reporting period, staff analyzed incident data and provided the data to ASTM and APSP.

**Next Action** Staff will attend and participate in the next ASTM and APSP meetings, when scheduled.

**Product** **Portable Bed Rails (Children's)**

**Staff Contact** Nesteruk, Hope

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

<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. part 1224, <i>Safety Standard for Portable Bed Rails</i>
<b><i>Purpose</i></b>	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.
<b><i>Activities</i></b>	Staff conducted a search for incident data reports. There have been no new incidents reported to the agency since early 2016.
<b><i>Next Action</i></b>	Staff will review incident data and participate in the next ASTM subcommittee meeting, when it is scheduled.

***Product***      **Portable Fireplaces (Firepots and Unvented Alcohol Appliances)**

***Staff Contact***      Ayers, Scott

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

***Mandatory Standard(s)***      ANPR published in December 2011

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

***Activities***      Staff wrote a letter to UL on October 13, 2016, requesting that UL STP 1370 consider the recent proposal for unvented liquid and gel fuel-burning portable devices. In response, staff was informed that UL no longer wanted to pursue the proposal. The working group approached ASTM about adding the existing working group to the F15 Consumer Products committee. During a teleconference on January 18, 2017, UL representatives provided their support of the proposal being developed through ASTM. On February 24, 2017, the working group met and discussed the ASTM process and the suggestion was made to be part of the F15.72 subcommittee on torch fuels.

In April 2017, staff sent a letter to ASTM requesting a new activity on portable fireplaces. Following that letter, ASTM held four task group meetings between April and June 2017, where the draft standard was reviewed and discussed. The task group balloted a new standard to the ASTM F15.72 subcommittee on September 22, 2017. At the end of the reporting period, the results of the ballot were not known.

**Next Action** Staff will continue to work with the ASTM task group to develop the new standard.

**Product** **Portable Generators**

**Staff Contact** Buyer, Janet

**Voluntary Standard(s)** *Safety and Performance of Portable Generators (ANSI/PGMA G300-2015)*  
*Standard for Portable Engine-Generator Assemblies (UL 2201)*

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

**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 serious injuries.

**Activity** On November 21, 2016, an NPR for portable generators published in the *Federal Register*. On March 8, 2017, 12 stakeholders presented oral comments to the Commission on the NPR.

In November 2016, staff obtained approval to vote on both UL 2201 and ANSI/PGMA G300-2015. On February 28, 2017, staff wrote a letter to UL in support of the draft standard and included recommended changes to consider. UL issued a ballot on March 23, 2017, and staff voted affirmative with comment, using the February 28 letter as the basis of the comment. The draft standard did not reach consensus. Staff also participated in UL task group meetings on December 14, 2016, and on January 4, 2017.

Staff also met with PGMA on February 15, April 3, June 2, July 13, and August 16, 2017. The April 3 and June 2, 2017, meetings were for PGMA to present the draft revisions to PGMA's standard and provide an opportunity for participants to provide feedback. The July 13 and August 16, 2017, meetings were for PGMA to present technical data from their members' testing and modeling that led to the development of the draft revisions in the standard.

In addition, staff met with various manufacturers regarding shut-off sensor technology during the reporting period.

**Next Action** Staff will continue to work with PGMA and UL to develop new requirements for the standard, to address the risks associated with CO emissions from portable generators.

**Product**

**Power Equipment (formerly Table Saws)**

**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))*

**Purpose**

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

**Activities**

Staff met with UL on October 25, 2016, to review the votes and comments from the last ballot. The Active Injury Mitigation System (AIMS) requirements have gone out to ballot twice and both times failed to obtain a consensus.

During the reporting period, staff prepared a briefing package recommending an NPR proposing a performance standard to address blade-contact injuries on table saws. Staff briefed the Commission on March 23, 2017. On April 27, 2017, the Commission voted to approve publication of the NPR, with added motions and amendments.

**Next Action**

CPSC staff will continue to provide technical assistance to UL toward the adoption of AIMS requirements for table saws.

