

March 29, 2024

**Via Email and Box**

Roman Jankowski  
214 Massachusetts Avenue  
Washington, District of Columbia 20002  
[Roman.Jankowski@heritage.org](mailto:Roman.Jankowski@heritage.org)

**RE:** Freedom of Information Act Request #23-F-00294: I respectfully request the following records:

- A. All records related to CPSC Commissioner Richard L Trumka's memo titled NPR Proposing Ban on Gas Stoves (Indoor Air Quality)
  - B. All records regarding voluntary standards and natural gas stoves
  - C. All record regarding ANSI Z21.1-2016 or CSA 1.1-2016
  - D. All communications with other federal agencies, including but not limited to the Department of Energy, Environmental Protection Agency, and the Federal Energy Regulatory Commission, regarding natural gas stoves.
  - E. All communications with the Office of the President or Executive Office of the President regarding natural gas stoves.
- [Please see request for details]. (Date Range for Record Search: From 12/1/2021 To 1/8/2023)

Dear Mr. Jankowski:

Thank you for your Freedom of Information Act (FOIA) request seeking records from the U.S. Consumer Product Safety Commission (CPSC). On June 21, 2023, we sent you correspondence advising you that your request presented unusual circumstances and would take up to an additional nine months to process from that date because the request sought records from several CPSC program offices and involved a volume of potentially responsive records approximating 5,000 pages. By email dated January 3, 2024, we informed you that some of the records responsive to your request were processed in other FOIA requests and posted to our website. Those records are available at the following links (with the corresponding FOIA Request numbers provided in parentheses):

[Newsroom - FOIA | CPSC.gov](#) (23-F-00274)

[Newsroom - FOIA | CPSC.gov](#) (23-F-00255)

[Newsroom - FOIA | CPSC.gov](#) (23-F-00226)

This is a supplemental response. The additional responsive emails from the CPSC's Office of Executive

Director (OEX) have been processed and are enclosed. These consist of 570 pages of emails and attachments. Additional records are being reviewed and will be made available on a rolling basis in another supplemental response.

Portions of the enclosed records are withheld pursuant to FOIA Exemptions 5 and 6, 5 U.S.C. §§ 552(b)(5) and (b)(6). Portions of the enclosed records not responsive to the subject of your request are also withheld as nonresponsive where noted. CPSC considered the foreseeable harm standard when reviewing these records and applying FOIA exemptions.

*Exemption 5.* FOIA Exemption 5 permits withholding from disclosure inter-agency and intra-agency memoranda that would not be available, by law, to a party other than an agency in litigation with the agency. The staff memoranda and analyses being withheld are pre-decisional and deliberative, consisting of recommendations, opinions, suggestions, and analyses of technical and/or legal staff. Any factual materials in the memoranda not covered by some other exemption are inextricably intertwined with exempt materials, or the disclosure of the factual materials would expose the deliberative process and/or violate the attorney-client privilege. It would not be in the public interest to disclose these materials because disclosure would impair the frank exchange of views necessary for such matters. Accordingly, we are withholding portions of the enclosed emails which contain pre-decisional draft documents and staff deliberations under this exemption where noted.

Additionally, the following pages of the enclosed OEX emails are withheld in full under Exemption 5: 133-138, 394-401 and 405-412 (CPSC draft congressional response letters); 414-432 (internal EXHR activities report, August 17, 2022); 434-453 (internal EXHR activities report, August 31, 2022); 455-474 (internal EXHR activities report, September 14, 2022); 476-496 (internal EXHR activities report, September 28, 2022); 498-518 (internal EXHR activities report, December 21, 2022); 531-535 (internal CPSC Memorandum); 538-539 (draft certification of document production).

*Exemption 6.* FOIA Exemption 6 permits withholding personnel and medical files and similar files, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy. Absent authorizations to disclose the records or personally identifying information from the persons identified in the records or their representatives, such information falls within the protection of this FOIA exemption to disclosure and is withheld accordingly.

### FOIA Administrative Procedures

*Right to appeal.* According to the CPSC's regulations implementing the FOIA at 16 C.F.R. § 1015.7, a partial denial of access to records may be appealed. If you are not satisfied with the response to this request, you may administratively appeal in writing, addressed to FOIA APPEAL, Office of the General Counsel, ATTN: Division of Information Access, U.S. Consumer Product Safety Commission, 4330 East West Highway, Room 820, Bethesda, MD 20814-4408.

Your appeal must be postmarked or electronically transmitted ([cpscfoiarequests@cpsc.gov](mailto:cpscfoiarequests@cpsc.gov)) within 90 days of the date of the response to your request. You may also fax your appeal to 301-504-0127. You may contact us Monday – Friday from 8:00AM – 4:30PM ET, by telephone at 1-800-638-2772, by fax to 301-504-0127, or by email to [cpsc-foia@cpsc.gov](mailto:cpsc-foia@cpsc.gov).


Before filing a formal appeal with the CPSC, you may contact me, CPSC's FOIA Public Liaison, via email or at 1-800-638-2772, for any further assistance, or to discuss any aspect of your request. Assistance may include guidance on reformulation of your request or an alternative period for processing the request.

*Right to Mediation.* Additionally, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services they offer. The contact information for OGIS is as follows: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road-OGIS, College Park, MD 20740-6001; email: [ogis@nara.gov](mailto:ogis@nara.gov); telephone: 202-741-5770; toll free: 1-877-684-6448; fax: 202-741-5769.

*Fees.* We are not charging you fees in this instance to cover the costs to the CPSC in processing this request, performing the file searches and preparing the information.

Sincerely,

ROBERT  
DALTON

 Digitally signed by ROBERT  
DALTON  
Date: 2024.03.29 13:01:41  
-04'00'

Robert Dalton  
Supervisory Attorney  
Office of the General Counsel  
Division of Information Access  
(301) 504-7246  
[rdalton@cpsc.gov](mailto:rdalton@cpsc.gov)

Enclosures: Office of Executive Director (OEX) Emails – 570 pages

**From:** [Jankowski, Roman](#)  
**To:** [CPSC FOIA](#)  
**Cc:** [OversightProject](#)  
**Subject:** New FOIA request part 1 of 4  
**Date:** Monday, February 6, 2023 3:52:41 PM  
**Attachments:** [CSPC request 2-6-2023.pdf](#)

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Attached is a new FOIA request part 1 of 4.

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[Roman Jankowski](#)

*Senior Investigative Counsel, Oversight Project, Government Relations*  
The Heritage Foundation  
214 Massachusetts Avenue, NE  
Washington, DC 20002  
202-608-1503

[heritage.org](https://heritage.org)

Email secured by Check Point



214 Massachusetts Avenue, NE  
Washington, DC 20002  
(202) 546-4400  
heritage.org

February 6, 2023

Dear Abioye Mosheim,

Pursuant to the Freedom of Information Act, 5 U.S.C. § 552, and the implementing FOIA regulations of the Consumer Safety Product Commission (“CSPC”), 16 CFR Part 1015, I respectfully request the following records:

- A. All records related to CPSC Commissioner Richard L Trumka’s memo titled *NPR Proposing Ban on Gas Stoves (Indoor Air Quality)*
- B. All records regarding voluntary standards and natural gas stoves
- C. All record regarding ANSI Z21.1-2016 or CSA 1.1-2016
- D. All communications with other federal agencies, including but not limited to the Department of Energy, Environmental Protection Agency, and the Federal Energy Regulatory Commission, regarding natural gas stoves.
- E. All communications with the Office of the President or Executive Office of the President regarding natural gas stoves

Please limit the search for this request from December 1, 2021 to Jan 8, 2023. Please include the following custodians in any search:

- A. Office the Chairman, Alexander Dennis “Alex” Hoehn-Saric,
- B. Office of Commissioner Peter Feldman
- C. Office of Commissioner Mary T. Boyle
- D. Office of Commissioner Richard L. Trumka Jr.
- E. Office of Communications
- F. Office of the Inspector General
- G. Office of Equal Employment Opportunity and Minority Enterprise
- H. Office of the Executive Director
- I. Office of the General Counsel
- J. Office of Legislative Affairs

The term “record” means any written, recorded, or graphic matter of any nature whatsoever, regardless of how recorded, and whether original or a copy, including, but not limited to, the following: memoranda, reports, expense reports, books, manuals, instructions, financial reports, working papers, records, notes, letters, notices, confirmations, telegrams, receipts, appraisals, pamphlets, magazines, newspapers, prospectuses, inter-office and intra-office communications, electronic mail (emails), MMS or SMS text messages, instant messages, messaging systems (such as iMessage, Microsoft Teams, WhatsApp, Telegram, Signal, Google Chat,

Twitter Direct Messages, Lync, Slack, and Facebook Messenger), contracts, cables, telexes, notations of any type of conversation, telephone call, voicemail, meeting or other communication, bulletins, printed matter, computer printouts, teletypes, invoices, transcripts, diaries, analyses, returns, summaries, minutes, bills, accounts, estimates, projections, comparisons, messages, correspondence, press releases, circulars, financial statements, reviews, opinions, offers, studies and investigations, questionnaires and surveys, work sheets (and all drafts, preliminary versions, alterations, modifications, revisions, changes, and amendments of any of the foregoing, as well as any attachments or appendices thereto), graphic or oral records or representations of any kind (including without limitation, photographs, charts, graphs, microfiche, microfilm, videotape, recordings and motion pictures), electronic or mechanical records or representations of any kind (including, without limitation, tapes, cassettes, disks, and recordings), and other written, printed, typed, or other graphic or recorded matter of any kind or nature, however produced or reproduced, and whether preserved in writing, film, tape, disk, videotape or otherwise. A record bearing any notation not a part of the original text is to be considered a separate record. A draft or non-identical copy is a separate record within the meaning of this term.

The term “communication” means each manner or means of disclosure or exchange of information (in the form of facts, ideas, inquiries, or otherwise), regardless of means utilized, whether oral, electronic, by document or otherwise, and whether in an in-person meeting, by telephone, facsimile, e-mail (desktop or mobile device), MMS or SMS text message, instant messages, messaging systems (such as iMessage, Microsoft Teams, WhatsApp, Telegram, Signal, Google Chat, Twitter Direct Messages, Lync, Slack, and Facebook Messenger), regular mail, telexes, releases, or otherwise.

“Communications with,” “communications from,” and “communications between” means any communication involving the related parties, regardless of whether other persons were involved in the communication, and includes, but is not limited to, communications where one party is cc’d or bcc’d, both parties are cc’d or bcc’d, or some combination thereof.

The terms “and” and “or” should be construed broadly and either conjunctively or disjunctively to bring within the scope of this request any information which might otherwise be construed to be outside its scope. The terms “all,” “any,” and “each” should each be construed as encompassing any and all. The singular includes

the plural number, and vice versa. The present tense includes the past and vice versa. The masculine includes the feminine and neuter genders.

Please consider all members of a document “family” to be responsive to the Request if any single “member” of that “family” is responsive, regardless of whether the “family member” in question is “parent” or “child.”

In the interest of expediency and to minimize the research and/or duplication burden on your staff, please send records electronically if possible. If this is not possible, please notify me before sending to the mailing address listed below. If access to this request takes longer than twenty (20) business days, please let me know when I might receive records or be able to inspect the requested records. Please produce responsive documents as soon as they become available. In all cases, please communicate with me at the email address below.

Please comply fully with 5 U.S.C. § 552 (b). Accordingly, without limitation to the foregoing, if any portion of this request is denied for any reason, please provide written notice of the records or portions of records that are being withheld and cite each specific exemption of the Freedom of Information Act on which the Agency relies. Moreover, to the extent the Agency believes that responsive records may be withheld in part, produce all reasonably segregable portions of those records.

Additionally, please provide all responsive documents even if they are redacted in full.

### Fee Waiver Request

This request is primarily and fundamentally for non-commercial purposes. As a 501(c)(3) nonprofit, Heritage Foundation does not have a commercial purpose and the release of the information requested is not in Heritage Foundation’s commercial interest. Heritage Foundation’s mission is to formulate and promote public policies based on the principles of free enterprise, limited government, individual freedom, traditional American values, and a strong national defense. Heritage Foundation uses the information requested and analyzes it in order to educate the public through social media,<sup>1</sup> broadcast media<sup>2</sup> (traditional and nontraditional), and

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<sup>1</sup> Heritage Foundation. [@ Heritage] (Accessed: 2022, February 18). 626.8K Followers Twitter. <https://twitter.com/Heritage>

<sup>2</sup> Fox News. (Accessed: 2022, February 18). Heritage Foundation launches Conservative Oversight

press releases.<sup>3</sup> The requested information is in the public interest because the U.S. CPSC commissioner, Richard Trumka Jr., stated in an interview with Bloomberg, that CPSC is considering banning gas stoves amid health fears.<sup>4</sup> This announcement generated a great deal of national news coverage of this issue. *See* Appendix 1.

This is a request by a member of the news media for information of public interest, made in my capacity as an author for the Daily Signal<sup>5</sup> (a major news outlet<sup>6</sup>), I actively gather information of potential interest to our Daily Signal audience, I use my editorial skills to turn raw materials into a distinct work, and I distribute that work to our Daily Signal audience through podcasts<sup>7</sup> and articles. Therefore, I request that you waive all applicable fees associated with this request. If you deny this request for a fee waiver, please advise me in advance of the estimated charges if they are to exceed \$50. Please send me a detailed and itemized explanation of those charges.

### **Expedited Processing is Warranted under 16 C.F.R. 1015.5**

1. This provision provides that expedited processing shall be granted regarding: “With respect to a request made by a person primarily engaged in disseminating information, that there is an urgency to inform the public concerning actual or alleged Federal Government activity.”

Even though expedited processing under 36 C.F.R. § 1250.28 (a)(4) hasn’t been judicially construed under 16 C.F.R. 1015.5, courts have held that similar DOJ Regulation requires the requester to show: (1) that the request involves a “matter of widespread and exceptional media interest” (28 C.F.R. § 16.5(e)(1)(iv)); and (2) that the matter is one “in which there exists possible questions about the integrity of the government that affect public confidence” (*id.*). *See Edmonds v. FBI*, No. 02-cv-1294 (ESH), 2002 WL 32539613, \*3 (D.D.C. Dec. 3, 2002). It is not necessary to show “prejudice or a matter of current exigency to the American public.” *Id.*

First, the DOJ Regulation requires showing that the matter about which questions of integrity have been raised is the subject of widespread national media attention. *See Am. Oversight v. DOJ*, 292 F.Supp.3d 501, 507–508 (D.D.C. 2018)

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Project aimed at 'exposing' Biden admin, leftist policies. <https://www.foxnews.com/politics/heritage-conservative-oversight-project-biden-admin-leftist-policies>

<sup>3</sup> Heritage Foundation. (Accessed: 2022, February 18). Press. <https://www.heritage.org/press> .

<sup>4</sup> Bloomberg. (Accessed: 2023, January 27). US Safety Agency to Consider Ban on Gas Stoves Amid Health Fears. <https://www.bloomberg.com/news/articles/2023-01-09/us-safety-agency-to-consider-ban-on-gas-stoves-amid-health-fears?leadSource=uverify%20wall>



(denying motion for expedited processing because general media interest in Solicitor General’s nomination is insufficient to show media interest in possible ethics questions concerning the nomination). There need not be a showing that the disclosure would shed considerable light on agency operations; only that there is “exceptional” and “widespread” media interest. See *CREW v. DOJ*, 870 F.Supp.2d 70, 81 (D.D.C. 2012), *rev’d on other grounds*, 746 F.3d 1082 (D.C. Cir. 2014). While the media interest need be “widespread” and “exceptional” it need not be overwhelming. See *ACLU*, 321 F.Supp.2d at 31–32 (rejecting DOJ’s position that requester’s citation to what the court described as “only a handful of articles” was insufficient to show “widespread and exceptional media interest” because those articles “were published in a variety of publications and repeatedly reference the ongoing national discussion about the Patriot Act and Section 215” (second quotation added)); *Edmonds*, 2002 WL 32539613, at \*3 (numerous national newspaper and network television broadcasts concerning whistleblower’s allegations of security lapses in FBI translator program met test).<sup>5</sup>

Second, the DOJ Regulation requires showing that “there exists *possible* questions about the government’s integrity that affect public confidence.” *CREW v. DOJ*, 436 F.Supp.3d 354, 361 (D.D.C. 2020) (*quoting* 28 C.F.R. § 16.5(e)(1)(4)) (emphasis by Court).<sup>6</sup> It does not “require the requester to prove wrongdoing by the government in order to obtain documents on an expedited basis.” *Id.* at 362. “The primary way to determine whether such possible questions exist is by examining the state of public coverage of the matter at issue, and whether that coverage surfaces possible ethics issues so potentially significant as to reduce public confidence in governmental institutions.” *Am. Oversight v. DOJ*, 292 F.Supp.3d 501, 508 (D.D.C. 2018). This is not an extraordinarily high bar. See, e.g., *CREW*, 436 F.Supp.3d at 361 (complaint sufficient to survive a motion to dismiss where it alleged Attorney General’s action regarding disclosure of Mueller Report “supported an inference that at best, the Attorney General undertook to frame the public discussion on his own terms, and at worst that he distorted the truth”); *ACLU v. DOJ*, 321 F.Supp.2d 24, 32 (D.D.C. 2004) (allegations in press that Section 215 of the Patriot Act may be unconstitutional and reports that Members of Congress have alleged abuses of Section 215 “implicate[] government integrity” and hence are sufficient to meet test); *Edmonds*, 2002 WL 32539613, at \*3–4 (test met where plaintiff alleged security

<sup>5</sup> Cf. 28 C.F.R. § 16.5(e)(3) (“The existence of numerous articles published on a given subject can be helpful in establishing the requirement that there be an ‘urgency to inform’ the public on the topic.”).

<sup>6</sup> To be sure, this standard does not require expedition of any questions concerning government integrity. See, e.g., *White v. DOJ*, 16 F.4th 539, 544 (7th Cir. 2021) (test not met in case where records sought to cast doubt on requestors’ criminal conviction where requestor claimed he was subject to an elaborate government sting operation).

lapses in FBI translators program, national news covered the issue, and two Senators expressed concern regarding “the significant security issues raised by plaintiff’s allegations and the integrity of the FBI”).<sup>7</sup>

2. The requested information is in the public interest because the U.S. CPSC commissioner, Richard Trumka Jr., stated in an interview with Bloomberg, that CPSC is considering banning gas stoves amid health fears.<sup>8</sup> As Attachment A (000002-000087) demonstrates, the press interest in these revelations is immense and on-going.

There has been Congressional interest in the stated comment. The Energy and Commerce Committee is conducting oversight and has transmitted oversight letters to the CPSC and the White House. *See* Appendix B. Senate Energy and Natural Resources Committee Chairman Joe Manchin announced Thursday that he is working with Sen. Ted Cruz to introduce bipartisan legislation to prohibit the Consumer Product Safety Commission from banning gas stoves.<sup>9</sup>

Press coverage and public Congressional oversight has repeatedly surfaced “possible questions about the integrity of the government that affect public confidence.”

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<sup>7</sup> DOJ has granted expedition under the DOJ Regulation in a number of circumstances. *See, e.g., CREW v. DOJ*, 870 F.Supp.2d at 81 n. 14 (expedition granted to request seeking records on FBI’s closed investigation of Congressman DeLay for misconduct which did not result in charges, but received considerable media attention (subsequent history omitted)); *CREW v. DOJ*, 820 F.Supp.2d 39, 42, 46 (D.D.C. 2011) (expedition granted to request seeking information concerning possible deletion of Office of Legal Counsel emails where the possible deletion was flagged as a hindrance in an internal investigation, covered in the media, and was the subject of Congressional concerns); *Elec. Frontier Found. v. DOJ*, 565 F.Supp.2d 188, 189–91 (D.D.C. 2008) (expedition granted to request seeking information regarding storage of information obtained by National Security Letters in FBI’s Data Warehouse); *CREW v. DOJ*, No. 05-cv-2078 (EGS), 2006 WL 1518964, \*1 (D.D.C. June 1, 2006) (expedition granted to request concerning government’s decision to seek a reduced penalty in tobacco litigation where government’s decision was subject to intensive news coverage and prompted concern from “several Congressman” which caused a request for an Inspector General investigation of “improper political interference” with the decision).