**Product**

**Recreational Off-Road Vehicles (ROVs)**

**Staff Contact**

Paul, Caroleene

**Voluntary Standard(s)**

*Recreational Off-Highway Vehicles Association (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))*

**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.

**Activities** Staff attended a meeting with ROHVA to discuss the progress in developing the ROV tilt table hang tag. ROHVA contracted with Applied Safety and Ergonomics to develop the tilt table hang tag based on the requirements in ANSI/ROHVA 1-2016. Staff also prepared a briefing package with a recommendation to terminate rulemaking on ROVs. On January 25, 2017, the Commission voted 3-2, not to terminate the open rulemaking. On February 17, 2017, staff sent a letter to ROHVA regarding the hang tag. In the letter, staff recommended that the hang tag include additional messaging to help consumers interpret the tilt table angle.

**Next Action** Staff intends to continue working with ROHVA and focus groups toward creating effective messaging for consumers regarding the hang tag.

**Product** **Safety Locks and Other Household Child-Inaccessibility Devices**

**Staff Contact** Lee, Kevin

**Voluntary Standard(s)** None at this time

**Mandatory Standard(s)** NA

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

**Activities** During the reporting period, staff reviewed the incident data associated with hazards for safety locks and other child-inaccessible device and provided ASTM with a copy.

**Next Action** In October 2017, staff will attend an initial meeting with ASTM and other interested stakeholders. A full subcommittee meeting is scheduled for November 2017.

**Product** **Self-Balancing Scooters**

**Staff Contact** Amodeo, Vince

<b>Voluntary Standard(s)</b>	<i>Electrical Systems for Self-Balancing Scooters (UL 2272 1<sup>st</sup> Ed.) Recreational Powered Scooters and Pocket Bikes (ASTM F2641-15)</i>
<b>Mandatory Standard(s)</b>	NA
<b>Purpose</b>	To work with UL and ASTM on revising the standards to strengthen the safety provisions addressing hazards associated with self-balancing scooters.
<b>Activities</b>	The 1 <sup>st</sup> edition of the UL standard 2272 was approved on November 21, 2016. The standard was developed as a voluntary consensus standard based on UL's Outline of Investigation that was developed in 2016. On December 20, 2016, staff wrote a letter to UL commenting on the proposed effective date changes for UL 2272. UL proposed a 24-month effective date, and staff suggested that a 6-month effective date would be adequate, considering the significant hazards associated with the electrical aspects of these products. The ASTM F15.58 subcommittee (Powered Scooters and Skateboards) held subcommittee and tasks group meetings on October 6, 2016, November 29, 2016, December 29, 2016, and January 12, 2017, to discuss electrical and mechanical issues related to self-balancing scooter fall hazards to develop a new voluntary standard for self-balancing scooters (hoverboards). ASTM issued a ballot dated March 16, 2017 (closing April 17, 2017). The ballot contains the draft standard for self-balancing scooters. Staff wrote a letter to ASTM indicating support and also providing comments to the ballot. Negatives were received on the ballot. The Subcommittee met on July 13, 2017, to review the ballot results. Task groups were established to work on scope, definitions, and performance requirements.
<b>Next Action</b>	Staff will continue to work with UL and ASTM in the development of new requirements/standards to address the hazards associated with self-balancing scooters.

**Product** **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)** NA

**Purpose** To work with UL and NFPA on potential revisions to the standards to strengthen safety provisions addressing hazards associated with smoke alarms.

**Activities**

In November 2016, the 8<sup>th</sup> Edition of UL 217 was approved and published. On February 16, 2017, CPSC hosted a Workshop entitled, “Survey on Usage and Functionality of Smoke Alarms and CO Alarms in Households.” CPSC staff intends to conduct a national census (or representative in-home survey) on the prevalence, operability, and characteristics of smoke alarms and carbon monoxide alarms. The workshop was held to gather input and feedback from stakeholder groups for this planned survey. The feedback gathered will help develop the questions and methodology of the survey, as well as evaluate how the survey is communicated (*i.e.*, what are the really important pieces of data that need to be gathered and included in the overall data set).