<sup>8</sup> Bloomberg. (Accessed: 2023, January 27). US Safety Agency to Consider Ban on Gas Stoves Amid Health Fears. <https://www.bloomberg.com/news/articles/2023-01-09/us-safety-agency-to-consider-ban-on-gas-stoves-amid-health-fears?leadSource=verify%20wall>

<sup>9</sup> Washington Examiner. (Accessed: 2023, February 2). Manchin teams up with Cruz on bill to block gas stove ban. <https://www.washingtonexaminer.com/restoring-america/faith-freedom-self-reliance/manchin-cruz-bill-block-gas-stove-ban>



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heritage.org

First. The proposed CPSC action to ban gas stoves has repeatedly been attacked as an extreme action undertaken without regards the CPSC's proper role and authority<sup>10</sup>. Indeed, many Members of Congress and members of the media have explicitly said the rule is motivated solely to advance and extreme climate agenda without regard to any applicable metrics. (Attachment A and B 000002-0000109)

Second. Many have raised serious concerns that a proposed ban would directly cause safety issues. (Attachment A 000002-000109)

Third. Many have argued that the proposed ban would potentially increase costs as it relates to energy(Attachment A 000002-000087). Some have suggested that this could have a more acute impact on certain disadvantaged segments of society

Thank you in advance for considering my request. If you have any questions, or feel you need clarification of this request please contact me at [oversightproject@heritage.org](mailto:oversightproject@heritage.org).

Sincerely,

Mike Howell  
Director of the Oversight Project and  
Author at The Daily Signal  
The Heritage Foundation  
214 Massachusetts Ave, NE  
Washington, D.C. 20002

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<sup>10</sup>Daily Mail. (Accessed: 2023, February 3). Biden's Consumer Product Safety Commission WAS serious about banning gas stoves before public backlash forced a rethink - as it's claimed it would cost over \$65BN to make every US household electric. <https://www.dailymail.co.uk/news/article-11707473/Internal-memo-shows-Biden-banning-gas-stoves-public-backlash.html>

**From:** Boniface, Duane  
**Sent:** Thu, 26 Jan 2023 14:12:56 +0000  
**To:** Ray, DeWane  
**Subject:** FW: Informational Package: Voluntary Standards Tracking and Access Fiscal Year 2022 Annual Report.pdf  
**Attachments:** Voluntary Standards Tracking and Access Fiscal Year 2022 Annual Report.pdf

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**From:** Rouse, Brenda <BRouse@cpssc.gov>  
**Sent:** Wednesday, December 14, 2022 9:37 AM  
**To:** Hoehn-Saric (b)(6) Hoehnsaric@cpssc.gov>; Fong-Swamidoss, Jana <JFSwamidoss@cpssc.gov>; Laitin, Anna <ALaitin@cpssc.gov>; Feldman, (b)(6) Feldman@cpssc.gov>; Dziak, Douglas <DDziak@cpssc.gov>; Fuller, Thomas <TFuller@cpssc.gov>; Trumka (b)(6) Trumka@cpssc.gov>; Lipp, Robin <RLipp@cpssc.gov>; Niemasik, Kaylee <KNiemasik@cpssc.gov>; Sebold, Meghan <MSebold@cpssc.gov>; Boyle (b)(6) Boyle@cpssc.gov>; Caldera, Eva <ECaldera@cpssc.gov>; Council, Alison <ACouncil@cpssc.gov>  
**Cc:** Austin (b)(6) schlick@cpssc.gov>; Stone, Pamela <PStone@cpssc.gov>; Hampshire, Melissa <MHampshire@cpssc.gov>; Mosheim, Abioye <AMosheim@cpssc.gov>; Vice, Daniel <DVice@cpssc.gov>; Levine (b)(6) Levine@cpssc.gov>; Ray, DeWane <jray@cpssc.gov>; Summitt, Monica <MSummitt@cpssc.gov>; Yaung, Michelle <MYaung@cpssc.gov>; McGoogan, Stephen <SMcGoogan@cpssc.gov>; Boniface, Duane <DBoniface@cpssc.gov>; Recht, Joel <jrecht@cpssc.gov>; Kelleher, Mary <MKelleher@cpssc.gov>; Stadnik, Andrew <AStadnik@cpssc.gov>; Kumagai, Mark <MKumagai@cpssc.gov>; Hanway, Stephen <SHanway@cpssc.gov>; Moscoso, Alex <AMoscoso@cpssc.gov>; Kaye, Robert <RKaye@cpssc.gov>; Sultan, Jennifer <JBlumenthal@cpssc.gov>; Murphy, Mary <MMurphy@cpssc.gov>; Tarnoff, Howard <HTarnoff@cpssc.gov>; Ippolito, Leah <Lippolito@cpssc.gov>; Reyes, Gregory <GReyes@cpssc.gov>; Keller, Shaun <SDKeller@cpssc.gov>; Synnott, Stephanie <SSynnott@cpssc.gov>; Springs (b)(6) Springs@cpssc.gov>; Davis, Patty <PDavis@cpssc.gov>; Ginsburg, Andrew <AGinsburg@cpssc.gov>; Cusey, William <WCusey@cpssc.gov>; Midgett (b)(6) Midgett@cpssc.gov>; Campbell, Jacqueline <JCampbell@cpssc.gov>; Mills, Alberta E. <AMills@cpssc.gov>  
**Subject:** Informational Package: Voluntary Standards Tracking and Access Fiscal Year 2022 Annual Report.pdf

Good Morning,

Please find attached the following informational package:

[Voluntary Standards Tracking and Access Fiscal Year 2022 Annual Report- December 14, 2022.](#)

-

-  
Thank you,  
Brenda

**Brenda C. Rouse**

Docket and Hearing Coordinator, Division of the Secretariat  
[U.S. Consumer Product Safety Commission](#) | Office of the General Counsel  
4330 East West Highway | Bethesda, MD, 20814

Office: 301-504-6836 - Cell: (b)(6) Email: [brouse@cpsc.gov](mailto:brouse@cpsc.gov)

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## Memorandum

**DATE:** December 14, 2022

**To:** The Commission  
Alberta E. Mills, Secretary

**THROUGH:** Austin C. Schlick, General Counsel  
Jason K. Levine, Executive Director

**FROM:** Jacqueline H. Campbell,  
Voluntary Standards Coordinator  
Office of Hazard Identification and Reduction

**SUBJECT:** Voluntary Standards Tracking and Access Fiscal Year 2022 Annual  
Report

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Attached is U.S. Consumer Product Safety Commission (CPSC) staff's Fiscal Year 2022 (FY 2022) Annual Voluntary Standards Tracking and Access Report (VSTAR), covering the period October 1, 2021 through September 30, 2022. If you have any questions, please contact Jacqueline Campbell at: [jcampbell@cpsc.gov](mailto:jcampbell@cpsc.gov) or [VoluntaryStandards@cpsc.gov](mailto:VoluntaryStandards@cpsc.gov).

**U.S. Consumer Product  
Safety Commission**  
4330 East-West Highway  
Bethesda, MD 20814  
[cpsc.gov](http://cpsc.gov)

**National Product Testing  
& Evaluation Center**  
5 Research Place  
Rockville, MD 20850



## Memorandum



United States  
**Consumer Product Safety Commission**

# Voluntary Standards Tracking and Access Report

FY 2022 ANNUAL REPORT

(October 1, 2021–September 30, 2022)

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

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# CPSC Voluntary Standards Activities:

## October 1, 2021–September 30, 2022

### Introduction

Voluntary standards play an important role at the CPSC. Under some CPSC statutes, if a relevant voluntary standard addresses the risk of injury that a consumer product presents, the Commission could issue a mandatory standard, but only if the voluntary standard is not likely to adequately reduce or eliminate the risk of injury, or there is not likely to be substantial compliance with the voluntary standard. Additionally, some provisions of the Consumer Product Safety Improvement Act of 2008 (CPSIA) include sections regarding certain voluntary standards. Specifically, section 104 of the CPSIA requires the Commission to promulgate mandatory consumer product safety standards for durable infant or toddler products. These mandatory 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.

### VSTAR Content and Organization

The Voluntary Standards Tracking and Access Report (VSTAR) is issued biannually as: (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 Fiscal Year 2022 (FY 2022) Annual Report.

Voluntary standards activities are handled by various standards development organizations (SDOs), most of them accredited by the American National Standards Institute (ANSI).<sup>1</sup> While most of the voluntary standards discussed in this report are developed by ASTM, International (ASTM) and UL Standards and Engagement (ULSE),<sup>2</sup> staff works with a number of other SDOs that support consumer safety activities. This report contains a listing of all the SDOs working with staff on voluntary standards and includes their abbreviated designation(s) in the Appendix at the end of this report.

The VSTAR includes a table listing the voluntary standards to which staff contributed that were initially published or revised during the reporting period. Additionally, this report identifies staff

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<sup>1</sup>International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), American Pyrotechnics Association (APA), and The American Fireworks Standards Laboratory (AFSL) are not accredited by ANSI.

<sup>2</sup>ULSE (formerly Underwriters Laboratories Inc.), an ANSI accredited SDO, is distinct from UL Research Institutes, which is a product testing and certification laboratory that was formerly part of UL.

who were approved to vote on a voluntary standard or hold a leadership position on a standards body during the reporting period.

Lastly, the VSTAR contains a section for each product, product area, or hazard associated with CPSC staff's voluntary standards work, as outlined in the FY 2022 CPSC Operating Plan (Op Plan). The FY 2022 Op Plan lists 83 different products, product areas, or hazards for which staff plans to be actively involved in developing voluntary standards during the fiscal year. The voluntary standards covered in this report address potential hazards associated with consumer products found in homes, schools, and recreation areas. More than 40 different staff serve as designated representatives (DRs) for the voluntary standards work that covers the 83 activity areas outlined in this report.

The product, product area, or hazards are organized into similar activities with the following grouping:

- Children's Products and Hazards
  - Durable Infant and Juvenile Products
  - Other Children's Products and Hazards
- Emerging Technology
- Home Products and Hazards
- Recreation
- Codes, Analytical Methods, and Labeling

Each VSTAR entry includes the following information:

<b>Purpose:</b>	The purpose of staff's involvement with the voluntary standard(s).
<b>Staff Contact:</b>	The name of staff leading the activity ( <i>i.e.</i> , the designated representative, DR).
<b>Voluntary Standard(s):</b>	The designation(s) and name(s) of existing voluntary standards, potential new voluntary standards, and ISO standards associated with the product, with which staff is, was, or may be actively involved. The designation and titles for new or updated voluntary standards are in <b>bold font</b> . Titles for current voluntary standards are in <i>italics</i> , and titles of draft or potential standards are in plain font (not bold and non-italicized).
<b>Standard(s) Update:</b>	Any updates to the voluntary standards or potential new voluntary standards with staff's participation.
<b>Relevant Rulemaking:</b>	Any associated CPSC mandatory standard(s), proposed regulation(s), and any relevant petitions, regardless of status. This subsection also includes updates to any of the petitions,

mandatory standards, or proposed regulations noted in the subsection above.

**Activities:**

A high-level description of the activity associated with the voluntary standards that occurred during the reporting period. Staff and Commission activities are highlighted in this subsection. There are sections summarizing staff-attended meetings, documented standards-related staff communications, and relevant ballot activity. It is noted when staff did not attend any meetings, did not send any documented communication, or there were no ballots.

**Next Action:**

Staff's anticipated actions on the voluntary standards and associated mandatory standards. This subsection also includes any recommendations associated with the voluntary standard.

VSTAR entries provide a high-level description of staff activity for the reporting period. For further information on meeting activity, staff meeting logs may be found at [Newsroom - FOIA | CPSC.gov](#). Staff correspondence may be found on the CPSC Voluntary Standards website at <https://www.cpsc.gov/Regulations-Laws-Standards/Voluntary-Standards>.

## Updated Standards

Table 1 lists the 42 revised, renewed, or new voluntary standards that staff actively engaged in revising or developing, and that were published during the period October 1, 2021 to September 30, 2022. Details regarding the revisions can be found in the applicable product sections of this report. The designations and titles of voluntary standards that were new, revised, or reapproved during the FY 2022 fiscal year are shown in bold font in the applicable activity section.

**Table 1: New, Renewed, or Revised Voluntary Standards Published**

**October 1, 2021 - September 30, 2022**

Title	SDO	Published	DR	New, Revision, Renewal
F747-21 Standard Terminology Relating to Amusement Rides and Devices	ASTM	October 2021	Taxier, D.	Revision
F2933-21a Standard Consumer Safety Specification for Crib Mattresses	ASTM	October 2021	Taxier, D.	Revision
F3512-21- Standard Test Method for Evaluating Wind Safety and Durability of Market Umbrellas	ASTM	October 2021	Newens, A.	New

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F3326-21 Standard Specification for Flame Mitigation Devices on Portable Fuel Containers	ASTM	October 2021	Ayers, S.	Revision
60335-2- 89, 2nd Edition Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Unit or Compressor	UL/CSA	October 2021	Ayers, S.	Revision
F3463-21 Standard Guide for Ensuring the Safety of Connected Consumer Products	ASTM	November 2021	Lee, S.	Revision
Z21.58/CSA 1.6 6th edition Outdoor Cooking Gas Appliances	ANSI/CSA	January 2022	Kim, Y.	Revision
F852 / F852M-22 Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use	ASTM	January 2022	Ayers, S.	Revision
F2388-21 Standard Consumer Safety Specification for Baby Changing Products for Domestic Use	ASTM	January 2022	Mella, L.	Revision
F404-21 Standard Consumer Safety Specification for High Chairs	ASTM	January 2022	Marques, S.	Revision
F852/F852M-22 Standard Specification for Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use	ASTM	January 2022	Ayers, S.	Revision
F2598-22 Standard Consumer Safety Specification for Sealed Storage Chests such as Cedar Chests, Hope Chests, Blanket Chests, Keepsake Chests	ASTM	February 2022	Verdino, P.	Revision
F3012-22 Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface under and around Playground Equipment	ASTM	February 2022	Lee, K.	Revision
Movable and Wall-or Ceiling-Hung Electric Room Heaters	UL	February 2022	Lee, A.	Revision
F3159-15(2022) Standard Safety Specification for Liquid Laundry Packets	ASTM	March 2022	Hurley, J.	Reapproval
F1148-22 Standard Consumer Safety Performance Specification for Home Playground Equipment	ASTM	March 2022	Lee, K.	Revision
F2670-22 Standard Consumer Safety Specification for Infant Bath Tubs	ASTM	March 2022	Foster, Z.	Revision
30 Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids	UL	April 2022	Ayers, S.	Revision
15.2 Safety Standard for Refrigeration Systems in Residential Applications	ASHRAE	April 2020	Ayers, S.	Revision
F2088-22 Standard Consumer Safety Specification for Infant and Cradle Swings.pdf	ASTM	May 2022	Torres, C.	Revision

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F2167-22 Standard Consumer Safety Specification for Infant Bouncer Seats	ASTM	May 2022	Wanna-Nakamura, S.	Revision
F2549-22 Standard Consumer Safety Specification for Frame Child Carriers.pdf	ASTM	May 2022	Lee, K.	Revision
F2907-22 Standard Consumer Safety Specification for Sling Carriers	ASTM	May 2022	Foster, Z.	Revision
F3084-22 Standard Consumer Safety Specification for Infant and Infant_Toddler Rockers	ASTM	May 2022	Kish, C.	Revision
F1193-22 Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices	ASTM	June 2022	Taxier, D.	Revision
F2194-22e1 - Standard Consumer Safety Specification for Bassinets and Cradles	ASTM	June 2022	Kish, C.	Revision
F2291-22a - Standard Practice for Design of Amusement Rides and Devices	ASTM	June 2022	Taxier, D.	Revision
F2970-22 - Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts	ASTM	June 2022	Taxier, D.	Revision
F2974-22 - Standard Practice for Auditing Amusement Rides and Devices	ASTM	June 2022	Taxier, D.	Revision
F770-22 - Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices	ASTM	June 2022	Taxier, D.	Revision
2849, Electrical Safety Systems for eBikes	UL	June 2022	Mella, L.	Revision
ANSI/PHTA/ICC- 4 (2022) American National Standard for Above-Ground/On-Ground Residential Pools	ANSI/PHTA /ICC	June 2022	Bathalon, S.	Renewal
ANSI/PHTA/ICC- 5 (2022) Residential Inground Swimming Pools	ANSI/PHTA /ICC	June 2022	Bathalon, S.	Renewal
E2525-22 Standard Test Method for Evaluation of the Effect of Nanoparticulate Materials on the Formation of Mouse Granulocyte-Macrophage Colonies	ASTM	July 2022	Matheson, J.	Revision
F1004-22 - Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures	ASTM	July 2022	Torres, C.	Revision
F2517-22e1 - Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use	ASTM	July 2022	Ayers, S.	Revision

F977-22e1 - Standard Consumer Safety Specification for Infant Walkers	ASTM	July 2022	Mordecai, B.	Revision
60335-2- 24, 3rd Edition Safety Requirements for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Refrigerating Appliances, Ice Cream Appliances, and Ice-Makers	UL/CSA	July 2022	Ayers, S.	Revision
60335- 2-107 revision 2.2 Particular Requirements for Robotic Battery Powered Electrical Lawnmowers	ANSI/OPEI	August 2022	Newens, A.	Revision
F2613-22 Standard Consumer Safety Specification for Children's Chairs and Stools	ASTM	August 2022	Lee, K.	Revision
F3304-22 Standard Specification for Lamp Fuel and Torch Fuel Packaging	ASTM	August 2022	White, S.	Revision
D8445-22a Standard Practice for Measuring Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Samples in a Large-scale Ventilated Enclosure	ASTM	September 2022	Bevington, C.	New/Revision

## Voting and Leadership Roles

In accordance with 16 CFR part 1031, *Commission Participation and Commission Employee Involvement in Voluntary Standards Activities*, the VSTAR report includes information about staff voting and leadership activities. These activities are approved annually by the Office of the Executive Director (OEX). Listed below are the active leadership and voting approvals during the reporting period:

Staff Name	Date of Approval	New Approval or Renewal	Vote or Leadership	Standards Body and Standard
Thomas, T.	December 2021	New	Leadership and voting	UL 2904, 3D Printer Emissions
Kish, C.	December 2021	Renewal	Voting	ASTM F15.18 Bassinets and Cradles
Kish, C.	January 2022	Renewal	Voting	ASTM F15.18 Infant Inclined Sleep Products
Kish, C.	January 2022	New	Voting	ASTM F15.18, Non-Full-Size Baby Cribs and Play Yards

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Harsanyi, S.	January 2022	Renewal	Voting	ASTM F15.77, Adult Magnets
Ayers, S.	April 2022	Renewal	Leadership and Voting	ASTM F15.72, Flame Mitigation Devices on Disposable Fuel Containers*
Ayers, S.	April 2022	Renewal	Leadership and Voting	ANSI/CSA Z21 Gas Ranges*
Smith, T.	April 2022	New	Voting	ANSI Z535 Safety Colors and Signs*
Ayers, S.	April 2022	Renewal	Voting	ASTM F15.10 Gasoline Containers*
Ayers, S.	April 2022	New	Voting	UL 30 Safety Cans*ASTM F15.10 Gasoline Containers*
Ayers, S.	April 2022	New	Voting	UL 30 Safety Cans*
Balci-Sinha, R.	June 2022	New	Voting	ANSI/WCMA A100.1 Safety of Corded Window Covering Products
Bevington, C.	July 2022	New	Voting	ASTM IAQ Standard Guide

# FY 2022 Staff Voluntary Standards Activities Summary

## Children's Products and Hazards

### Durable Infant and Toddler Products

Section 104 of the CPSIA directs the Commission to work with stakeholders and SDOs to develop product safety standards for durable infant and toddler products. Once a regulation is promulgated, the SDO notifies the Commission of updates to the standard. Unless the Commission notifies the SDO that the proposed revision does not improve the safety of the product, the revised standard will be considered a consumer product safety standard issued by the Commission effective 180 days after the SDO notifies the Commission (or a later date specified by the Commission in the *Federal Register*). However, if the Commission determines that the proposed revised standard does not improve the safety of the consumer product covered by the standard, the Commission may notify the SDO that the applicable mandatory children's product safety rule remains unchanged.

#### Bassinets/Cradles

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**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 bassinets and cradles.

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F2194-22e1</b>	<b><i>Standard Consumer Safety Specification for Bassinets and Cradles</i></b>

**Standard(s) Update** On July 18, 2022, ASTM notified staff that it had published ASTM F2194-22e1, the latest revision to the *Standard Consumer Safety Specification for Bassinets and Cradles*. This revision added compact bassinets to the scope of the standard. On September 23, 2022, the Commission voted to determine that the revision did not improve safety and directed staff to notify ASTM that ASTM F2194 –13, with modifications, would remain incorporated by reference. Staff was preparing a notification to ASTM at the end of the reporting period.

**Relevant Rulemaking** 16 CFR part 1218, *Safety Standard for Bassinets and Cradles*



Note: 16 CFR part 1218 references the -13 version, with modifications. ASTM F2194-16e1 version is similar to the regulation.

A notice of availability and request for comments were published on July 28, 2022 [87 FR 45303].

**Activities Summary**

Staff continues to work with the subcommittee on safe sleep issues for bassinets and cradles. During the reporting period, staff provided data on cantilever bassinets and in-bed sleepers, participated in task group meetings on bassinet and cradle scope and performance requirements, and provided feedback on the agency’s position for improving safety for these products. Additionally, staff prepared a briefing package for Commission consideration on the revision to the standard published in ASTM 2194-22e1.

**Meeting(s)**

Staff participated in ASTM F15.18 subcommittee meetings to discuss ballot outcomes and task group updates. The issue of “legs” on bassinets resulted in forming a new task group.

Staff participated in a task group meeting to discuss issues related to baby boxes, such as lids and water repellency.

Staff participated in task group meetings to discuss scope and definition issues, such as the issue of a requirement for a “leg-based” frame and how it can be characterized with stability testing and whether in-bed sleepers would be in scope of the new definition.

**Communication(s)**

Date	Type	Summary
12/8/2021	Incident Data	Staff provided the ASTM F15.18 subcommittee with cantilever bassinet incident data, along with a letter requesting formation of a task group to review incidents and propose performance requirements.
12/8/2021	Incident Data	Staff provided the ASTM F15.18 subcommittee a redacted IDI for an in-bed sleeper bassinet.
3/23/2022	Incident Data	Staff provided the ASTM F15.18 subcommittee a redacted IDI for an in-bed sleeper bassinet.
4/27/2022	Letter	Staff provided a letter to explain negative vote on ballot F15(22-04).
5/11/2022	Incident Data	Staff provided the ASTM F15.18 subcommittee with bassinet incident data for the period 1/1/2017-2/28/2022, as well as two redacted IDIs.
6/7/2022	Incident Data	Staff provided the ASTM F15.18 subcommittee with redacted IDIs for cantilever bassinets.

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Applicable Ballot(s)

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F2194	Ballot F15(21-07) item (4) struck the term “bassinet/cradle” from the side height requirements to be more inclusive of different bassinet designs. Staff submitted a comment supporting side heights of at least 7.5 inches. The ballot item passed.
October 2021	ASTM F2194	Ballot F15(21-07) item (5) to find a previous staff negative vote on the “compact bassinet” definition, stability test, and side height non-persuasive. Staff’s negative vote was found non-persuasive.
November 2021	ASTM F2194	Ballot F15(21-08) item (1) addressed suffocation concerns with lids on “baby boxes.” The item did not pass. The subcommittee found negative vote(s) persuasive and removed the item from the ballot.
March 2022	ASTM F2194	Ballot F15(22-02) items (3, 4) addressed suffocation concerns with lids and water repellency, respectively, of “baby boxes.” Item 3 received multiple negative votes, and item 4 received one negative vote. Both items remained unresolved at the end of the reporting period.
May 2022	ASTM F2194	Ballot F15(22-04) item (7) addressed the definition and scope within the standard. The item received several negative votes. Staff submitted a negative vote, commenting that the proposed definition removed any reference to legs, base, or stand and no longer meets the definition of “bassinet/cradle” in 16 CFR part 1218.
August 2022	ASTM F2194	Ballot F15(22-12) items (3,4,5,6,7) were issued to find negative votes on ballot F15(22-02) item (3) nonpersuasive. The ballot items were approved.
September 2022	ASTM F2194	Ballot F15(22-13) items (3,4,5,6,7,8,9) were issued to find negative votes on ballot F15(22-02) item (4) nonpersuasive. The ballot items were approved.
September 2022	ASTM F2194	Ballot F15(22-14) items (1,2,3,4,5,6,7) were issued to find negative votes on ballot F15(22-04) item (7) nonpersuasive. The ballot items were approved.

**Next Action** Staff will participate in upcoming subcommittee meetings, including the next ASTM subcommittee meeting scheduled in October 2022. Staff will notify ASTM that the current revision will not be incorporated into 16 CFR part 1218.

**Bedside Sleepers**

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**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.

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2906-13 (2019)	<i>Standard Consumer Safety Specification for Bedside Sleepers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1222, *Safety Standard for Bedside Sleepers*

**Activities Summary** Staff continues to work with the subcommittee on safe sleep issues related to bedside sleepers. During the reporting period, staff provided data on bedside sleepers and participated in a task group and subcommittee meeting. Staff worked with the subcommittee to find balloted language that would not negatively impact safety.

**Meeting(s)** Staff participated in a subcommittee meeting where new language was proposed and discussed to address questions from a testing laboratory, and a task group was formed to explore the issue. Additionally, a task group was formed to address “mattress top” bedside sleepers. Staff participated in a task group meeting on the proposed clarifying language, resulting in a recommendation that was balloted.

**Communication(s)** There were no communications during the reporting period.

<b>Applicable Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	September 2022	ASTM F2906	Ballot F15(22-13) item (1) proposed clarifying language for the performance requirement and warning sections. The item received a negative vote (later withdrawn) regarding

		alignment with Ad Hoc Language and some editorial comments. The item was approved.
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**Next Action** Staff will participate in the next ASTM subcommittee meeting scheduled for October 2022.

**Booster Seats**

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

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2640-18	<i>Standard Consumer Safety Specification for Booster Seats</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1237, *Safety Standard for Booster Seats*

**Activities Summary** Staff continues to work with the ASTM F15.16 subcommittee to address safety issues related to booster seats. During the reporting period, staff emailed the subcommittee chair the annual booster seat data review.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/23/21	Data	Annual booster seat data review. Staff did not identify any fatalities or new hazard patterns.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

## Carriages and Strollers

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

**Staff Contact** Talcott, Kristen

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F833-21	<i>Standard Consumer Safety Specification for Carriages and Strollers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1227, *Safety Standard for Carriages and Strollers*

The mandatory standard was updated on November 18, 2021 [86 FR 64349] with an effective date of February 15, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.17 subcommittee to address safety issues related to carriages and strollers. During the reporting period, staff presented a Direct Final Rule (DFR) briefing package to the Commission, attended subcommittee meetings, and developed questions for the subcommittee on testing issues.

**Meeting(s)** Staff participated in subcommittee meetings where members discussed the potential implications of the CPSC final rule for infant sleep products on carriages and strollers, leading to formation of a task group to appeal to CPSC for guidance on the issue. Members also discussed testing questions from staff. Staff plans to send a list of redrafted questions at the request of the subcommittee members.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings.

## Changing Products

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

**Staff Contact** Mella, Lawrence

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**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2388-21	<i>Standard Consumer Safety Specification for Baby Changing Products for Domestic Use</i>

**Standard(s) Update**

On February 1, 2022, ASTM notified staff that it had published ASTM F2388-21, the latest revision to the *Standard Consumer Safety Specification for Baby Changing Products for Domestic Use*. This revision updates a figure to align information with other standards using the same testing apparatus.

**Relevant Rulemaking**

16 CFR part 1235, *Safety Standard for Baby Changing Products*

The mandatory standard was updated on April 26, 2022 [87 FR 24414], with an effective date of July 31, 2022.

**Activities Summary**

Staff continues to work with the ASTM F15.18 subcommittee on safety issues related to baby changing products. During the reporting period, staff provided input that there were no incidents that specifically indicated contoured changing pads, provided input to discussion of potential changes for new designs in the market, and prepared a briefing package for Commission consideration on the revision to the standard published in ASTM F2388-21.

**Meeting(s)**

Staff participated in a subcommittee meeting where members were updated on task groups for Cribs/Changers, Metal Fasteners, and CPSC incident data. Members also discussed four new issues: new products on the market, travel diaper changing stations and wearables, contoured changing pads and frames, and advised members that the subcommittee chair was stepping down. Staff participated in two task group meetings on contoured changing pads.

**Communication(s)**

Date	Type	Summary
June 28, 2022	Letter	Staff notified ASTM that the standard was incorporated by reference into 16 CFR part 1235, as a direct final rule.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F2388	Ballot F15(21-07) item (6) proposed an updated figure to align information with other standards using the same testing apparatus. Two administrative negatives were withdrawn November 2021, and the ballot item passed.

**Next Action** Staff will participate in the next task group or subcommittee meeting when scheduled.

**Children’s Folding Chairs and Stools**

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

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F2613-22</b>	<b>Standard Consumer Safety Specification for Children’s Chairs and Stools</b>

**Standard(s) Update** On August 22, 2022, ASTM notified staff that it had published ASTM F2613-22, the latest revision to the *Standard Consumer Safety Specification for Children’s Chairs and Stools*. This revision removed children’s step stools from the scope of the standard, added a head entrapment test, and updated references, figures, and definitions. Staff was preparing a briefing package for Commission consideration at the end of the reporting period.

**Relevant Rulemaking** 16 CFR part 1232, *Safety Standard for Children’s Folding Chairs and Children’s Folding Stools*

A notice of availability and request for comments was published on June 30, 2022 [87 FR 39068].

**Activities Summary** Staff continues to work with the ASTM F15.59 subcommittee to address hazards associated with children’s chairs and stools. During the reporting period, staff participated in the head entrapment task group to establish a test for head entrapment hazards in these products.

**Meeting(s)** Staff participated in task group meetings to develop an additional new head entrapment performance requirement between elastic components. Staff provided the task group with head entrapment test methods from the CPSC public playground handbook and other ASTM juvenile product standards.

**Ballot(s)**

Date	Type	Summary
April 2022	F2613	Ballot F 15(22-03) item (4) proposed a test for head entrapment, scope changes, and other updates. The item received one negative vote (later withdrawn) that proposed clarifications to terms and testing. The ballot item passed.

**Next Action**

Staff will participate in upcoming subcommittee meetings in October 2022 and work with the subcommittee to establish safety improvements in the standard. Staff will prepare a briefing package on the revisions to the standard for Commission consideration.

**Commercial Cribs**

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**Purpose**

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

**Staff Contact**

Taxier, Daniel

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2710-19	Standard Consumer Safety Performance Specification for Commercial Cribs

**Standard(s) Update**

The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking**

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

**Activities Summary**

Staff continues to work with the ASTM F15.18 subcommittee to address hazards associated with commercial cribs. Staff provided the subcommittee with a summary of recent incident data.

**Meeting(s)**

Voluntary standards meetings related to this topic did not take place during the reporting period.

**Communication(s)**

Date	Type	Summary
August 23, 2022	Data	Staff provided the subcommittee with the incident data for commercial cribs from 8/15/2021-8/15/2022.



*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings, including the next ASTM subcommittee meeting scheduled in October 2022.

**Crib Mattresses (including Supplemental and Aftermarket Mattresses)**

**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing hazards and form the basis of a federal standard intended to reduce hazards associated with crib and supplemental mattresses.

**Staff Contact** Taxier, Daniel

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2933-21a	<b>Standard Consumer Safety Performance Specification for Crib Mattresses</b>

**Standard(s) Update** In October 2021, ASTM published a revision to ASTM F2933- 21, ASTM F2933-21a *Standard Consumer Safety Performance Specification for Crib Mattresses*, that changed warnings and instructions in the standard. Staff voted against the ballot items, but the vote was found non-persuasive.

**Relevant Rulemaking** 16 CFR part 1241, *Safety Standard for Crib Mattresses*  
On February 15, 2022, the Commission published the final rule (87 FR 8640) with an effective date of August 15, 2022. The final rule references ASTM F2933-21, the previous version of the standard.

**Activities Summary** Staff continues to work with the ASTM F15.66 subcommittee on safe sleep issues related to crib mattresses. During the reporting period, staff participated in multiple task groups, as well as presented a final rule to the Commission.

**Meeting(s)** Staff participated in ASTM F15.66 subcommittee meetings to discuss ballot outcomes and aligning to the new crib mattress rule, 16 CFR part 1241. Staff participated in meetings of multiple task groups covering crib mattress sheet shrinkage, Ad Hoc Language, surface firmness, corner gap evaluation, cyclic testing, and breathability.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	8/23/2022	Data	Staff provided the subcommittee with the incident data for infant mattresses and pads from 1/1/2010-4/15/2022.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings, including the next ASTM subcommittee meeting scheduled in October 2022.

**Frame Child Carriers**

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**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.

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F2549-22</b>	<b>Standard Consumer Safety Specification for Frame Child Carriers</b>

**Standard(s) Update** On June 6, 2022, ASTM notified staff that it had published ASTM F2549-22, the latest revision to the *Standard Consumer Safety Specification for Frame Child Carriers*. This revision increased the test weight in the dynamic load and stability test, increased the scope of products covered, corrected incorrect citations and refined some passages, added a new warning label, and updated Ad Hoc Language.

**Relevant Rulemaking** 16 CFR part 1230, *Safety Standard for Frame Child Carriers*  
 The mandatory standard was updated September 1, 2022 [87 FR 53657] with an effective date of December 3, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee on safety issues related to frame child carriers. During the reporting period, staff participated in two ASTM task group meetings. Staff worked with the task group to update the Ad Hoc Warning Language, stability requirements, and the dynamic load test. Additionally, staff prepared a briefing package for Commission consideration on the revision to the standard published in ASTM F2549-22.

**Meeting(s)** Staff participated in tasks group meetings for testing updates and editorial and Ad Hoc language updates.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	9/15/2022	Data	Staff provided the subcommittee with the annual summary of incident data for frame child carriers from 6/10/2021-8/24/2022.

<b>Ballot(s)</b>	<b>Date</b>	<b>Voluntary</b>	<b>Summary and Results (If Applicable)</b>
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closed	Standard	
March 2022	ASTM F2549	Ballot F15(22-02) item (5) added new test requirements, increased the scope of products covered, corrected incorrect citations and refined some passages, and updated Ad Hoc language. The ballot item passed.

**Next Action** Staff will attend the next subcommittee meeting, when scheduled. Staff will monitor regulations.gov for any negative comments on the rule amendment, which will be effective on December 3, 2022.

**Full-Size Cribs**

**Purpose** To work with ASTM on revising the voluntary 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.

**Staff Contact** Taxier, Daniel

Voluntary Standard(s)	Designation and current version	Title
	ASTM F1169-19	Standard Consumer Safety Specification for Full-Size Cribs

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1219, *Safety Standard for Full-Size Cribs*

**Activities Summary** Staff continues to work with the ASTM F15.18 subcommittee and related task groups on safe sleep issues, including inclined sleep surfaces. During the reporting period, staff provided data on full-size cribs and participated in a task group meeting to discuss proposed sleep angle requirements for full-size cribs and other infant sleep products.

**Meeting(s)** Staff participated in an ASTM task group meeting to discuss proposed requirements for full-size cribs, non-full-size cribs, and play yards that would address the incline angle and other aspects of these products.

Communication(s)	Date	Type	Summary
	10/20/2021	Data	Staff provided the subcommittee with summarized incident data for full-size cribs from January 2017 through July 2021.

8/31/2022	Data	Staff provided the subcommittee with summarized incident data for full-size cribs from August 2020 through August 2022.
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**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in any upcoming subcommittee meetings.

**Gates and Expandable Enclosures**

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**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 expansion gates and expandable enclosures.

**Staff Contact** Torres, Carlos

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F1004-22	<i>Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures</i>

**Standard(s) Update** On July 25, 2022, ASTM notified staff that it had published ASTM F1004-22, the latest revision to the *Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures*. The revision to ASTM F1004-22 consists of changes to the illustrated examples of warning labels referenced as Figures in Section 8.4.7. This change reflects the requirement in Section 8.5.7 for pressure-mounted gates to have a separate warning, specific to installation of wall cups, if the design of that gate relies on the wall cups to meet the push-out force requirements.

**Relevant Rulemaking** 16 CFR part 1239, *Safety Standard for Gates and Enclosures*

A notice of availability and request for comments was published on August 4, 2022 [87 FR 47729].

**Activities Summary** Staff continues to work with the ASTM F15.11 subcommittee on improving the safety of gates and enclosures. During the reporting period, staff participated in subcommittee and task group meetings on retractable gates. Additionally, staff is preparing a briefing package for Commission consideration on the revisions to the standard published in ASTM F1004-22.

**Meeting(s)** Staff participated in subcommittee and a group meetings on retractable gates. Staff raised the issue with retractable gates in a 2020 letter, providing data to the subcommittee and advocating for a new fabric performance requirement for certain types of gates. Fabric may stretch or loosen during routine use, resulting in a possible hazard. Also, staff suggested including a warning label on the “hook side” of the gate to alert consumers about these issues. Staff participated in subcommittee and task group meetings to correct the illustrative warning examples (for on-product warning label) in the standard and clarify the warning requirements for packaging and instructions pertaining to wall cups.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
May 2022	ASTM F1004	Ballot F15(22-04) item (3) addressed the illustrative warning examples (for on-product warning labels) in the standard for pressure-mounted gate wall cups. The item passed.

**Next Action** Staff will participate in upcoming subcommittee meetings in October 2022. Staff will present a briefing package for Commission consideration on the revisions to the standard published in ASTM F1004-22.

**Handheld Infant Carriers**

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**Purpose** To work with ASTM on revising the voluntary 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 infant carriers.

**Staff Contact** DeGrano, Frederick

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2050-19	Standard Consumer Safety Performance Specification for Hand-Held Infant Carriers

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers*

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee to address hazards associated with hand-held infant carriers. Staff provided the subcommittee with a summary of recent incident data.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

**Communication(s)**

Date	Type	Summary
9/9/2022	Data	Staff provided the subcommittee with summarized incident data for full-size cribs from June 2021 through June 2022.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

**High Chairs**

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

**Staff Contact** Marques, Stefanie

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F404-21	Standard Consumer Safety Specification for High Chairs

**Standard(s) Update** On January 24, 2022, ASTM notified the Commission that it had published ASTM F404-21, the latest revision to the *Standard Consumer Safety Specification for High Chairs*. This revision includes clarifications to improve accurate placement of the test weight for stability testing.

**Relevant Rulemaking** 16 CFR part 1231, *Standard Consumer Safety Specification for High Chairs*.

The mandatory standard was updated on July 18, 2022 [87 FR 42636], with an effective date of July 23, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.16 subcommittee on improving safety of high chairs. During the reporting period, staff participated in a subcommittee meeting, provided incident data to the subcommittee, and prepared a briefing package for Commission

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consideration on the revision to the standard published in ASTM F404-21.

**Meeting(s)** Staff participated in a meeting where the subcommittee discussed ballot results and moved the standard forward for publication.

**Communication(s)**

Date	Type	Summary
10/20/2021	Incident Data	Staff provided the subcommittee with the incident data for high chairs from March 2017 through July 2021.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

### Infant Bath Seats

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**Purpose** To work with ASTM on revising the voluntary 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.