In July 2017, staff attended a meeting for NFPA 72, to discuss and review the public comments relating to the proposed revision to chapter 29.

**Next Action**

Staff intends to use the information gained during the workshop and 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 standard.

**Product**

**Soft Infant and Toddler Carriers**

**Staff Contact**

Nesteruk, Hope

**Voluntary Standard(s)**

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

**Mandatory Standard(s)**

16 C.F.R. part 1226, *Safety Standard for Soft Infant and Toddler Carriers*

**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.

**Activities**

Staff reviewed and analyzed incident data pertaining to soft infant and toddler carriers. The data summary was provided to ASTM for review by the subcommittee.

In September 2017, ASTM issued ballots to revise the standard. One ballot item reflected changes to the terminology section of the standard to harmonize with other juvenile product standards. The other ballot item contained revisions to the marking and labeling sections, to harmonize with the Ad Hoc recommended wording. As of the end of the reporting period, the results of the ballots were not known.

**Next Action** CPSC staff will review incident data and attend and participate in the next subcommittee meeting when scheduled.

**Product** **Sports Protective Gear**

**Staff Contact** McCallion, Richard

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

**Mandatory Standard(s)** NA

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

**Activities** Staff participated in NOCSAE's winter meeting on January 27, 2017, where NOCSAE reviewed the status of various standards.

**Next Action** CPSC staff will continue to monitor NOCSAE standards and attend future NOCSAE board meetings.

**Product** **Spray Polyurethane Foam Insulation**

**Staff Contact** Layton, Adrienne

**Voluntary Standard(s)** *Test Method for Estimating Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Using Micro-Scale Environmental Test Chambers (ASTM WK40293 – under development)*  
*New Standard Measuring Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Samples in a Large-Scale Spray Booth (ASTM WK51588 – under development)*  
*New Standard Application of Indoor Emission and Fate Modeling for Spray Polyurethane Foam (SPF) Insulation (ASTM WK52052 – under development)*  
*New Test Method for Estimating Emissions of Methylene diphenyl diisocyanate (MDI) from Spray Polyurethane Foam (SPF) Insulation using Emission Cells or Micro-Scale Environmental Test Chambers (ASTM WK58355 –under development)*  
*New Guide for Selecting Emission Testing Methods for Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) from Dry Sources (ASTM WK57802 – under development)*

<i><b>Mandatory Standard(s)</b></i>	NA
<i><b>Purpose</b></i>	To work with ASTM on developing new standards to address hazards associated with chemical emissions from spray polyurethane foam (SPF) insulation.
<i><b>Activities</b></i>	This voluntary standard development project focused on work items under the ASTM Air Quality/Indoor Air Subcommittee (ASTM D22.05) to measure or model emissions from these SPF products using micro-scale environmental test chambers, a large-scale spray booth, or computer models. During the reporting period, staff attended subcommittee meetings for D22.05 on October 25, 2016, and March 2, 2017 and April 4, 2017. Several of the spray foam draft standards were reviewed and discussed at these ASTM meetings.
<i><b>Next Action</b></i>	Staff will continue to provide technical support to the subcommittee and attend/participate in the next subcommittee meeting.
<i><b>Product</b></i>	<b>Stationary Activity Centers</b>
<i><b>Staff Contact</b></i>	Lee, Kevin
<i><b>Voluntary Standard(s)</b></i>	<i>Standard Consumer Safety Specification for Stationary Activity Centers (ASTM F2012-16)</i>
<i><b>Mandatory Standard(s)</b></i>	Under development in accordance with Section 104 of the CPSIA
<i><b>Purpose</b></i>	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.
<i><b>Activities</b></i>	ASTM approved a new definition for “closed-base stationary activity centers,” but the revision is being held, pending resolution of a ballot for spring testing. Staff participated in the subcommittee held on January 18, 2017, and a task group meeting on March 22, 2017. At the task group meeting, the addition of tip angle requirements to the spring redundancy test were discussed and agreed upon.  On April 5, 2017, staff attended and participated in an ASTM subcommittee meeting. Staff also provided incident data to ASTM during the reporting period. Following the meeting, ASTM issued two ballot items for stationary activity centers. One contained labeling and instructional literature revisions, plus other changes throughout the standard; and the other contained a revision

to the existing requirement for spring-supported products. Both ballot items received negative votes. The former item was reballoted in September 2017, and it also received negative votes.