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F1967-19	Standard Consumer Safety Specification for Infant Bath Seats

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1215, *Safety Standard for Infant Bath Seats*

**Activities Summary** Staff continues to work with the ASTM F15.20 subcommittee to address hazards associated with infant bath seats. Staff provided the subcommittee with a summary of recent incident data and requested that the subcommittee add a discussion of the test surface wording in the standard to the October 2022 subcommittee meeting.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

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<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	6/8/2022	Data	Staff provided the new subcommittee chair with incident data for infant bathers, bath seats, and bath tubs that had been previously supplied in 2020 and 2021.

*Ballot(s)*                      There were no ballots during the reporting period.

**Next Action**                      Staff will participate in the next ASTM subcommittee meeting in October 2022.

### Infant Bath Tubs

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**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.

**Staff Contact**                      Foster, Zachary

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2670-22	<b>Standard Consumer Safety Specification for Infant Bath Tubs</b>

**Standard(s) Update**                      On March 28, 2022, ASTM provided notification to CPSC of the latest revision to ASTM F2670-22, *Standard Consumer Safety Specification for Infant Bath Tubs*. This revision includes changes to the introduction, references, marking and labeling provisions, and resistance to collapse testing.

**Relevant Rulemaking**                      16 CFR part 1234, *Safety Standard for Infant Bath Tubs*

The mandatory standard was updated on June 24, 2022 [87 FR 37732], with an effective date of September 24, 2022.

**Activities Summary**                      Staff continues to work with the ASTM F15.20 subcommittee on issues related to stability and resistance to collapse of infant bath tubs. During the reporting period, staff participated in subcommittee and task group meetings on stability and resistance to collapse. Staff also prepared a briefing package for Commission consideration on the revision to the standard published in ASTM F2670-22.

*Meeting(s)*                              Staff participated in a subcommittee meeting and several task group meetings related to latching and locking mechanisms and stability.



Communication(s)	Date	Type	Summary
	6/8/2022	Data	Staff provided the new subcommittee chair with incident data for infant bathers, bath seats, and bath tubs that had been previously supplied in 2020 and 2021.

Ballot(s)	Date closed	Voluntary Standard	Summary and Results (If Applicable)
	January 2022	ASTM F2670	Ballot F15(21-10) item (4) addressed latching and locking mechanisms. The ballot item passed.
	January 2022	ASTM F2670	Ballot F15(21-10) item (5) sought to find a negative vote on ballot F15(21-06) item (4) regarding language requirements on warnings not persuasive. The ballot item passed.

**Next Action** Staff will participate in the upcoming subcommittee meeting in October 2022.

**Infant Bouncer Seats**

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**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.

**Staff Contact** Wanna-Nakamura, Suad

Voluntary Standard(s)	Designation and current version	Title
	ASTM F2167-22	<i>Standard Consumer Safety Specification for Infant Bouncer Seats</i>

**Standard(s) Update** On June 22, 2022, ASTM notified CPSC of the latest revision to the standard, ASTM F2167-22, *Standard Consumer Safety Specification for Infant Bouncer Seats*. This revision includes changes to suffocation hazard warnings to clarify that the product is not intended for sleep.

**Relevant Rulemaking** 16 CFR part 1229, *Safety Standard for Infant Bouncer Seats*  
 A notice of availability and request for comments was published on July 28, 2022 [87 FR 54362]. The mandatory standard was updated on September 6, 2022 [87 FR 54366], with an effective date of December 19, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant bouncer seats. During the reporting period, staff provided incident data to the subcommittee, reviewed a ballot proposal, and delivered a briefing package on the revision to the standard for Commission consideration.

**Meeting(s)** Staff participated in subcommittee meetings, where ballot results and incident data were discussed.

**Communication(s)**

Date	Type	Summary
10/20/2021	Data	Staff provided the subcommittee with the incident data for infant bouncer seats from June 2017 through July 2021.
6/1/2022	Data	Staff provided a summary of the annual incident data for the period ending 4/18/2022.
8/10/2022	Data	Staff provided the subcommittee with the incident data for infant bouncer seats for the period January 2017 through March 2022.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	ASTM F2167	Ballot F15(21-10) item (7) addressed warning language. The ballot item passed.
April 2022	ASTM F2167	Ballot F15(22-03) item (3) proposed to find a negative vote not related, allowing F15(21-10) item (7) to pass.

**Next Action** Staff will participate in upcoming subcommittee meetings in October 2022.

**Infant Sleep Products**

**Purpose** To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards, to form the basis of a federal standard intended to reduce hazards associated with infant sleep products.

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F3118-17a	Standard Consumer Safety Specification for Infant Inclined Sleep Products

**Standard(s) Update** The voluntary standard listed here was withdrawn on September 16, 2022.

**Relevant Rulemaking** 16 CFR part 1236, *Safety Standard for Infant Sleep Products*

**Activities Summary** Staff continues to work with the ASTM F15.18 subcommittee on infant safe sleep issues. During the reporting period, staff provided feedback to the subcommittee chair on the proposed draft changes to the standard. Staff also voted negative on the balloted changes to the standard.

**Meeting(s)** Staff attended subcommittee meetings that discussed revisions to the standard in line with the new infant sleep products rule. The subcommittee decided to ballot to withdraw the standard.

**Communication(s)**

Date	Type	Summary
October 1, 2021	Letter	Staff provided the ASTM F15.18 subcommittee chair with comments to the proposed draft changes to the standard.
January 12, 2022	Letter	Staff provided the ASTM F15.18 subcommittee with a formal response to the negative vote on ballot F15(21-10) item 3.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	ASTM F3118	Ballot F15(21-10) item 3 removed “inclined” from the title and made changes to create a more inclusive standard for different infant sleep products. Staff submitted a negative vote due to the changes not fully aligning with the agency final rule. The ballot item was unresolved at the end of the reporting period.
August 2022	ASTM F3118	Ballot F15(21-10) item (9) proposed withdrawing the standard from publication due to the CPSC Infant Sleep Products Rule. The item passed.

**Next Action** Staff will participate in upcoming meetings, including the next ASTM subcommittee meeting scheduled in October 2022.

**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 infant swings.

**Staff Contact** Torres, Carlos

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2088-22	<i>Standard Consumer Safety Specification for Infant and Cradle Swings</i>

**Standard(s) Update**

On July 5, 2022, ASTM notified CPSC of the latest revision to the standard, ASTM F2088-22, *Standard Consumer Safety Specification for Infant and Cradle Swings*. This revision includes changes to the warning language related to infant swings not being safe for infant sleep.

**Relevant Rulemaking**

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

The mandatory standard was updated on October 28, 2021 [86 FR 59609], with an effective date of January 29, 2022. The mandatory standard was updated again on September 20, 2022 [87 FR 57390], with an effective date of January 1, 2023.

**Activities Summary**

Staff continues to work with the ASTM F15.21 subcommittee on strangulation and head entrapment hazards on tethered straps. During the reporting period, staff provided comments and feedback on the definition of “tethered straps.” Staff provided recommendations on requirements and testing. Staff reiterated that the current length requirement (up to 16 inches) is not very effective for some current tethered straps designs. Additionally, staff prepared a briefing package on the revision to the standard published in ASTM F2088-22 for Commission consideration.

**Meeting(s)**

Staff participated in subcommittee and task group meetings on safe infant sleep warnings ballot results and meetings on requirements related to strangulation hazards of tethered straps.

**Communication(s)**

Date	Type	Summary
8/10/2022	Data	Staff provided the subcommittee with the incident data for infant swings from 1/1/2010 through 8/7/2022.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	ASTM F2088	Ballot F15(21-10, item 6) addressed warning language. The ballot item passed.
April 2022	ASTM F2088	Ballot F15(22-03, item 2) proposed to find a negative vote not persuasive, allowing F15(21-10) item (6) to pass.

**Next Action** Staff will participate in upcoming subcommittee meetings in October 2022.

**Infant Walkers**

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

**Staff Contact** Mordecai, Ben

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F977-22</b>	<b>Standard Consumer Safety Specification for Infant Walkers</b>

**Standard(s) Update** On August 29, 2022, ASTM provided notification to CPSC of the latest revision to the standard, ASTM F977-22, *Standard Consumer Safety Specification for Infant Walkers*. This revision includes changes to the test methods to make them more stringent, as well as notes related to performing certain testing procedures.

**Relevant Rulemaking** 16 CFR part 1216, *Safety Standard for Infant Walkers*  
 Note: 16 CFR Part 1216 references the -12 version.

A notice of availability and request for comments was published on September 9, 2022 [87 FR 55413].

**Activities Summary** Staff continues to work with the ASTM F15.17 subcommittee on safety issues related to infant walkers. During the reporting period, staff participated in meetings on the new revision to the standard, reviewed a ballot proposal, and prepared a briefing package on the revision to the standard for Commission consideration.

**Meeting(s)** Staff participated in a subcommittee meeting where ballot results were discussed.

**Communication(s)** There were no communications during the reporting period.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	October 2021	ASTM F977	Ballot F15(21-07, item 2) addressed revisions to notes that provided recommendations for performing certain procedures. A negative

		vote related to the influence of these notes being more than a “best practice” was found persuasive. The item was removed from the ballot.
May 2022	ASTM F977	Ballot F 15(22-04, item 4) addressed revisions to notes that provided recommendations for performing certain procedures and addressed issues raised in a previous negative vote. The item passed.

**Next Action** Staff will participate in upcoming subcommittee meetings, when scheduled.

**Non-Full-Sized Cribs and Play Yards**

**Purpose** To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards, to form the basis of a federal standard intended to reduce hazards associated with infant sleep products.

**Staff Contact** DeGrano, Frederick

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F406-19	<i>Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

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

**Activities Summary** Staff continues to work with the ASTM F 15.18 subcommittee on safe sleep issues related to non-full-size baby cribs and play yards. During the reporting period, staff participated in task groups and related activities, voted on and provided an alternate test method to a proposed gap measurement, and presented a crib mattresses final rule to the Commission.

**Meeting(s)** Staff attended a subcommittee meetings and multiple task group meetings. In these meetings, staff reiterated issues with measuring the gap between the mattress and wall of the play yard and submitted a proposed test method to the subcommittee for consideration. Additionally, staff attended task group meetings covering sleep angle,

zipper access, hybrid scope interpretation, mattress floor definition, and Ad Hoc Warning Language.

*Communication(s)*

<b>Date</b>	<b>Type</b>	<b>Summary</b>
February 15, 2022	Letter	Staff provided the ASTM F15.18 with a formal response to the negative vote on ballot F15(22-01) item 5.
March 7, 2022	Letter	Staff proposed an alternate test method for measuring gaps between a play yard mattress and side wall to that proposed in ballot F15(22-01) item 5.
March 10, 2022	Data	Staff provided summary play yard incident data to the subcommittee for the period 7/7/2020 to 7/7/2021.
4/27/2022	Letter	Staff provided the ASTM F15.18 with a formal response to the abstention with comment on ballot F15(22-04) item 6.
8/19/2022	Data	Staff provided the subcommittee with a summary of the annual incident data for play yards from 7/7/2021 through 7/20/2022.
9/21/2022	Data	Staff provided the subcommittee with redacted IDIs for two fatal co-sleeping incidents associated with play yards.
9/26/2022	Data	Staff provided the subcommittee with an update to the summary of the annual incident data for play yards from 7/7/2021 through 7/20/2022.
9/26/2022	Data	Staff provided the subcommittee with a summary of the annual incident data for non-full-size cribs from 8/15/2021 through 8/15/2022.

*Ballot(s)*

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
October 2021	ASTM F406	Ballot F15(21-07) item 3 proposed Ad Hoc Language updates and a non-mandatory appendix for reference materials.
January 2022	ASTM F406	Ballot F15(21-10) item 1 proposed clarifying language for measuring the free length of a cord or strap and a requirement for any such component to have a loop. The item was approved.
February 2022	ASTM F406	Ballot F15(22-01) item 5 proposed allowing mattresses up to 2.0 inches thick, with a gap requirement for mattresses more than 1.5 inches thick and a proposed method for testing

		the gap. Staff submitted a negative vote. The ballot item was approved once the negative votes were either withdrawn or voted nonpersuasive through ballot F15(22-10).
March 2022	ASTM F406	Ballot F15(22-02) item 2 proposed new scope language for products “for play only.” The ballot item was approved.
May 2022	ASTM F406	Ballot F15(22-04) item 5 proposed new Ad Hoc Language updates on instructional literature. The ballot item was unresolved at the end of the reporting period. The item remained unresolved at the end of the reporting period.
May 2022	ASTM F406	Ballot F15(22-04) item 6 proposed new Ad Hoc Language updates on warnings. The ballot item was unresolved at the end of the reporting period. Two negative votes were found persuasive.
August 2022	ASTM F406	Ballot F15(22-10) items 1-5 proposed to find several votes on ballot F15(22-01) item 5 nonpersuasive. All ballot items were approved.

**Next Action** Staff will participate in upcoming meetings, including the next ASTM subcommittee meeting scheduled in October 2022.

**Portable Bed Rails (Children’s)**

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

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2085-19	Standard Consumer Safety Specification for Portable Bed Rails

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

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

**Activities Summary** Staff continued to work with the ASTM F15.11 subcommittee to improve the safety of children’s portable bedrails. During the reporting period,



staff participated in a subcommittee meeting and provided incident data to the subcommittee.

*Meeting(s)* Staff participated in an ASTM F15.11 subcommittee meeting.

<i>Communication(s)</i>	Date	Type	Summary
	10/20/2021	Data	Staff provided the subcommittee with the incident data for children’s portable bed rails from April 2020 through August 2021.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in the next subcommittee meetings, scheduled for October 2022.

**Portable Hook-On Chairs**

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**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.

**Staff Contact** Lee, Kevin

<i>Voluntary Standard(s)</i>	Designation and current version	Title
	ASTM F1235-18	Standard Consumer Safety Specification for Portable Hook-On Chairs

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1233, *Safety Standard for Hook-On Chairs*

**Activities Summary** Staff continued to work with the ASTM F15.16 subcommittee to improve the safety of children’s portable hook-on chairs. During the reporting period, staff provided incident data to the subcommittee.

*Meeting(s)* Voluntary standards meetings related to this topic did not take place during the reporting period.

<i>Communication(s)</i>	Date	Type	Summary
	6/9/2022	Incident Data	Staff provided the subcommittee with a summary of the incident data for children’s

		hook-on chairs from 10/31/2018 through 11/15/2021.
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**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

**Sling Carriers (Infant and Toddlers)**

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**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.

**Staff Contact** Foster, Zachary

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2907-21	<b>Consumer Safety Specification for Sling Carriers</b>

**Standard(s) Update** In January 2022, ASTM published a revision to ASTM F2907-19, ASTM F2907-21, *Consumer Safety Specification for Sling Carriers*. During the final editing process, staff noted a conflict in two of the figures included the revision. ASTM elected to issue a ballot to correct this conflict and delay notification until a revised version of the standard could be published.

On May 23, 2022, ASTM notified CPSC of the latest revision to the standard, ASTM F2907-22, *Standard Consumer Safety Specification for Sling Carriers*. This revision includes changes to Ad Hoc Language, warnings, and pictograms.

**Relevant Rulemaking** 16 CFR part 1228, *Safety Standard for Sling Carriers*

On August 19, 2022, the Commission published the direct final rule 16 CFR part 1228, *Safety Standard for Sling Carriers* (87 FR 50934) with an effective date of November 19, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee on sling carrier products. During the reporting period, staff participated in multiple task group meetings to re-examine the scope and testing requirements and provided summary incident data to the subcommittee.

**Meeting(s)** Staff participated in an ASTM F15.21 subcommittee meeting and multiple task group meetings where scope and testing were discussed.

**Communication(s)**

Date	Type	Summary
8/3/2022	Data	Staff provided the subcommittee with a summary of the incident data for sling carriers from 1/1/2015 through 6/9/2022.

**Applicable Ballot(s)**

Date Closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F2907	Ballot F 15(22-02) item 7 included Ad Hoc language and warning updates. The ballot item passed.
January 2022	ASTM F2907	Ballot F 15(22-02) item 6 updated pictograms. The ballot item passed.

**Next Action** Staff will participate in the subcommittee meeting in October 2022.

**Soft Infant and Toddler Carriers**

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**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.

**Staff Contact** Zachary Foster

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2236-16a	Standard Consumer Safety Specification for Soft Infant and Toddler Carriers

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1226, *Safety Standard for Soft Infant and Toddler Carriers*

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee on soft infant and toddler carrier products. During the reporting period, staff provided summary incident data to the subcommittee.

*Meeting(s)* Voluntary standards meetings related to this topic did not take place during the reporting period.

*Communication(s)*

Date	Type	Summary
8/3/2022	Data	Staff provided the subcommittee with a summary of the incident data for sling carriers from 1/1/2015 through 6/9/2022.

*Ballot(s)* There were no ballots during the reporting period.

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

**Stationary Activity Centers**

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**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 stationary activity centers for children.

**Staff Contact** Lee, Kevin

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2012-18e1	Standard Consumer Safety Specification for Stationary Activity Centers

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1238, *Safety Standard for Stationary Activity Centers*

**Activities Summary** Staff continues to work with the ASTM F15.17 subcommittee on stationary activity centers. Staff participated in a task group meeting and provided incident data to the subcommittee.

*Meeting(s)* Staff participated in a voluntary standards task group meeting related to a redundant suspension strap and life cycle testing.

*Communication(s)*

Date	Type	Summary
10/20/2021	Incident Data	Staff provided the subcommittee with the incident data for stationary

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		activity centers from March 2018 through July 2021.
5/31/2022	Data	Staff provided the subcommittee with the annual summary incident data for stationary activity centers from 3/8/2021 through 3/18/2022.

*Applicable Ballot(s)*

Date Closed	Voluntary Standard	Summary and Results (If Applicable)
August 2022	ASTM F2012	Ballot F 15(22-12) item 1 included Ad Hoc language and warning updates. There was a persuasive negative and the item was removed from the ballot.
August 2022	ASTM F2012	Ballot F 15(22-12) item 2 updated pictograms. The ballot item remained unresolved at the end of the reporting period.

**Next Action**

Staff will participate in the next subcommittee meeting, scheduled October 2022.

**Toddler Beds**

**Purpose**

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

**Staff Contact**

Kish, Celestine

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F1821-19e1	Standard Consumer Safety Specification for Toddler Beds

**Standard(s) Update**

The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking**

16 CFR part 1217, *Safety Standard for Toddler Beds*

**Activities Summary** Staff continues to work with the ASTM F15.18 subcommittee on toddler beds. Staff participated in a subcommittee meeting and provided incident data to the subcommittee.

**Meeting(s)** Staff participated in a subcommittee meeting where a victim who lost his son in a bunk bed incident asked the subcommittee to develop safety requirements and warnings for toddler beds.

**Communication(s)**

Date	Type	Summary
7/28/2022	Data	Staff provided the subcommittee with a summary of the annual incident data for toddler beds from 7/6/2021 through 7/25/2022.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for October 2022.

## Other Children’s Products and Hazards

### Child-Resistant Packages (CRP)

**Purpose** To maintain adequate safety levels addressing hazards associated with child-resistant packaging by monitoring developments that affect the federal mandatory standard, including working with ASTM on voluntary standards for package design and development.

**Staff Contact** Eilbert, Mark

**Voluntary Standard(s)**

Designation and current version	Title
ASTM D3475-20	Standard Classification of Child-Resistant Packages
ASTM F17-20	Standard Terminology Relating to Primary Barrier Packaging
ASTM F3375-19	Standard Test Method for Assessing Non-Metered Restricted Delivery Systems for Liquid Consumer Products
<b>ASTM D7860-14(2022)</b>	<b>Standard Test Methods for Measurement of Torque Retention for Child Resistant and Non-Child Resistant Packages with Continuous Thread Closures Using Automated Torque Testing Equipment</b>

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<b>Standard(s) Update</b>	On October 12, 2022, ASTM D7860-14(2022) was reapproved without change.						
<b>Relevant Rulemaking</b>	16 CFR part 1700, <i>Poison Prevention Packaging</i>						
<b>Activities Summary</b>	During the reporting period, staff participated in subcommittee meetings and requested that the subcommittee notify staff of upcoming meetings in the review of D7860-14 <i>Standard Test Methods for Measurement of Torque Retention for Child-Resistant and Non-Child-Resistant Packages with Continuous Thread Closures Using Automated Torque Testing Equipment</i> .						
<b>Meeting(s)</b>	Staff participated in subcommittee meetings by teleconference, including subcommittee F02.25 on Rigid Container Closure Systems where the review of D7860-14 was announced.						
<b>Communication(s)</b>	<table border="1"><thead><tr><th>Date</th><th>Type</th><th>Summary</th></tr></thead><tbody><tr><td>10/7/2022</td><td>email</td><td>Request to ASTM subcommittee chair to participate in review of ASTM D7860-14.</td></tr></tbody></table>	Date	Type	Summary	10/7/2022	email	Request to ASTM subcommittee chair to participate in review of ASTM D7860-14.
Date	Type	Summary					
10/7/2022	email	Request to ASTM subcommittee chair to participate in review of ASTM D7860-14.					
<b>Ballot(s)</b>	There were no ballots during the reporting period.						
<b>Next Action</b>	Staff will participate in upcoming subcommittee meetings in October 2022.						

### Crib Bumpers

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<b>Purpose</b>	To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards and form the basis of a federal standard intended to reduce hazards associated with crib bumpers.				
<b>Staff Contact</b>	Smith, Tim				
<b>Voluntary Standard(s)</b>	<table border="1"><thead><tr><th>Designation and current version</th><th>Title</th></tr></thead><tbody><tr><td>ASTM F1917-20e1</td><td><i>Standard Consumer Safety Specification for Infant Bedding and Related Accessories</i></td></tr></tbody></table>	Designation and current version	Title	ASTM F1917-20e1	<i>Standard Consumer Safety Specification for Infant Bedding and Related Accessories</i>
Designation and current version	Title				
ASTM F1917-20e1	<i>Standard Consumer Safety Specification for Infant Bedding and Related Accessories</i>				
<b>Standard(s) Update</b>	The voluntary standard listed here was not updated during the reporting period.				
<b>Relevant Rulemaking</b>	The NPR for 16 CFR part 1240, <i>Safety Standard for Crib Bumpers/Liners</i> was published in the <i>Federal Register</i> (85 FR 18878) on April 3, 2020. In July 2022, following passage of the Safe Sleep for Babies Act of 2021 (SSBA), and its designation of crib bumpers as banned hazardous				

products under section 8 of the CPSA, the Commission terminated rulemaking. An NPR for 16 CFR part 1309, *Ban of Crib Bumpers*, to codify the ban on “crib bumpers,” as defined by the SSBA, was published in the *Federal Register* (87 FR 44307) on July 26, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.19 subcommittee on infant bedding. Staff participated in two subcommittee meetings during the reporting period.

**Meeting(s)** Staff participated in two subcommittee meetings where staff answered questions about the crib bumpers rulemaking activity and the SSBA. The subcommittee also discussed a transcription error in the standard, identified by staff, that needed correction.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next Infant Bedding subcommittee meeting, scheduled for October 2022. Staff will continue rulemaking activities in support of the SSBA.

**Gasoline Containers, Child Resistance**

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**Purpose** To work with ASTM to revise the voluntary 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 from portable fuel containers.

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2517-22e1	<i>Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use</i>

**Standard(s) Update** In July 2022 ASTM published ASTM F2517-22 and then again in August 2022, ASTM published ASTM F2517-22e1, *Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use* with editorial corrections to ASTM F2517-22. The current revision of the standard includes changes to scope, wording, and testing requirements.



On September 1, 2022, ASTM notified CPSC of the latest revision to the standard, ASTM F2517-22e1, *Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use*.

**Relevant Rulemaking**

16 CFR part 1460, *Children’s Gasoline Burn Prevention Act Regulation*

Staff was preparing a briefing package for Commission consideration on the revision to the standard at the end of the reporting period.

**Activities Summary**

Staff worked with the ASTM F15.10 subcommittee to revise the voluntary standard to expand the scope to allow this standard to be used on other portable fuel containers other than gasoline, diesel, and kerosene containers; to improve the readability and reduce ambiguities in the voluntary standard; and to revise the adult test to include younger adults, more men, and develop a new method to screen participants.

**Meeting(s)**

Staff met with the task group revising ASTM F2517 twice to discuss and then reach consensus on proposed changes to the standard.

**Communication(s)**

There were no formal communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
February 2022	ASTM F2517	Ballot (F15(22-01)) item 2 proposed a new adult test to replace the senior test. The ballot item passed.
February 2022	ASTM F2517	Ballot (F15(22-01)) item 3 proposed improved readability of the child test procedure and changed instructions given to the child to remove ambiguities. The ballot item passed.
February 2022	ASTM F2517	Ballot (F15(22-01)) item 4 proposed changes to the scope that allows other portable fuel containers to test to this standard. The ballot item passed.
May 2022	ASTM F2517	Ballot F15(22-04) items 1 and 2 proposed to find two negative votes nonpersuasive. The ballot items passed.

**Next Action**

Staff will continue to participate with the ASTM F15.10 subcommittee on the voluntary standard. Staff will deliver a briefing package to the Commission on the revised standard.

**Infant Support Pillows and Nursing Support Products**

**Purpose** To work with ASTM on establishing voluntary standards to address hazards associated with infant support pillows and nursing support products.

**Staff Contact** Smith, Timothy

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	[Awaiting ASTM designation]	Potential new voluntary standard for Infant Loungers
	[Awaiting ASTM designation]	Potential new voluntary standard for Feeding and Infant Support Products

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff began work with ASTM F15.16, -19, and -21 subcommittees to develop new safety standards for infant support pillows and nursing support products. During the reporting period, staff provided relevant incident data to the ASTM F15.16 Infant Feeding Support Products subcommittee and the F15.21 Infant Loungers subcommittee. Staff also participated in subcommittee and task group meetings for these ASTM subcommittees to assist in the development of voluntary standards for each of these product categories.

**Meeting(s)** Staff attended multiple subcommittee and task group meetings for infant loungers and infant feeding support products. Because these are both new efforts, meeting activity has been focused on scope determination and incident data review.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	December 13, 2021	Letter/Incident Data	Staff requested the formation of a subcommittee to address hazards associated with infant support pillows. Along with the letter, staff provided data for nursing pillows and for infant loungers and other support pillows.
	May 11, 2022	Data	Staff provided the F15.21 Infant Loungers subcommittee with data on playmat-related incidents to children 1

		year old and younger from 1/1/2021 to 2/28/2022.
July 18, 2022	Data	Staff provided the F15.16 Infant Feeding Support Products subcommittee with incident data for all pillow-associated incidents involving infants from 1/1/2010 to 12/31/2021.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM subcommittee meetings scheduled in October 2022.

**Toys**

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**Purpose** To work with ASTM on revising the voluntary 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.

**Staff Contact** Mordecai, Benjamin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F963-17	<i>Standard Consumer Safety Specification for Toy Safety</i>
	ASTM D8133-21	<i>Standard Test Method for Determination of Low-Level Phthalates in Poly(Vinyl Chloride) Plastics by Solvent Extraction-Gas Chromatography/Mass Spectrometry</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1250, *Safety Standard for Toys*

**Activities Summary** Staff continues to work with the ASTM F15.22 subcommittee on toy safety issues. During the reporting period, staff engaged with ASTM on the below ballots, participated in task group meetings and provided feedback on the agency’s position for improving safety. Staff is expecting ASTM to publish a new revision to the standard in Winter 2023. Additionally, staff participated in several ISO TAG meetings.

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Staff is working with the ASTM D20.70 subcommittee on analytical methods to review the status of several analytical methods. Staff plans to participate in an ASTM D20.70 Inter-laboratory Study (ILS) of phthalate test methods, focusing on, ASTM D8133.

Meeting(s)

Staff attended several ISO TAG meetings, for Working Group (WG) 1, WG 6, and WG 9. Staff also attended a subcommittee meeting where previously issued ballots were discussed.

Staff participated in two ASTM D20.70 meetings during the reporting period. Staff volunteered to participating in an interlaboratory study (ILS) for ASTM D7823 and ASTM D8133.

Communication(s)

Date	Type	Summary
October 14, 2021	Letter	Staff provided a formal response to the subcommittee supporting ballot F15(21-07) item 9.
8/11/2022	Letter	Staff raised concerns with aquatic toy products.
8/19/2022	Letter	Staff raised concerns with button battery accessibility in toys.

Applicable Ballot(s)

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F963	Ballot F15(21-07) item 8 dealt with ingestion hazards related to expanding toys. The ballot item was unresolved at the end of the reporting period.
October 2021	ASTM F963	Ballot F15(21-07) item 9 added an A-weighted limit for push or pull toys. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 10 updated phthalate requirements. The ballot item was unresolved at the end of the reporting period.
October 2021	ASTM F963	Ballot F15(21-07) item 11 updated CPSC exemptions from testing. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 12 clarified alternative testing steps. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 13 moved and revised the definition of paper. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 14 updated labeling requirements. The ballot item

		was unresolved at the end of the reporting period.
October 2021	ASTM F963	Ballot F15(21-07) item 15 updated the definition of accessibility. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 16 updated the warnings on stroller and carriage toys. The ballot item was removed.
January 2022	ASTM F963	Ballot F15(21-10) items 8 and 9 proposed to find two negative votes on ballot F15(21-07) item 14 nonpersuasive. The ballot items passed.

**Next Action** Staff will participate in upcoming ASTM task group meetings or subcommittee meetings, when scheduled. Staff expects to start the ASTM D20.70 ILS work on ASTM D8133 in 2023.

## Emerging Technology

### Additive Manufacturing/3D Printing

**Purpose** To work with ULSE, ASTM, and other SDOs to develop standards for Additive Manufacturing and 3D Printers to address the hazards associated with 3D printed products and the 3D printing process

**Staff Contact** Thomas, Treye

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 2904, 1 <sup>st</sup> Edition	<i>Standard Method for Testing and Assessing Particle and Chemical Emissions from 3D Printers</i>
	ASTM WK69730	Potential new voluntary standard for wired directed-energy deposition processes

**Standard(s) Update** The STP developed a second edition of the UL 2904 and brought it to ballot on September 16, 2022. The update included an appendix on health and safety best practices developed by a working led by CPSC staff.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to participate in working and task groups focused on addressing the potential health and safety implications of additive

manufacturing. The UL 2904 Working Group began to update standards for emissions testing. Staff served as a task group leader for the development of a guidance document for 3D printer users. The task group developed a guidance document that is an informative appendix in the updated standard. The guidance will be placed in a separate document that will be available to the public free of charge. This will encourage small manufacturers to comply with voluntary standards and best practices for safety and health. Other efforts focused on larger scale use of printers and the responsible use of materials in 3D home construction.

**Meeting(s)** Staff attended several UL STP 2904 meetings discussing comments from the industry review of the next edition to the standard. Staff also attended an ASTM F42,07 meeting on 3D printing home construction.

Staff lead two meetings of a UL STP 2904 task group to address the hazards associated with 3D printer emissions in small manufacturer and home use scenarios..

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
April 2022	ASTM WK69730	Ballot item (F42 22-06, Item 1) proposed a new standard guide for wire arc energy directed deposition. The ballot remained unresolved at the end of the reporting period.
November 2022	UL 2904	The ballot for the second addition of the standard opened in September. The revision proposed updated analytical methods and guidance for the safe use of 3D printers. The ballot was still open at the end of the reporting period.

**Next Action** Staff expects the balloted second edition of the standard to be approved and released in fall 2022. These updates include the safety guidance document for 3D printers.

**Artificial Intelligence**

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**Purpose** To work with applicable SDOs to develop standards to address the safety hazards associated with artificial intelligence in consumer products.

**Staff Contact** Lee, Simon

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**Voluntary Standard(s)**

Designation and current version	Title
UL 4600	<i>Standard for Safety for the Evaluation of Autonomous Products</i>

**Standard(s) Update**

The standard was updated on March 15, 2022. The revision includes changes to the safety case framework and adding specific examples for autonomous trucks or vehicles, which could be applicable to future autonomous products.

**Relevant Rulemaking**

N/A

**Activities Summary**

CPSC staff continues to identify opportunities to improve the safety of consumer products using artificial intelligence and related technologies. During the reporting period, staff participated in a UL STP 4600 meeting.

**Meeting(s)**

Staff participated in a UL STP 4600 meeting where discussions included consolidation of UL 4600-2 into the baseline UL 4600 standard and scope of the standard. Staff's specific questions and comments included stating and reiterating CPSC's main safety concerns, mission, and jurisdiction, which is the autonomous products or systems portion of the UL 4600 (autonomous products not intended for roads).

**Communication(s)**

There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
September 2022	UL 4600	Ballot proposed to establish the standard for ANSI approval. There were comments from the ballot review from STP that are still being resolved as of the end of the reporting period.

**Next Action**

Staff plans to participate in the next UL STP 4600 meeting on December 8 and December 13 to address the revision comments and ongoing proposal topics. Staff will continue to monitor and participate in other applicable VS, federal agency, industry, partner workshops and CPSC projects.

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

**Purpose**

To work with ULSE, ASTM, and other stakeholders to revise existing voluntary standards and develop new voluntary standards to address hazards associated with connected consumer products.

**Staff Contact** Lee, Simon

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 5500, 1st Edition	<i>Remote Software Updates</i>
	UL 2900-1, 1st Edition	<i>Software Cybersecurity for Network-Connectable Devices</i>
	<b>ASTM F3463-21</b>	<b><i>Standard Guide for Ensuring the Safety of Connected Consumer Products</i></b>

**Standard(s) Update** In October 2021, ASTM published ASTM F3463-21, *Standard Guide for Ensuring the Safety of Connected Consumer Products*. The voluntary standard was revised to clarify language and the objective, define the term *consumer product*, outline how the guide could be applied, and update references.

**Relevant Rulemaking** N/A

**Activities Summary** CPSC staff continues to work to improve the safety of connected consumer products. During the reporting period, staff participated in several UL STP 2900-1 and task group meetings.

**Meeting(s)** Staff participated in an STP meeting where two task groups were formed for the glossary and documentation sections. Staff participated in meetings of both task groups.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to continue to participate in STP and TG meetings.

**Nanotechnology**

**Purpose** To work with ASTM and ISO technical committees to develop and revise voluntary standards to strengthen safety provisions addressing hazards associated with nanotechnology.

**Staff Contact** Matheson, Joanna

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
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ASTM E3025-16	<i>Standard Guide for Tiered Approach to Detection and Characterization of Manufactured Silver Nanomaterials in Textiles</i>
ASTM E2525-08 (2013) (Withdrawn)	<i>Standard Test Method for Evaluation of the Effect of Nanoparticulate Materials on the Formation of Mouse Granulocyte-Macrophage Colonies</i>
ASTM E3171-21	<i>Standard Test Method for Determination of Total Silver in Textiles by ICP-OES or ICP-MS Analysis</i>
ASTM E3238-20	<i>Standard Test Method for Quantitative Measurement of the Chemoattractant Capacity of a Nanoparticulate Material in vitro</i>
ASTM WK60553	Potential new voluntary standard for evaluation of nanoparticulate material internalization by phagocytic cells in vitro
<b>ASTM E3351-22 (previously WK60554)</b>	<b><i>Standard Test Method for Detection of Nitric Oxide Production In Vitro</i></b>
ISO/TS 13830:2013	<i>Nanotechnologies — Guidance on voluntary labelling for consumer products containing manufactured nano-objects</i>
ISO/TS 13830:2013	<i>Nanotechnologies — Guidance on voluntary labelling for consumer products containing manufactured nano-objects</i>

**Standard(s) Update**

In July 2022, the new standard ASTM E3351-22, *Standard Test Method for Detection of Nitric Oxide Production In Vitro*, was published.

**Relevant Rulemaking**

N/A

**Activities Summary**

Staff continues to work with ASTM and ISO on the safety of nanotechnology in consumer products. During the reporting period, staff participated in multiple ASTM and ISO meetings.

**Meeting(s)**

Staff participated in the ISO/TC 229 nanotechnologies working group meetings to discuss current projects and potential new work item proposals. Staff also participated in US TAG to ISO/TC 229 meetings to discuss work going on in the ISO/TC 229 working groups.

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Staff also participated in ASTM E56 committee meetings where, among other items discussed, staff participated in discussions on revising ASTM E3025.

*Communication(s)* There were no communications during the reporting period.

*Ballot(s)*

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
June 2022	ASTM E3351	Ballot item E56(22-02) item 1 proposed to establish the work item as a new standard. The ballot item was approved.
August 2022	ASTM E3025	Ballot item E56(22-03) Item 5 sought to review the standard after five years of publication. The ballot item was removed with a persuasive negative vote.
October 2022	ASTM E3025	Ballot item E56(22-05) Item 2 sought to review the standard after five years of publication and made changes to improve clarity, remove redundancies, and update the content of the standard. The ballot was still open at the end of the reporting period.

**Next Action** Staff will participate in upcoming working group and subcommittee meetings.

**Service, Communication, Information, Education, and Entertainment (SCIEE) Robots**

**Purpose** To work with ULSE to develop a new voluntary standard for SCIEE robots.

**Staff Contact** Dayal, Vineed

**Voluntary Standard(s)**

<b>Designation and current version</b>	<b>Title</b>
UL 3300	Potential new voluntary standard for SCIEE robots

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period. The STP is currently developing the first draft of the standard.

**Relevant Rulemaking** N/A

- Activities Summary** Staff continues to work with the UL STP to develop the new standard and is participating in multiple task groups for the effort.
- Meeting(s)* Staff participated in STP meetings focused on developing the standard, as well as task group meetings for Operational Design Domain and Risk Assessment, Robot Type classifications, Non-Robotic Function, Audible Indicators, Functional Safety, and other topics.
- Communication(s)* There were no communications during the reporting period.
- Ballot(s)* There were no ballots during the reporting period.
- Next Action** Staff will participate in upcoming STP and task group meetings.

**Wearables**

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**Purpose** To work with ULSE and any other SDOs to develop voluntary standards for wearable technologies to keep consumers safe.

**Staff Contact** Thomas, Treye

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 8400	Potential new voluntary standard for the safety for virtual reality (VR), augmented reality (AR) and mixed reality (MR) technology equipment

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continued to work with the UL STP to improve the draft standard. During the reporting period, staff participated in numerous task groups and STP meetings, and emphasized safety concerns for the subject immersive technologies, particularly regarding foreseeable, inappropriate use of the products by vulnerable age groups, and regarding the importance of normative requirements. The STP balloted the draft standard (closed 08/02/2022), and staff submitted a letter accompanying their abstention vote, which recommended improvements to the draft standard.

*Meeting(s)* Staff participated in regular, reoccurring STP and task group meetings for UL STP 8400, pertaining to safety and warning instructions, vulnerable age groups, and enhancing spatial perception. After the ballot closed, staff participated heavily in STP discussions reviewing the ballot comments, and staff recommended ways to improve the draft standard.

*Communication(s)* There were no communications during the reporting period.

<i>Ballot(s)</i>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	August 2022	UL 8400	Ballot proposed to establish the draft as a new standard. The ballot item was unresolved at the end of the reporting period.

**Next Action** Staff will continue to participate in STP meetings and efforts to publish the standard.

## Home Products and Hazards

### Adult Portable Bed Rails

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

**Staff Contact** Dayal, Vineed

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3186-17	<i>Standard Specification for Adult Portable Bed Rails and Related Products</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** Petition CP 13-1 *Petition on Adult Portable Bedrails* was docketed in June 2013. The Commission voted to grant the petition on March 15, 2022, directing staff to draft a notice of proposed rulemaking. Staff delivered a briefing package for Commission consideration at the end of the reporting period.

**Activities Summary** Staff continued to work with the ASTM F15.70 subcommittee to improve the safety of adult portable bedrails. During the reporting period, staff reviewed proposed revisions and briefed the group on agency activities.

**Meeting(s)** Staff participated in subcommittee and task group meetings. Topics included discussion of incident data, hazard identification, potential revisions and safety improvements, and agency activities. Additionally,

staff presented a summary of market compliance testing to the subcommittee.