**Next Action** Staff will continue to provide technical assistance to the subcommittee and task group and will participate in the next subcommittee meeting scheduled for October 2017.

**Product** **Strollers**

**Staff Contact** Talcott, Kristen

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Carriages and Strollers (ASTM F833-15)*

**Mandatory Standard(s)** 16 C.F.R. part 1227, *Safety Standard for Carriages and Strollers*

**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 for carriages and strollers.

**Activities** Staff participated in task group meetings pertaining to the choking hazard associated with foam grab bars and other accessories on strollers. On January 17, 2017, staff participated in the subcommittee meeting on strollers. Following the task group and subcommittee meetings, a proposed revision to ASTM F833, addressing the issue of children biting/chewing on accessible foam on tray/grab bars, was balloted in February 2017. The ballot closed on March 30, and the item passed. At the April 3, 2017, meeting, the subcommittee discussed a new test method to prevent children from dislodging armbar covers. Staff also attended the June 27, 2017, subcommittee meeting where it was announced that ISO was starting the development process for a new stroller standard. ASTM will be the US TAG administrator for the ISO standard. On September 13, 2017, staff attended a task group meeting regarding foam armbar covers. The group discussed what parts of the cover should be subjected to the pull test and what type of foam exposure should be considered a failure.

**Next Action** Staff will participate in the next ASTM subcommittee meeting scheduled for October 2017.

**Product**

**Swimming Pools and Spas (Drain Covers)**

**Staff Contact**

Sharpless, Perry

**Voluntary Standard(s)**

*American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16-2011).*

**Mandatory Standard(s)**

16 C.F.R. part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

**Purpose**

To work with APSP 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 such as pool drain covers.

**Activities**

Staff attended an APSP technical committee meeting on November 1, 2016. Potential revisions to APSP-16 were reviewed and balloted. APSP submitted the revised version to ANSI for consideration as an American National Standard, where it was subjected to a public review period. The standard completed the public review and was subsequently approved by ANSI. At the conclusion of the reporting period, the new version of APSP-16 had not been published.

**Next Action**

Staff will continue to work with APSP on any further developments of the standard.

**Product**

**Swimming Pools and Spas (Vacuum Relief Systems)**

**Staff Contact**

Sharpless, Perry

**Voluntary Standard(s)**

*Manufactured Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems (ASME A112.19.17)*  
*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 C.F.R. part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

**Purpose** To work with APSP and ASME 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.

**Activities** The current voluntary standard was developed by ASME. APSP requested that ASME yield development of the standard to APSP, and ASME agreed. APSP now administrates the standard. A new committee, APSP-17 has been formed to oversee the transition and further development of the standard. Staff reviewed data associated with this hazard, and prepared for the transition of the voluntary standard from ASME to APSP.

**Next Action** A kick-off meeting is scheduled for October 31, 2017, to be held during the International Pool, Spa and Patio Expo in Orlando, FL. Staff is planning to attend.

**Product** **Tents**

**Staff Contact** Tenney, Allyson

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

**Mandatory Standard(s)** NA

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

**Activities** The Directorate of Epidemiology prepared a report in May 2017, identifying incidents involving tents, between 2010 and 2015. This report was forwarded to ASTM.