<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	6/10/2022	Letter	Staff provided recommendations for revision of the standard.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will continue to work with the task group to review the remainder of the standard and discuss other proposals, as well as develop rulemaking briefing packages for Commission consideration.

**Bath Tubs (Adult)**

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**Purpose** To work with ASTM to re-establish F462 or develop a new voluntary standard to address fall hazards associated with adult bath tubs and shower facilities, with particular focus on older consumers.

**Staff Contact** Bowley, Susan

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F462-79(2007) (Withdrawn in 2016)	Consumer Safety Specification for Slip-Resistant Bathing Facilities

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the ASTM F15.03 subcommittee to develop a new standard that addresses slip and fall hazards in bath tubs and shower surfaces. During the reporting period, staff provided data on falls in bath tubs and showers over a 10-year period, participated in subcommittee meetings, and provided feedback on the agency’s contract related to creating Reference Surfaces for testing and performing a human research study (Arizona State University/ASU).

**Meeting(s)** Staff participated in several task group meetings focused on incident data review, reference surfaces for testing, and the CPSC contract to facilitate development of those reference materials, as well as outcomes from the CPSC human study contract, and other tasks to develop a new standard that addresses slip and fall hazards.

<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/23/2021	Incident Data	Staff provided the subcommittee with fall-related bath tub and shower incident data for the period August 2010 through August 2021.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled. Staff will share contract work results, when completed (expected contract completion date in December 2022).

**Batteries, Fire (High-Energy Density)**

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

**Staff Contact** Kadiwala, Jay

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 1642, 6 <sup>th</sup> Edition	<i>Standard for Safety for Lithium Batteries</i>
	UL 2272, 1 <sup>st</sup> Edition	<i>Standard for Electrical Systems for Personal E-Mobility Devices</i>
	UL 2849, 1 <sup>st</sup> Edition	<i>Standard for Electrical Systems for eBikes</i>
	UL 9540, 2 <sup>nd</sup> Edition	<i>Standard for Energy Storage Systems and Equipment</i>
	UL 9540A, 1 <sup>st</sup> Edition	<i>Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems</i>
	OOI 2056	<i>Outline of Investigation for Safety of Lithium-ion Power Banks</i>
	UL 2054, 3 <sup>rd</sup> Edition	<i>Household and Commercial Batteries</i>
	UL 60086-4, 1 <sup>st</sup> Edition	<i>Standard for Safety of Primary Batteries, Part 4: Safety of Primary Batteries</i>
	UL 62133, 1 <sup>st</sup> Edition	<i>Secondary Cells and Batteries Containing Alkaline and Other Non-Acid Electrolytes– Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, for Use in Portable Applications</i>
	UL 62133-1, 1 <sup>st</sup> Edition	<i>Secondary Cells and Batteries Containing Alkaline and Other Non-Acid Electrolytes– Safety</i>

	<i>Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, for Use in Portable Applications, Part 1: Nickel Systems</i>
UL 62133-2, 1 <sup>st</sup> Edition	<i>Secondary Cells and Batteries Containing Alkaline and Other Non-Acid Electrolytes – Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made From Them, for Use in Portable Applications, Part 2: Lithium Systems</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with both ASTM and ULSE on improving the overall safety of the battery powered products with primary focus on e-mobility devices, including e-bikes. This impact also concerns battery chargers. All of these activities are presently ongoing to improve overall lithium-ion battery safety within the scope of consumer products.

**Meeting(s)** Staff participated in ANSI C18 meetings in October and March to discuss fire related battery issues.

Staff participated in UL STP 2849 meeting focused on functional safety for electrical safety of ebikes.

**Communication(s)** There were no communications during the reporting period

**Ballot(s)** There were no ballots during the reporting period

**Next Action** Staff will participate in UL STP 1642 meetings, when scheduled. Staff is participating in activities to transition OOI 2056 to a published standard.

**Batteries, Ingestion (Button)**

**Purpose** To work with the various SDOs to revise button and coin cell battery safety voluntary standards and end-product voluntary standards for products that use these button and coin cell batteries, to address accidental battery ingestions that can cause severe injury and death.

**Staff Contact** Le, Huy

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>

UL 4200A, 1 <sup>st</sup> Edition	<i>Standard for Safety for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies</i>
UL 60065, 8 <sup>th</sup> Edition	<i>Standard for Audio, Video, and Similar Electronic Apparatus—Safety Requirements</i>
ANSI C18.1M Part 2-2019	<i>American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - Safety Standard</i>
ANSI C18.2M Part 2-2021	<i>American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard</i>
ANSI C18.3M Part 2-2021	<i>American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard</i>
ANSI C18.4M-2017	<i>American National Standard for Portable Cells and Batteries- Environmental</i>

**Standard(s) Update**

The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking**

On August 16, 2022, 15 U.S.C. § 2056e (Pub. L. No. 117-171), or Reese’s Law, was enacted, directing CPSC to “promulgate a final consumer product safety standard for button cell or coin batteries and consumer products containing button cell or coin batteries,” not later than 1 year after the date of enactment. The law also establishes a child-resistant packaging standard for button cell or coin battery packaging.

**Activities Summary**

During the reporting period, staff provided an update on the Staff FY 2022 NPR work for battery ingestion hazards. Staff continues to advocate for strong warning labels and child-resistant packaging for button and coin cell batteries in ANSI C18 standards. Reese’s Law was signed by President Biden on August 16, 2022, prompting staff to prepare a draft NPR briefing package to address the ingestion hazard, in accordance with the law.

**Meeting(s)**

Staff participated in NEMA/ANSI C18 meetings to discuss button and coin cell battery ingestion hazards.

**Communication(s)**

There were no communications during the reporting period.

**Ballot(s)**

There were no ballots during the reporting period

**Next Action**

Staff will participate in NEMA/ANSI C18 standards meetings and other related button and coin cell battery standards, including ASTM F963, as needed. Staff will prepare a draft NPR staff briefing package for the Commission to address the ingestion hazard, in accordance with Reese’s Law.



## Candles and Candle Accessories

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**Purpose** To work with the ASTM F15.45 subcommittee on revising the voluntary standards to strengthen safety provisions addressing hazards associated with candles and candle accessories.

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2417-17	Standard Specification for Fire Safety for Candles
	ASTM F2601-18	Standard Specification for Fire Safety for Candle Accessories

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** Petition CP 04-1 and HP 04-01 were denied in September 2014. The Commission directed staff to continue to work with ASTM.

**Activities Summary** Staff continues to work with the ASTM F15.45 subcommittee on candle safety. During the reporting period, staff provided data and participated in discussions on incident data and recalls.

**Meeting(s)** Staff participated in quarterly incident data teleconferences to discuss recent candle-related recalls and incidents found on SaferProducts.gov and from other sources, such as Canada or Europe. Based on these data, staff supported adding changes that address candle-making kits, end of useful life, and wick migration, resulting in the formation of task groups in which staff is participating.

Staff participated in two meetings discussing possible changes to F2417. Staff participated in two meeting discussing requirements for candle-making kits.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	2/15/2022	Incident Data	Staff provided a redacted IDI to the subcommittee to discuss during a future quarterly incident data teleconference.

**Ballot(s)** There were no related ballots during the reporting period.

**Next Action** Staff will continue to participate in subcommittee meetings, quarterly incident data teleconferences, and task group meetings, as scheduled.

The subcommittee plans to revise F2417 in FY 2023 and F2601 in FY 2024.

**Carbon Monoxide (CO) Alarms**

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**Purpose** To work with ULSE to ensure that the voluntary standard adequately addresses the safety hazards associated with CO alarms and effective notification of hazardous levels of CO.

**Staff Contact** Brookman, Matthew J.

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 2034, 4 <sup>th</sup> Edition	<i>Single and Multiple Station Carbon Monoxide Alarms</i>
	NFPA 72®, 2022 Edition®	<i>National Fire Alarm and Signaling Code</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the technical committee to enhance the standard and maintain effective performance requirements for CO alarms. During the reporting period, staff drafted a letter of support for the long-term sensor stability test proposal. Additionally, staff continued working with the contractor to complete the National Smoke and CO Alarm Survey. The survey will provide a national representation of smoke and CO alarm usage in the United States and a better understanding of how these devices are used to inform fire and CO safety stakeholders on ways to reduce the death rate from fires and CO poisoning.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	2/24/2022	Letter	Staff supported the proposal for a sensor stability test protocol.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will continue to support the activities of the technical committee and further development of the standard. Staff plans to complete the Smoke and CO Alarm survey in 2023, and release a report in FY 2024.

**Clothing Storage Units Tip Over**

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**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing the hazards associated with furniture tip-over incidents.

**Staff Contact** Talcott, Kristen

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2057-19	<i>Standard Safety Specification for Clothing Storage Units</i>
	ASTM F3096-21	<i>Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** The Commission published an ANPR in November 2017 (82 FR 56752, Nov. 30, 2017) and an NPR, *Safety Standard for Clothing Storage Units*, in February 2022 (87 FR 6246, Feb. 3, 2022). Staff submitted a draft FR briefing package to the Commission in September 2022.

**Activities Summary** Staff continues to work with the ASTM F15.42 subcommittee on furniture safety, especially tip-over hazards. During the reporting period, staff participated in many subcommittee and task group meetings, as well as kept the group informed of the associated rulemaking.

**Meeting(s)** Staff participated in multiple subcommittee and task group meetings related to the proposed changes to the standard. Meetings included scope, interlocks, warning and labeling, tip restraint, and testing task groups. Staff briefed the subcommittee on the NPR and provided feedback on proposals.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	6/3/2022	Letter	Staff provided statements to the F15.42 subcommittee chair with for negative votes on ballot items 1, 2, and 4-8 from F15(22-06).
	8/16/2022	Letter	Staff provided a statement to the F15.42 subcommittee chair with for negative votes on ballot items 1-8 from F15(22-11).

<b>Ballot(s)</b>	<b>Date</b>	<b>Voluntary</b>	<b>Summary and Results (If Applicable)</b>
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closed	Standard	
November 2021	ASTM F2057	ASTM F 15(21-08) item 2 proposed to address unit height measurements when adjustable feet are included. The item received negative votes and was removed from the ballot.
November 2021	ASTM F2057	ASTM F 15(21-08) item 3 proposed to remove the term <i>nightstand</i> from the standard, replacing it with a volume measurement threshold. The item received negative votes and was removed from the ballot.
November 2021	ASTM F2057	ASTM F 15(21-08) item 4 proposed language to address testing of interlocking drawers. The item received negative votes and was removed from the ballot.
June 2022	ASTM F2057	ASTM F 15(22-06) item 1 proposed changes to the warning label content, including warnings related to the interlock system. CPSC staff voted negative on the ballot item because staff was concerned that the proposed changes and other misalignments with the NPR warning label requirements did not provide sufficiently effective warnings. The ballot item received an additional technical negative, which was withdrawn. The subcommittee voted to find the CPSC staff negative non-persuasive.
June 2022	ASTM F2057	ASTM F 15(22-06) item 2 proposed changes to the warning label placement. CPSC staff voted negative on the ballot item because staff was concerned that the balloted changes did not ensure warning label conspicuity. The subcommittee voted to find the CPSC staff negative non-persuasive.
June 2022	ASTM F2057	ASTM F 15(22-06) item 4 proposed changes to the scope of the standard. CPSC staff voted negative on the ballot item because staff was concerned that the balloted changes did not align with the scope of the NPR, and, therefore, did not address the full range of products that pose a tip-over hazard. The subcommittee voted to find the CPSC staff negative non-persuasive.

June 2022	ASTM F2057	ASTM F 15(22-06) item 5 proposed requirements for interlocking elements. CPSC staff voted negative on the ballot item because staff was concerned that balloted requirements allow consumers to use CSUs in untested, less stable configurations that pose a greater risk of tip over. The item received an additional technical negative, which was not withdrawn. The subcommittee voted to find the CPSC staff negative and the additional negative non-persuasive.
June 2022	ASTM F2057	ASTM F 15(22-06) item 6 proposed changes to the requirements for the test weight. CPSC staff voted negative on the ballot item because staff was concerned that the balloted 60-pound test weight and associated stability test did not account for or simulate the forces from a dynamic child climbing interaction, which is a critical component of adequately addressing the tip-over hazard. The ballot item received an additional technical negative, which was withdrawn. The subcommittee voted to find the CPSC staff negative non-persuasive.
June 2022	ASTM F2057	ASTM F 15(22-06) item 7 proposed requirements for an alternate test weight. CPSC staff voted negative on the ballot item because staff was concerned that the balloted 60-pound test weight and associated stability test did not account for or simulate the forces from a dynamic child climbing interaction, which is a critical component of adequately addressing the tip-over hazard. The ballot item received an additional technical negative, which was withdrawn. The subcommittee voted to find the CPSC staff negative non-persuasive.
June 2022	ASTM F2057	ASTM F 15(22-06) item 8 proposed changes to the stability testing requirements. CPSC staff voted negative on the ballot item because staff was concerned that the balloted test did not simulate multiple simultaneous factors that are demonstrated to decrease stability and to simultaneously exist during known incidents— <i>i.e.</i> , multiple open/filled drawers, carpet, and

		forces from children’s dynamic interactions; that the static body weight in line with the edge of the drawer substantially underestimates the forces generated during child climbing interactions, which incident data show to be among the most common interactions; and that the pull force in the test in Section 9.2.2 was lower than demonstrated child strength, and did not appear to be a simulated dynamic force, as claimed. The ballot item received additional technical negatives, which were withdrawn. The subcommittee voted to find the CPSC staff negative non-persuasive.
June 2022	ASTM F2057	ASTM F 15(22-07) item 1 proposed additional instructions for units with levelers to the stability testing requirements. The ballot item did not receive any technical negatives.
July 2022	ASTM F2057	ASTM F 15(22-08) items 1-3 and 5-8 were to uphold negatives to find CPSC staff’s negatives on ASTM F 15(22-08) items 1, 2, and 4-8 non-persuasive. The ballot items passed.
July 2022	ASTM F2057	ASTM F 15(22-08) item 4 was to uphold negative to find a subcommittee member’s negative on ASTM F 15(22-08) item 5 non-persuasive. The ballot item passed.
August 2022	ASTM F2057	ASTM F 15(22-11) item 1 proposed changes to the stability testing requirements related to the rear floor support. CPSC staff voted negative on the ballot item, because staff was concerned that the balloted changes still did not account for real-world tip over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F 15(22-11) item 2 proposed changes to the testing surface. CPSC staff voted negative on the ballot item, because staff was concerned that the balloted changes still did not account for real-world tip over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The item received two additional technical negatives,

		which were withdrawn. The subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F 15(22-11) item 3 proposed a clarification that a test was to be performed on the test surface. CPSC staff voted negative on the ballot item, because staff was concerned that the balloted changes still did not account for real-world tip over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F 15(22-11) item 4 proposed changes to the stability testing requirements to clarify that the test apparatus is applied to only one door at a time. CPSC staff voted negative on the ballot item, because staff was concerned that the balloted changes still did not account for real-world tip over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F 15(22-11) item 5 proposed updated figures showing the application of the test apparatus. CPSC staff voted negative on the ballot item, because staff was concerned that the balloted changes still did not account for real-world tip over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F 15(22-11) item 6 proposed changes to the stability testing requirements for the horizontal pull test. CPSC staff voted negative on the ballot item, because staff was concerned that the balloted changes still did not account for real-world tip over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The

		subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F15(22-11) item 7 proposed changes to the warning label example to match previously balloted language. CPSC staff voted negative on the ballot item because staff was concerned that the balloted changes still did not account for real-world tip-over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The subcommittee voted to find the CPSC staff negative non-persuasive.
August 2022	ASTM F2057	ASTM F15(22-11) item 8 proposed changes to the definition of “extendible element” to specifically exclude bins. CPSC staff voted negative on the ballot item because staff was concerned that the balloted changes still did not account for real-world, tip-over scenarios, such as a child climbing or pulling on a CSU with all the drawers filled and open. The subcommittee voted to find the CPSC staff negative non-persuasive.

**Next Action** Staff will participate in upcoming subcommittee and task group meetings.

**Electric Heaters**

**Purpose** To work with ULSE to address hyperthermia deaths caused by portable and room heaters and address risks of fire related to electric heater cords and plugs.

**Staff Contact** Lee, Arthur

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 1278, 4 <sup>th</sup> Edition	<i>Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters</i>

**Standard(s) Update** In February 2022, ULSE revised the current edition of UL 1278, *Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters*. The amended edition (February 21, 2022) includes new requirements for warnings and markings to address hyperthermia hazards. ULSE did not issue a new edition number with the revision.



**Relevant Rulemaking**

N/A

**Activities Summary**

In October 2021, ULSE sought preliminary review for a proposal for markings and labeling to address the hyperthermia hazard. Staff chaired the task group that addressed the comments from the preliminary review. The task group addressed the comments via email and prepared a ballot in December 2021. ULSE issued a ballot of the marking and labeling proposal in December 2021; the ballot closed in January 2022 and passed. Staff is also studying fire hazards related to electric heaters and has identified some cord and plug issues that the UL STP may be able to address.

**Meeting(s)**

Voluntary standards meetings related to this topic did not take place during the reporting period.

**Communication(s)**

Date	Type	Summary
3/7/2022	Letter	Staff requested that the UL STP review findings of an internal CPSC report on inconsistent crimping, welding and/or soldering on the crimp connectors of heater plug blades.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	UL 1278	Ballot to include requirements for warnings and markings to address hyperthermia hazards.

**Next Action**

Staff will work with the UL STP to address cord and plug fire related issues.

**Fire Safety of Portable Fuel Containers and Gasoline Cans**

**Purpose**

To work with ASTM and ULSE to improve or develop fire safety requirements for flame mitigation devices and other fire safety features in various types of portable fuel containers, such as gasoline containers

**Staff Contact**

Ayers, Scott

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F3429 / ASTM F3429M-20	Standard Specification for Performance of Flame Mitigation Devices Installed in Disposable and Pre-Filled Flammable Liquid Containers

ASTM F852 / ASTM F852M-22	<b>Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use</b>
ASTM F3326-21	<b>Standard Specification for Flame Mitigation Devices on Portable Fuel Containers</b>
ASTM F839-15	Standard Specification for Cautionary Labeling of Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use
ANSI/CAN/UL/ULC 30:2022	<b>Standard for Safety Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids</b>
NFPA 30, 2021 Edition	Flammable and Combustible Liquids Code

**Standard(s)  
Update**

In October 2021, ASTM published ASTM F3326-21, *Standard Specification for Flame Mitigation Devices on Portable Fuel Containers*. The voluntary standard was revised to allow metal Flame Mitigation Devices (FMDs) in metal gasoline containers.

In January 2022, ASTM published ASTM F852 / F852M-22, *Standard Specification for Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use*. The voluntary standard was revised to update heat-resistance requirements for the container body.

In April 2022, ULSE published ANSI/CAN/UL/ULC 30:2022, *Standard for Safety Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids*. The voluntary standard was revised to include requirements for flame mitigation devices on safety cans, among other inclusions.

**Relevant  
Rulemaking**

Portable Fuel Container Safety Act of 2020

On May 18, 2022, the Commission voted to approve a Notice of Availability for Staff draft document, "Voluntary Standards Evaluation Under the Portable Fuel Container Safety Act of 2020" (Briefing package dated May 11, 2022).

**Activities  
Summary**

During the reporting period, staff worked with the UL STP 30 to revise the current edition of the voluntary standard safety. CPSC contracted with a testing laboratory to develop a performance test for flame mitigation devices on safety cans. The STP accepted the test for the next edition of UL 30. Staff is also gauging general industry compliance to ASTM F3429.

**Meeting(s)**

Staff participated in several UL STP 30 and task group meetings to develop a performance test for FMDs on safety cans. Some of these

meetings included a CPSC contractor who adapted the ASTM F3429 for safety cans.

Staff participated in an ASTM F15.72 subcommittee meeting that included discussions on FMDs and industry compliance to ASTM F3429.

Staff participated in a NFPA 30 committee meeting where public inputs for the second draft of the next edition were discussed.

*Communication(s)* There were no communications during the reporting period.

*Ballot(s)*

Date closed	Voluntary Standard	Summary and Results (If Applicable)
March 2022	UL 30	Recirculation ballot incorporated new FMD performance test and other items. The ballot passed with and will be published in April or May 2022.

**Next Action**

Staff will chair a meeting of the ASTM F15.72 task group responsible for ASTM F3429 / F3429M in October to discuss compliance to the voluntary standard and possible future requirements, including an evaluation of the standard as directed by the Commission.

**Flammable Refrigerants**

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**Purpose**

To work with the various ULSE and ASHRAE standards work groups to revise the voluntary standards associated with consumer products that utilize flammable refrigerants (also known and marketed as “low global warming potential refrigerants” and “natural refrigerants”).

**Staff Contact**

Ayers, Scott

**Voluntary Standard(s)**

Designation and current version	Title
UL/CSA 60335-2-24, 3 <sup>rd</sup> Edition	<b>Safety Requirements for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances, and Ice-Makers</b>
UL/CSA 60335-2-40, 3 <sup>rd</sup> Edition	<i>Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers</i>
<b>ASHRAE 15.2</b>	<b>Safety Standard for Refrigeration Systems in</b>

	<b>Residential Applications</b>
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**Standard(s) Update**

In May 2022, ASHRAE published ASHRAE Standard 15.2, *Safety Standard for Refrigeration Systems in Residential Application*. The new standard includes requirements for flammable refrigerants in low-rise residential buildings.

In July 2022, ULSE published UL/CSA 60335-2-24, 3<sup>rd</sup> Edition, *Safety Requirements for Household and Similar Electrical Appliances, Part 2, Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances, and Ice-Makers*. The revised edition of the voluntary standard includes new requirements for flammable refrigerants, including labeling.

**Relevant Rulemaking**

N/A

**Activities Summary**

During the reporting period, staff worked with the CANENA UL/CSA 60335-2-40 group as it revised the voluntary standard. Additionally, staff provided comments to ASHRAE on the potential new voluntary standard ASHRAE 15.2P.

**Meeting(s)**

Staff participated in UL 60335-2-40 and ASHRAE 15/15.2 meetings, where staff provided input on both standards.

**Communication(s)**

Date	Type	Summary
3/15/2022	Formal Letter	Staff supporting statement on the fifth public review of the draft ASHRAE 15.2P standard

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
March 2022	ASHRAE 15.2P	Fifth public review of the draft ASHRAE 15.P standard, addressing comments from the fourth public review. Results of the ballot led to publication of ASHRAE Standard 15.2.
March 2022	UL/CSA 60335-2-40	Recirculation of comments to revisions proposed in UL/CSA 60335-2-40. Staff expects that to be the last ballot and the next edition to publish in late 2023.

**Next Action**

Staff will participate with the ASHRAE 15.2 committee to address issues the standard may need to address. Staff will participate with the CANENA work group revising UL/CSA 60335-2-40, as needed. Staff will participate with the CANENA work group maintaining UL/CSA 60335-2-24 as needed.

## Flooring (Slips, Trips, and Falls)

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<b>Purpose</b>	To work with ASTM and NFSI on developing a new voluntary standard or revising the existing voluntary standard to reduce or prevent consumer slips, trips, and falls.						
<b>Staff Contact</b>	Bowley, Susan						
<b>Voluntary Standard(s)</b>	<table border="1"> <thead> <tr> <th>Designation and current version</th> <th>Title</th> </tr> </thead> <tbody> <tr> <td>ASTM F2508-16e1</td> <td><i>Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces</i></td> </tr> <tr> <td>ASTM WK60578</td> <td>Potential new voluntary standard test method for walkway friction testing</td> </tr> </tbody> </table>	Designation and current version	Title	ASTM F2508-16e1	<i>Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces</i>	ASTM WK60578	Potential new voluntary standard test method for walkway friction testing
Designation and current version	Title						
ASTM F2508-16e1	<i>Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces</i>						
ASTM WK60578	Potential new voluntary standard test method for walkway friction testing						
<b>Standard(s) Update</b>	The voluntary standards listed here were not updated during the reporting period.						
<b>Relevant Rulemaking</b>	Petition CP 16-1, <i>Labeling Requirements Regarding Slip Resistance of Floor Coverings</i> (Denied) and Petition CP 18-2 <i>Floor Coverings</i> (Denied)						
<b>Activities Summary</b>	Staff continued to work with ASTM F13.10 subcommittee to establish better characterization of trip, slip, and fall hazards associated with flooring.						
<b>Meeting(s)</b>	Staff participated in ASTM F13 main committee and subcommittee meetings. Topics included discussion of recent ballot results, standards up for review and new work items, including WK72780 for revision of ASTM F2508-16e1, and related slip-resistance efforts and research. Staff hosted a meeting with the Tile Council of North America (TCNA) to discuss ANSI A326.3-2021, <i>American National Standard Test Method for Measuring Dynamic Coefficient of Friction of Hard Surface Flooring Materials</i> (released February 2022).						
<b>Communication(s)</b>	There were no communications during the reporting period.						
<b>Ballot(s)</b>	There were no ballots during the reporting period.						
<b>Next Action</b>	Staff will participate in upcoming meetings, as scheduled.						

## Gas Appliances, CO Sensors

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<b>Purpose</b>	To work with technical committees on revising the voluntary standards to strengthen safety provisions addressing hazards associated with CO
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risks due to failure modes, such as disconnected vents and partially blocked vents

**Staff Contact** Jordan, Ronald

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z21.47-2016/ CSA 2.3-2016	<i>Gas-Fired Central Furnaces</i>
	ANSI Z21.13-2017/ CSA 4.9-2017	<i>Gas-Fired Low Pressure Steam and Hot Water Boilers</i>
	ANSI Z21.86-2016/ CSA 2.32-2016	<i>Vented Gas-Fired Space Heating Appliances</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** The Commission published an ANPR for Performance Requirements for Residential Gas Furnaces and Boilers, in the *Federal Register* on August 19, 2019 (84 FR 42847). At the conclusion of this reporting period, staff was working on an NPR briefing package to send to the Commission.

**Activities Summary** Staff continues to monitor the activities of the technical committee and subcommittees for any developments related to CO safety. During the reporting period, staff corresponded with the SDO to obtain updates on standards activities.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	10/27/2021	Email	Staff corresponded with the CSA TC project manager to determine whether the TC or TSCs were considering any CO safety-related improvements to the standards.

**Ballot(s)** There were no ballots during the reporting period

**Next Action** Staff will provide an NPR to the Commission and update the voluntary standard bodies on the NPR and related contractor reports, when appropriate. Staff will continue to engage with CSA and any other SDOs interested in gas appliance safety and CO sensors.

## Gas Ranges

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**Purpose** To work with the CSA TSC and other stakeholders to revise the voluntary standard to strengthen its provisions for safety.

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z21.1-2016/ CSA 1.1-2016	Household Cooking Gas Appliances

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff chaired the CSA TSC, which is working on preparing a draft of the next edition to ANSI Z21.1 for ballot this fall. Some of the requirements the TSC is proposing include those for smart-enabled cooking. Staff is also working with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges to possibly make recommendations or proposals to affected voluntary standards.

**Meeting(s)** Staff chaired two meetings of the CSA TSC, where the TSC focused on resolving open issues in preparation for the balloting of the draft of the next edition of the standard.

Staff met monthly with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges. This group is still developing the workflow of establishing recommendations and proposals.

**Communication(s)** There were no communications during the reporting period,

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will continue to chair the CSA TSC. Staff will participate in the next CSA TSC meeting, scheduled for October 6, 2022. Staff will also continue to participate with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges as long as recommendations or proposals to voluntary standards bodies are the potential outcomes. The next meeting is scheduled for October 17, 2022.

## Indoor Air Quality

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**Purpose** To work with SDOs and other stakeholders to develop and maintain voluntary standards that address hazards associated with indoor air quality.

**Staff Contact** Bevington, Charles

**Voluntary Standard(s)**

Designation and current version	Title
ASTM D8142-17e1	<i>Standard Test Method for Determining Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation using Micro-Scale Environmental Test Chambers</i>
ASTM D8141-17	<i>Standard Guide for Selecting Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) Emission Testing Methods to Determine Emission Parameters for Modeling of Indoor Environments</i>
ASTM D5438-17	<i>Standard Practice for Collection of Floor Dust for Chemical Analysis</i>
<b>ASTM D8445-22a</b>	<b><i>Standard Practice for Measuring Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Samples in a Large-scale Ventilated Enclosure</i></b>
ASHRAE 62.2-2019	<i>Ventilation and Acceptable Indoor Air Quality in Residential Buildings</i>

**Standard(s) Update** In August 2022, ASTM published the new standard ASTM D8445-22a, *Standard Practice for Measuring Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Samples in a Large-Scale Ventilated Enclosure*.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the ASTM D22.05 subcommittee on standards related to measuring and modeling chemicals in the indoor environment. During the reporting period, staff continued to advocate for development of standards that provide information on consumer products and their relationship to the indoor environment, leading to increased coordination with the ASTM F15 subcommittee. Staff is also working with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges to possibly make recommendations or proposals to affected voluntary standards.



**Meeting(s)** Staff participated in ASTM D22.05 subcommittee meetings where ballot results for ASTM D8445-22a, ASTM D8141-17, and ASTM D5438-17 were discussed. Staff also participated in ASTM D22.05 task group meetings where approaches to measure or model substances, such as Per and Poly-Fluoroalkyl Substances (PFASs) in indoor air and consumer products, were discussed.

Staff met frequently with various industry, government, and advocacy stakeholders assembled into three workgroups as part of an independent joint taskforce on reviewing IAQ issues associated with gas ranges. This group is actively working on incorporating emission protocol from gas ranges and associated indoor air concentrations of carbon monoxide, nitrogen dioxide, and fine particulate matter into revisions of existing standards.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
February 2022	ASTM WK58354	Ballot item (D22-01, Item 7) to publish as a new standard (ASTM D8445-22a). The item passed after ASTM 8442-22 was re-balloted to update one section.
March 2022	ASTM D8141	Ballot item (D22-02, Item 1) to include new references. The ballot results were not reviewed prior to the end of the reporting period.

**Next Action** Staff will continue to participate in ASTM and ASHRAE meetings to develop and review standards related to IAQ and consumer products. For example, staff started work on a new ASTM work item under D22.05 titled *Defining and categorizing modeling approaches to support source characterization for indoor exposure assessment of consumer products*.

Staff will continue to participate with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges as long as revisions to voluntary standards or recommendations to voluntary standards bodies are a potential outcome.

**Liquid Laundry Packets**

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

**Staff Contact** Hurley, Jill

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3159-15(2022)	<i>Standard Safety Specification for Liquid Laundry Packets</i>

**Standard(s) Update** On March 4, 2022, ASTM reapproved ASTM F3159-15(2022), *Standard Safety Specification for Liquid Laundry Packets*.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the ASTM F15.71 subcommittee on liquid laundry packet safety issues. During the reporting period, staff participated in task group meetings to determine if the standard’s scope should be expanded to focus on other age groups and hazards, such as ocular and dermal injuries.

**Meeting(s)** Staff attended subcommittee meetings and several task group meetings, focused on scope, data, ocular/dermal, and senior/dementia issues. Staff presented on the staff report, *Effect of Novel Coronavirus Pandemic on 2020 NEISS Estimates*, providing a list and summary count of incidents by code for the years 2019 and 2020. Members reviewed a report from Rocky Mountain Poison Control summarizing liquid laundry package exposures in children ages 6 years and younger from 2013 to 2020, focused on single and multiple routes of exposure involving ingestions, dermal, and ocular exposures.

**Communication(s)** There were no communications during the reporting period.

<b>Applicable Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	December 2021	ASTM F3159	Ballot F15(21-09) item 3 proposed to reapprove the standard with no changes. The ballot item passed once a negative vote was found non-persuasive.

**Next Action** Staff will participate in upcoming subcommittee quarterly meetings and monthly task group meetings, as scheduled.

**LP Gas Appliances**

**Purpose** To work with CSA, NFPA, and other stakeholders to revise the voluntary standards to strengthen safety provisions and to ensure that the voluntary

standards address hazards associated with LP-gas appliances, such as gas grills and fire pits.

**Staff Contact** Kim, Yeon Seok

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z21.97-2017/ CSA 2.41-2017	<i>Outdoor Decorative Gas Appliances</i>
	ANSI Z21.58b-2018 /CSA 1.6-2018	<i>Outdoor Cooking Gas Appliances</i>
	NFPA 58, 2020 Edition	<i>Liquefied Petroleum Gas Code</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff attended the technical subcommittee meeting January 2022, to review the task force reports and progress. Staff also reviewed the ballot for ANSI Z21.58.

**Meeting(s)** The joint TSC met to discuss open work items, this was the first TSC meeting in almost 2 years.

Staff also participated in several TSC and task force meetings to discuss requirements for smart-enabled, specialty outdoor cooking appliances.

**Communication(s)** There were no communications during the reporting period

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	May 2022	ANSI Z21.58	Ballot for the next edition to the standard, including requirements clarifying spare LP gas cylinders cannot be stored within a gas grill, and provisions for smart-enabled outdoor cooking gas appliances. The ballot results had not been discussed by the end of the reporting period.

**Next Action** Staff will participate in upcoming CSA TSC meeting scheduled in October 2022. Staff will continue to monitor and participate with CSA and any other SDOs interested in LP gas appliances safety.

## Market Umbrellas/Beach Umbrellas

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**Purpose** To work with ASTM to develop voluntary standards to address hazards associated with market (including patio) umbrellas (MU) and beach umbrellas (BU).

**Staff Contact** Newens, Andrew

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3512-21	<b>Standard Test Method for Evaluating Wind Safety and Durability of Market Umbrellas</b>
	ASTM WK 81182	Potential new standard for evaluating wind safety and stability of beach umbrellas

**Standard(s) Update** In October 2021, ASTM published F3512-21, *Standard Test Method for Evaluating Wind Safety and Durability of Market Umbrellas*. This new voluntary standard established test methods for evaluating MUs for wind strength and durability.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the MU Subcommittee and BU Task Group on developing new standards. During the reporting period, staff provided comments on draft documents, actively participated in task group meetings on establishing scope and test requirements, gathered data on wind forces and related information, and provided feedback on the agency's position for maintaining or improving safety for these products.

**Meeting(s)** Staff participated in an ASTM F15.79 subcommittee meeting in November 2021, where the subcommittee established a task group to develop a new standard for BUs. Staff has since been meeting with the BU task group approximately once per month, working actively with the subcommittee to develop testing requirements.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/10/2021	Email	Staff provided the ASTM F15.79 subcommittee information on accessing publicly available incident data on umbrellas

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	October 2021	N/A	Subcommittee ballot F15.79 (21-01), item 1 to include beach umbrellas requirements in any new standards.

**Next Action** Staff will host a task group meeting at the CPSC Laboratory in October 2022.

**Mowers**

**Purpose** To work with OPEI to revise their voluntary standards to address hazards associated with walk-behind and riding power lawn mowers.

**Staff Contact** Newens, Andrew

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/OPEI B71.1-2017	<i>Standard for Consumer Turf Care Equipment – Pedestrian-Controlled Mower and Ride-On Mowers – Safety Specification</i>
	ANSI/OPEI 60335-2-107-2020	<i>Particular Requirements for Robotic Battery Powered Electrical Lawnmowers</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1205, Safety Standard for Walk-Behind Power Lawn Mowers and Petition CP 19-1 on Walk-Behind Power Lawn Mowers (withdrawn May 2020)

**Activities Summary** Staff continues to work with the OPEI B71.1 committee on rollover and runover/backover hazards relating to residential riding lawn mowers. During the reporting period, staff provided incident data to OPEI. Staff continued working with SEA Limited to support contract work on riding mower rollovers, and working to support contract work on riding mower runover and backover hazards.

**Meeting(s)** Staff met with the OPEI to discuss how CPSC and OPEI can collaborate on the review of riding lawn mower incident data and on riding mower rollover and runover/backover research.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	6/30/2022	Data	Staff provided the OPEI with incident data for mower runover and rollover incidents for the period 1/1/2015 through 5/1/2022.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will meet with the OPEI B71.1 committee in October 2022. Staff expects a ballot to be issued before the end of 2022.

## Portable Generators

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**Purpose** To work with ULSE and PGMA to revise the voluntary standards to strengthen safety provisions addressing hazards associated with portable generator CO deaths and injuries.

**Staff Contact** Buyer, Janet

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/PGMA G300-2018 (Errata Update)	<i>Safety and Performance of Portable Generators</i>
	UL 2201, 2 <sup>nd</sup> Edition	<i>Carbon Monoxide (CO) Emission Rate of Portable Generators</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** NPR published on November 21, 2016 (81 FR 83556)

**Activities Summary** In February 2022, staff published a briefing package on staff's assessment of the effectiveness of the CO hazard mitigation requirements in UL 2201 and PGMA G300-2018 and information on the availability of compliant products. Additionally, staff provided an IDI to PGMA for an incident caused by a portable generator that was certified to PGMA G300-2018.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	4/22/2022	Data	Staff provided PGMA with an IDI for a CO poisoning incident related to a portable generator certified to the PGMA G300-2018 standard.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in any upcoming meetings and share data, as needed. Staff will also work on a rulemaking package for Commission consideration.

## Pressure Cookers

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**Purpose** To work with ULSE to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with pressure cookers.

**Staff Contact** Snyder, Duncan Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 136, 8th Edition	<i>Standard for Pressure Cookers</i>
	UL 1026, 6 <sup>th</sup> Edition	<i>Standard for Safety for Electric Household Cooking and Food Serving Appliances</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff worked actively to identify the correct committee, schedule a meeting, and engage stakeholders to begin addressing hazards raised by staff related to pressure cookers.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	7/6/2022	Correspondence	Staff provided draft language to UL for formation of a new task group for pressure cookers.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** At the end of the reporting period, ULSE and staff determined that the appropriate STP to address the issues raised is UL 1026. Staff anticipates moving the effort to this group in FY 2023.

**Smoke Alarms**

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

**Staff Contact** Lee, Arthur

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 217, 9th Edition	<i>Standard for Single and Multiple Station Smoke Alarms</i>

NFPA 72, 2022 Edition	National Fire Alarm and Signaling Code®
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- Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.
- Relevant Rulemaking** N/A
- Activities Summary** Staff continues to work with ULSE and NFPA to improve efficacy of smoke alarms, participating in meetings with both groups. Additionally, staff continued working with the contractor to complete the National Smoke and CO Alarm Survey. The survey will provide a national representation of smoke and CO alarm usage in the US and a better understanding of how these devices are used to better inform fire and CO safety stakeholders on ways to reduce the death rate from fires and CO poisoning.
- Meeting(s)** Staff participated in NFPA 72 First Draft meetings on issues of testing and installation of smoke alarms.
- Communication(s)** There were no communications during the reporting period.
- Ballot(s)** There were no ballots during the reporting period.
- Next Action** Staff plans to attend the UL STP 217 meeting in the fall/winter 2022. Staff plans to attend the second draft NFPA 72 meeting on public comments for the 2025 edition. Staff plans to complete the Smoke and CO Alarm survey in 2023 and release a report in FY 2024.

**Table Saws**

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

**Staff Contact** Paul, Caroleene

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 62841-3-1, 1st Edition	<i>Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-1: Particular Requirements for Transportable Table Saws</i>



## OS 84

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** NPR *Safety Standard Addressing Blade-Contact Injuries on Table Saws* (82 FR 22190)

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

Communication(s)	Date	Type	Summary
	9/30/2022	Letter	Staff noted that blade-contact injuries have not declined with the most recent blade guard requirements and asked UL to review the incident data.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will continue to monitor incident data and recommend safety improvements. Staff will continue rulemaking activities.

### Torch Fuel and Lamp Oil

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**Purpose** To work with ASTM on the development of voluntary standards addressing the hazards associated with the color and design of torch and lamp fuel packaging, the color and odor of torch and lamp fuel, and the use and design of devices principally intended to house torch and lamp fuel.