**Next Action** Staff will participate in future subcommittee and task group meetings in FY 2018.

**Product** **Toddler Beds**

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)** *Standard Consumer Safety Specification for Toddler Beds (ASTM F1821-16)*

<b><i>Mandatory Standard(s)</i></b>	16 C.F.R. part 1217, <i>Safety Standard for Toddler Beds</i>
<b><i>Purpose</i></b>	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.
<b><i>Activities</i></b>	<p>On December 8, 2016, ASTM notified the CPSC of ASTM's approval and publication of ASTM F1821-16 in a standard approved on October 1, 2016, ASTM F1821-16. Staff recommended that the Commission publish a final rule referencing F1821-16 as the new safety standard for toddler beds. The direct final rule was published on February 22, 2017.</p> <p>Staff attended and participated in the April 3, 2017, subcommittee meeting. At the meeting, the subcommittee voted to send out a ballot to define “corner posts.” That ballot was issued in July 2017, and received two negatives. Staff also provided incident data to ASTM during the reporting period.</p>
<b><i>Next Action</i></b>	Staff will continue to provide technical assistance to the subcommittee and participate in the next subcommittee meeting scheduled for October 2017.

***Product***                    **Torch Fuel and Lamp Oil**

***Staff Contact***                Talcott, Kristen

***Voluntary Standard(s)***     ASTM Subcommittee F15.72 – (Under development)- *New Specification for Torch Fuel and Lamp Oil Packaging* (and other related standards)

***Mandatory Standard(s)***    NA

***Purpose***                         To work with ASTM on the development of a standard addressing hazards associated with torch fuel, lamp oil, and their containers.

***Activities***                    During the reporting period, staff attended and participated in two task group teleconferences, on February 16, 2017, and on March 16, 2017. During the February meeting, staff provided information from CPSC’s Office of Compliance regarding container shape and similarities with food, drug or cosmetic containers. Based on this information, the task group decided not to make language changes to this section of the draft standard. Also during the meetings, label durability and other labeling issues were discussed.

Staff also attended a task group meeting on July 27, 2017, where the draft standard was discussed.

**Next Action** Staff anticipates that ASTM will issue a ballot for the new standard in FY 2018. Staff will participate in the next ASTM Torch Fuel and Lamp Oil task group and subcommittee meetings and will provide comments to the upcoming expected ballot, as warranted.

**Product** **Toys**

**Staff Contact** Mordecai, Ben

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

**Mandatory Standard(s)** 16 C.F.R. part 1250, *Safety Standard for Toys*

**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.

**Activities** *ASTM F963-16* was published in October 2016. On November 1, 2016, ASTM officially notified the CPSC of the revised standard. Staff prepared a comprehensive briefing package with the recommendation to accept F963-16 as the new federal standard for toys. The Commission voted in favor of staff's recommendation, and on February 2, 2017, the Direct Final Rule (16 C.F.R. part 1250) was published in the *Federal Register*. ASTM issued a ballot item on February 28, 2017, to correct an omission from the standard. Staff sent a letter to ASTM in March, stating support and offering some editorial suggestions. The ballot closed with one negative vote that was later withdrawn. Staff attended a subcommittee meeting in June 2017, held in Toronto, Canada. Staff also attended various task group meetings, via teleconference during the reporting period.

A new revision of the standard, ASTM F963-17, was approved and published in August 2017. The standard included the change to the projectile requirements, as balloted earlier in the year and also many other changes, that were not balloted. On September 1, 2017 ASTM sent an official notification to CPSC about the newly published standard.

**Next Action** Staff is preparing a briefing package, in response to the notification from ASTM regarding the revised ASTM standard. That briefing package is expected to be delivered to the Commission in early November 2017. In addition, staff intends to participate in future task group meetings and the next subcommittee meeting scheduled for Oct 2017. This subcommittee meeting is a joint meeting with the ISO TC 181 TAG meeting.

**Product**                    **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)*  
*Draft Standard Methods of Tests for Evaluating Fire and Ignition Resistance of Upholstered Furniture Using a Flaming Ignition Source (NFPA 277)*

**Mandatory Standard(s)**    NA

**Purpose**                    To work with ASTM on revising their standard to strengthen its safety provisions addressing hazards associated with fires involving upholstered furniture and to work with the NFPA Fire Test Committee Task Group to develop a new open-flame standard.

**Activities**                Staff attended and participated in several NFPA meetings during the reporting period. The main task group on developing new requirements for NFPA 277 met on October 28, 2016, January 12, 2017, and July 25, 2017. During these meetings, NFPA 277 and proposed changes to NFPA 260 were discussed. The secondary task group met on February 28, 2017, and on May 25, 2017. At the May meeting, a wide variety of information from industry, fire fighters, health, and environmental groups was shared and discussed. Following this meeting, the secondary task group shared their comments with the primary task group.

Other staff participated and activity during the reporting period included attendance at NFPA’s technical committee on Fire Tests on March 21, 2017; meeting with stakeholders on January 24, 2017, where new furniture flammability research was presented to CPSC staff; attendance at the Fire and Materials Conference held February 6-8, 2017, where staff presented information on recent test work dealing with furniture flammability and attendance at the ASTM E05 committee meetings in June 2017.

**Next Action**            CPSC staff will continue to participate in ASTM E05 Committee meetings and NFPA Fire Committee Test Task Group meetings toward developing new provisions and revising existing provisions in the voluntary standards to address hazards associated with upholstered furniture fires.

**Product**                    **Washing Machines, Top Loading**

**Staff Contact**            Kim, Yeon

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

**Mandatory Standard(s)**    NA

**Purpose**                    To work with UL on revising the standard to strengthen its safety provisions addressing hazards associated with top-loading washing machines.

**Activities**                On December 19, 2016, staff sent a letter to UL asking that STP 2157 on Clothes Washing Machines form a task group to assess the ability of washing machines to withstand high-speed spin cycles under unbalanced load conditions. The task group was formed and had a kick-off meeting on August 16, 2017, with a follow-up meeting on September 22, 2107. Staff attended both meetings and provided incident data to the task group.

**Next Action**            Staff intends to attend and participate in future meetings for STP 2157.

**Product**                    **Window Coverings (Blind Cords)**

**Staff Contact**            Balci-Sinha, Rana

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

**Mandatory Standard(s)**    ANPR published in January 2015.

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

**Activities**                There was considerable activity on this standard during the reporting period. Staff attended and participated in WCMA steering committee meetings held several times, and also participated on stock/custom definition and warning labeling task groups. Multiple draft revisions to the standard have been circulated for comments. CPSC staff provided comments in a January 24, 2017, letter to the WCMA.

WCMA sent a letter to then-Chairman Elliot Kaye on January 30, 2017, commenting about incident data and issues raised in staff's January 24, 2017

letter. Staff replied to WCMA on February 7, 2017, to clarify information about incident data.

WCMA sent out a canvas ballot on May 31, 2017, and a follow-up recirculation ballot on September 1, 2017. Staff provided comments on both ballots but did not vote. In the recirculation ballot, many of staff's suggested changes had been included.

*Next Action* Staff will continue to work with WCMA on the revision of the standard.

*Product* **Youth-Resistant Firearms Security Containers**

*Staff Contact* Brookman, Matt

*Voluntary Standard(s)* *Standard Specification for Youth-Resistant Firearms Containers (ASTM F2456-16)*

*Mandatory Standard(s)* NA

*Purpose* To work with ASTM on revising the standard to strengthen its safety provisions addressing hazards associated with children accessing firearms in security containers.

*Activities* During the reporting period, staff compiled incident data and began reviewing the data. Market research was performed to identify currently available products with new technologies, such as biometric and RFID interfaces. Staff is developing a test plan to evaluate these new technologies and to determine whether the standard adequately addresses them. On April 17, 2017, staff sent a letter informing ASTM that the review and analysis was being conducted and that staff would provide results, when complete.

*Next Action* Staff will perform tests from the standard that are relevant to new technologies. Upon completing the data review and testing, staff intends to contact ASTM with our findings regarding the adequacy of the standard.