**Staff Contact** White, Sharon

Voluntary Standard(s)	Designation and current version	Title
	ASTM F3304-22	<i>Standard Specification for Lamp Fuel and Torch Fuel Packaging</i>

**Standard(s) Update** In August 2022, ASTM published a revision of ASTM F3304-22, *Standard Specification for Lamp Fuel and Torch Fuel Packaging*. The revision included an appendix to address the color and odor of torch and lamp fuel.

**Relevant Rulemaking** N/A

**Activities Summary**

During the reporting period, staff participated in task group meetings to address the hazards associated with the color and odor of torch and lamp fuel. There was consensus among the task group that the Packaging standard that was published in September 2021 contained specific requirements that already address the color and odor of torch and lamp fuel and that the better approach would be to add an Appendix to the Packaging standard that shows how the Packaging standard addresses this issue rather than develop a separate standard.

**Meeting(s)**

Staff met with the ASTM F15.72 task group to develop a potentially new voluntary standard to address the hazards associated with the color and odor of lamp and torch fuel twice during the reporting period.

**Communication(s)**

There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
June 2022	ASTM F3304	Ballot F15(22-06), item 9 proposed to add sections on packaging to the appendix and update a reference on the Age Determination Guidelines. The item passed.

**Next Action**

Staff will participate in the next scheduled meeting, which has been scheduled for December 6, 2022.

**Upholstered Furniture**

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**Purpose**

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

**Staff Contact**

Maling, Emily

**Voluntary Standard(s)**

Designation and current version	Title
ASTM E1353-21	<i>Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture</i>
NFPA 260, 2019 Edition	<i>Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture</i>

**Standard(s) Update**

The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR Part 1640, *Standard for the Flammability of Upholstered Furniture*

**Activities Summary** Staff continues to work with ASTM and NFPA. During the reporting period, staff advised the committees on the details of the new federal standard and provided feedback on other test for upholstered furniture flammability that are being developed and revised.

**Meeting(s)** Staff attended an ASTM E05.15 subcommittee meeting. The subcommittee met to discuss several flammability standards, including one for upholstered furniture. Staff updated the subcommittee on recent CPSC rulemaking.

Staff attended a NFPA fire test committee second draft meeting, where staff updated the committee on activity implementing 16 CFR part 1640.

**Communication(s)** There were no communications during the reporting period

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	January 2022	NFPA 260	Closing of the public comment period for the 2023 edition. The second draft is scheduled to be posted in October 2022.

**Next Action** Staff will participate in upcoming ASTM and NFPA meetings. Staff will provide feedback on proposed new and revised standards, as appropriate.

**Washing Machines**

**Purpose** To work with ULSE to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with an unbalanced load condition of top-loading washing machines.

**Staff Contact** Kim, Yeon Seok

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 2157, 4th Edition	<i>Electric Clothes Washing Machines and Extractors</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

**Communication(s)**

Date	Type	Summary
6/6/2022	Data	Staff provided top-load washing machine incident data for the period July 2017 through February 2022.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to attend any upcoming meetings, as scheduled.

**Window Coverings**

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

**Staff Contact** Balci-Sinha, Rana

**Voluntary Standard(s)**

Designation and current version	Title
ANSI/WCMA A100.1-2018	Standard for Safety of Corded Window Covering Products

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** The NPR for the *Safety Standard for Operating Cords on Custom Window Coverings* was published in the *Federal Register* (87 FR 1014) on January 7, 2022. On the same day, the Commission published the NPR, *Substantial Product Hazard List: Window Covering Cords* (87 FR 891).

**Activities Summary** Staff continues to work with WCMA on window covering safety issues. During the reporting period, staff participated in steering committee meetings, and staff reviewed and commented on draft revisions to the standard. Additionally, staff prepared a draft final rule briefing package for Commission consideration. Staff submitted the briefing package to the Commission on 9/28/2022.

**Meeting(s)** Staff participated in a conference call with WCMA to discuss the process on reopening the standard and three WCMA steering committee meetings, where they briefed the group on the staff's recommendations, participated in discussions on potential custom window product requirements, presented incident data, and commented on proposed revisions to the standard.

**Communication(s)**

Date	Type	Summary
3/1/2022	Letter	Staff provided a formal response to WCMA on their opposition to continuous cord loop systems and raised issues with single retractable cord lift systems.
8/15/2022	Letter	Staff outlined reasons for a negative vote on ANSI/WCMA A100 standard.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
8/15/2022	ANSI/WCMA A100	Staff and several others cast negative votes
10/21/2022	ANSI/WCMA A100	Recirculation ballot was issued on 9/23/2022. Staff's original vote stood.

**Next Action** Staff will participate in upcoming committee meetings as they are scheduled and will review and comment on any ballots issued by WCMA.

## Recreation

### Amusement Rides, Trampoline Parks, and Adventure Attractions

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

**Staff Contact** Taxier, Daniel

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F747-21a	<i>Standard Terminology Relating to Amusement Rides and Devices</i>
ASTM F770-22	<i>Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices</i>

<b>ASTM F1193-22</b>	<b><i>Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices</i></b>
ASTM F2137-19	<i>Practice for Measuring the Dynamic Characteristics of Amusement Rides</i>
<b>ASTM F2291-22a</b>	<b><i>Standard Practice for Design of Amusement Rides and Devices</i></b>
<b>ASTM F2970-22</b>	<b><i>Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts</i></b>
<b>ASTM F2974-22</b>	<b><i>Standard Practice for Auditing Amusement Rides and Devices</i></b>

**Standard(s)  
Update**

In October 2021, ASTM published ASTM F747-21a, *Standard Terminology Relating to Amusement Rides and Devices*. This revision updated references and consolidated the definitions of *owner/operator* from other F24 committee standards.

In October 2021, ASTM published F770-21a, *Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices*. This revision updated terminology and clarified the scope.

In June 2022, ASTM published F770-22, *Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices*. This revision updated the definition of *owner/operator*.

In June 2022, ASTM published F1193-22, *Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices*. This revision updated requirements for non-conforming components and added requirements for manufacturers to maintain a catalog of supplemental bulletins. Additionally, some welding requirements, including a welding process inspection requirement, were moved from F2291 to this standard.

In June 2022, ASTM published F2970-22, *Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts*. This revision removed the definition of *owner/operator*.

In June 2022, ASTM published F2974-22, *Standard Practice for Auditing Amusement Rides and Devices*. This revision updated the reference to the terminology standard, F747.

In June 2022, ASTM published F2291-22, *Standard Practice for Design of Amusement Rides and Devices*. This revision updated references,

terminology, restraint requirements, loads and strength requirements, and documentation requirements. Additionally, some welding requirements, including a welding process inspection requirement, were moved from this standard to F1193. This revision also updated guidance on metal fatigue and restraint design and added guidance on corrosion and wind load factors.

In July 2022, ASTM published F2291-22a, *Standard Practice for Design of Amusement Rides and Devices*. This revision added a requirement for head-worn accessories (such as helmets or head mounted displays) to be considered in the ride analysis for their potential effects on the rider's head inertia.

**Relevant Rulemaking**

N/A

**Activities Summary**

Staff continued working with ASTM F24 to improve safety standards for amusement rides, trampoline parks, and adventure attractions. During the reporting period, staff attended multiple subcommittee and task group meetings, reviewed ballot items, presented an in-depth investigation (IDI) report for an amusement park ride, restraint-related incident, and provided portable amusement ride and attraction incident data.

**Meeting(s)**

Staff attended multiple subcommittee and task group meetings for amusement park rides and devices. Subcommittees included those for design, maintenance and inspection, and adventure attractions. Task groups included risk assessment, restraints, ride modification, air-inflated devices, and trampoline courts. Staff presented an IDI for a restraint-related incident.

**Communication(s)**

Date	Type	Summary
8/31/2022	Data	Staff provided portable amusement ride and attraction incident data for the period January 2011 through December 2020.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F1193	Ballot F24(21-06) item 2 proposed changed language to highlight a manufacturer's responsibilities. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 3 proposed changed language to harmonize terms between

		standards. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 4 proposed changed the guide to a standard. The item passed.
October 2021	ASTM F1193	Ballot F24(21-06) item 5 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 6 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 8 proposed changed language to highlight a manufacturer's responsibilities. The item was removed from the ballot.
February 2022	ASTM 747	Ballot F24(21-07) item 3 proposed revising the scope. The item was removed from the ballot.
February 2022	ASTM 747	Ballot F24(21-07) item 4 proposed adding a Significance and Use section. The item was removed from the ballot.
February 2022	ASTM F1193	Ballot F24(21-07) item 5 proposed changed language to highlight a manufacturer's responsibilities. The item passed.
February 2022	ASTM F1193	Ballot F24(21-07) item 6 proposed changed language to highlight how to handle non-conforming components. The item passed.
February 2022	ASTM F1193	Ballot F24(21-07) item 7 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
February 2022	ASTM F1193	Ballot F24(21-07) item 8 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
February 2022	ASTM F2291	Ballot F24(21-07) item 9 aligns and adds content from other parts of the standard. The item was removed from the ballot.
February 2022	ASTM F2291	Ballot F24(21-07) item 10 proposed adding a ride class to a requirement that had inadvertently been left out. The item passed.



February 2022	ASTM F2291	Ballot F24(21-07) item 11 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 12 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 13 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 14 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 15 proposed changes to the electrical requirements. The item received no negatives but remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 16 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 17 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 18 proposed changes to the electrical requirements. The item received no negatives but remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 19 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 20 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 21 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 22 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 23 proposed editorial improvements to text. The item passed.
February 2022	ASTM F2291	Ballot F24(21-07) item 24 proposed changes to highlight responsibilities of designer/engineer. The item remains unresolved.

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February 2022	ASTM F2974	Ballot F24(21-07) item 25 proposed changed language to harmonize terms between standards. The item passed.
February 2022	ASTM F770	Ballot F24(21-07) item 26 proposed changed language to highlight a manufacturer's responsibilities. The item was removed from the ballot.
February 2022	ASTM F770	Ballot F24(21-07) item 27 proposed definition changes. The item passed.
February 2022	ASTM F2291	Ballot F24(21-07) item 38 proposed addressing head-worn accessories. The item passed.
April 2022	ASTM F1193	Ballot F24 (22-02) item 3 proposed added procedures for manufacturer subcontractors and suppliers. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 5 proposed removal of non-mandatory language. Item was removed from ballot
April 2022	ASTM F2291	Ballot F24 (22-02) item 6 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 7 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 8 proposed removal of non-mandatory language. Item was removed from ballot
April 2022	ASTM F2291	Ballot F24 (22-02) item 9 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 10 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 11 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 12 proposed updated loads and strengths references. Item was approved.
April 2022	ASTM F2291	Ballot F24 (22-02) item 13 proposed updated references. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 14 proposed updated wind load factors.

		Item was approved.
April 2022	ASTM F2291	Ballot F24 (22-02) item 15 was a duplicate of item 12. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 16 proposed moving wind load information to an appendix. Item was unresolved.
April 2022	ASTM F2291	Ballot F24 (22-02) item 17 proposed explanatory text for wind loads. Item was approved.
April 2022	ASTM F2291	Ballot F24 (22-02) item 18 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 19 proposed removal of unused definitions from the terminology. Item was approved.
April 2022	ASTM F2291	Ballot F24 (22-02) item 20 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 21 proposed removal of non-mandatory language. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 22 proposed an updated scope for the documentation requirements. Item was removed from ballot.
April 2022	ASTM F2291	Ballot F24 (22-02) item 23 proposed additional guidance for measuring short duration accelerations. Item was unresolved.
June 2022	ASTM F747	Ballot F24 (22-03) item 2 proposed removal of terms not used in any F24 standard. Item remains unresolved.
June 2022	ASTM F2291	Ballot F24 (22-03) item 3 proposed updating the scope of items the standard does not apply to. Item was removed from ballot.
June 2022	ASTM F2291	Ballot F24 (22-03) item 4 proposed updated documentation requirements. Item was removed from ballot.
June 2022	ASTM F2291	Ballot F24 (22-03) item 5 proposed clarifications for requirements associated with portable ride transportation. Item remains unresolved.

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June 2022	ASTM F770	Ballot F24 (22-03) item 6 proposed clarifications for requirements associated with portable rides. Item was removed from ballot.
June 2022	ASTM F2291	Ballot F24 (22-03) item 7 proposed updated gap requirements on elevated walkways. Item was removed from ballot.
June 2022	ASTM F2291	Ballot F24 (22-03) item 8 proposed new information for gap requirements on elevated walkways. Item was removed from ballot.
August 2022	ASTM F747	Ballot F24 (22-04) item 1 proposed an updated scope. Item remains unresolved.
August 2022	ASTM F747	Ballot F24 (22-04) item 2 proposed adding a significance and use section. Item remains unresolved.
August 2022	ASTM F747	Ballot F24 (22-04) item 3 proposed adding an informational flow chart. Item remains unresolved.
August 2022	ASTM F2291	Ballot F24 (22-04) item 4 proposed revising the documentation scope. Item remains unresolved.
August 2022	ASTM F2291	Ballot F24 (22-04) item 5 proposed updating documentation requirements. Item was removed from ballot.
August 2022	ASTM F2291	Ballot F24 (22-04) item 6 proposed adding a definition for portable amusement ride. Item was removed from ballot.
August 2022	ASTM F2291	Ballot F24 (22-04) item 7 proposed clarifications to restraint position and restraint position monitoring device requirements. Item was removed from ballot.
August 2022	ASTM F2291	Ballot F24 (22-04) item 8 proposed added consistent unit conversions. Item was removed from ballot.
August 2022	ASTM F770	Ballot F24 (22-04) item 9 proposed requirements for a modification program. Item was removed from ballot.
August 2022	ASTM F770	Ballot F24 (22-04) item 10 proposed information related to a modification evaluation process. Item was removed from ballot.

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August 2022	ASTM F770	Ballot F24 (22-04) item 11 proposed added references to the modification program. Item was removed from ballot.
August 2022	ASTM F770	Ballot F24 (22-04) item 12 proposed added evacuation plan requirements. Item was removed from ballot.
August 2022	ASTM F72291	Ballot F24 (22-04) item 25 proposed added language addressing interface design. Item remains unresolved.
August 2022	ASTM F2291	Ballot F24 (22-04) item 26 proposed added scope for operator interfaces section. Item remains unresolved.
August 2022	ASTM F2291	Ballot F24 (22-04) item 27 proposed revised technical requirements for operator interfaces. Item remains unresolved.
August 2022	ASTM F2291	Ballot F24 (22-04) item 28 proposed added operator interface requirements. Item remains unresolved.
August 2022	ASTM F2291	Ballot F24 (22-04) item 29 was balloted in error. Item was removed from ballot.
August 2022	ASTM F2291	Ballot F24 (22-04) item 30 proposed revised rider eligibility analysis requirements. Item remains unresolved.
October 2022	ASTM F2291	Ballot F24 (22-05) item 1 proposed clarifications to acceleration analysis requirements. Item closed after reporting period.
October 2022	ASTM F770	Ballot F24 (22-05) item 5 proposed requirements for portable amusement rides. Item closed after reporting period.
October 2022	ASTM F2291	Ballot F24 (22-05) item 6 proposed a definition for portable amusement ride or device. Item closed after reporting period.
October 2022	ASTM F2291	Ballot F24 (22-05) item 7 proposed renaming the definitions section. Item closed after reporting period.
October 2022	ASTM F2970	Ballot F24 (22-05) item 8 proposed revisions to the trampoline court standard. Item closed after reporting period.

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October 2022	ASTM F2291	Ballot F24 (22-06) items 1 through 10 proposed removal of non-mandatory language. Items closed after reporting period.
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**Next Action** Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM F24 committee meeting in October.

### ATVs (All-Terrain Vehicles)

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**Purpose** To work with SVIA to revise the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels to reduce fire, stability, and occupant protection hazards associated with ATVs.

**Staff Contact** Lim, Han

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/SVIA 1-2017	<i>American National Standard for Four Wheel All-Terrain Vehicles (ATVs)</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1420, *Standard for All-Terrain Vehicles*

**Activities Summary** Staff continues to work with SVIA to develop possible performance standard requirements to address fire hazards. During the reporting period, staff met with manufacturers to discuss ATV hazards and notified SVIA of a contractor report.

**Meeting(s)** Staff met with SVIA representing ATV manufacturers to discuss fire hazards on November 9, 2021, April 1, 2022, June 7, 2022, and Sept 7, 2022. A virtual meeting was held on Sept 1, 2022, to discuss proposed requirements to address OHV fire hazards.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	March 15, 2022	Email	Staff notified SVIA of a CPSC-sponsored contractor report that was made publicly available.

**Ballot(s)** A canvass ballot started on September 8, 2022; however, the closing date was after the reporting period. The ballot was for numerous proposed standard requirements for the ANSI/SVIA-1-202x standard to address fire hazards associated with ATVs.

**Next Action** Staff will continue to work with SVIA and review the open ballot.

**Bicycles**

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**Purpose** To work with ASTM to develop new or revised ASTM voluntary standards to reduce or eliminate hazards associated with bicycles and bicycle components.

**Staff Contact** Mella, Lawrence

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2793-14	<i>Standard Specification for Bicycle Grips</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1512 *Requirement for Bicycles*

**Activities Summary** Staff continues to work with the subcommittee on issues related to bicycles. During the reporting period, staff provided input on an incident regarding an exposed handlebar. Staff provided their feedback on the proposed new test method for handlebar grip resistance to abrasion and on the agency’s position for maintaining or improving safety for these products. Staff recommended balloting the end cap requirement and the improvement to the test method.

**Meeting(s)** Staff attended the ASTM F08.96 ISO TAG meeting to monitor ISO and CEN standards related to bicycles. Additionally, staff attended the ASTM F08.10 Bicycles subcommittee meetings, where the handlebar task group presented a proposed new test method for handlebar grip resistance to abrasion. Staff will participate in the development of the new test method.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings in November 2022.

## Fireworks

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

**Staff Contact** Valliere, Rodney

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	APA 87-1A, 2018 Version	<i>Standard for Construction, Classification, Approval, and Transportation of Consumer Fireworks</i>
	AFSL 101 – 115, February 2022	<i>AFSL Standards for Consumer Fireworks</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR § 1500.17, *Banned Hazardous Substances* and 16 CFR part 1507, *Firework Devices*

**Activities Summary** Staff continued to work with APA and AFSL on fireworks issues. During the reporting period, staff provided a summary of CPSC fireworks regulations to be used as a guide to importers.

**Meeting(s)** Staff participated in two APA meetings, where staff discussed potential revisions to APA 87-1A.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming APA and AFSL standards committee meetings, including the APA annual meeting Winter Educational Conference scheduled in February 2023.

## Magnet Sets

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**Purpose** To work with ASTM to revise the voluntary standard to adequately address the hazard associated with ingestion of magnets from magnet sets.

**Staff Contact** Harsanyi, Stephen



<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3458 – 21	<i>Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index <math>\geq 50 \text{ kG}^2\text{mm}^2</math>)</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** The Commission published an NPR, *Safety Standard for Magnets*, on January 10, 2022 (87 FR 1260). The Commission published a final rule, *Safety Standard for Magnets*, on September 21, 2022 (87 FR 57756).

**Activities Summary** Staff continued to work with ASTM F15.77 to improve the safety of magnet sets while also working towards a final rule for magnets. Much of this work was asynchronous, although ASTM's online collaboration area centered on drafting ballot items pertaining to performance requirements and marketing and educational requirements.

**Meeting(s)** Staff participated in two subcommittee meetings, where they briefed the group on the scope and process of the NPR and the final rule. The group discussed potential changes to the standard, and the majority voted to establish a new work item to revise the standard by balloting performance and marketing/educational requirements.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will work with the subcommittee on drafting the abovementioned ballot items. These items will be balloted for the full F15 committee.

**Playground Equipment, Home**

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

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F1148-22	<b><i>Standard Consumer Safety Performance Specification for Home Playground Equipment</i></b>

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**Standard(s) Update** The voluntary standard listed here was updated on March 8, 2022. The revision added chromated carbon arsenate (CCA) to the list of materials that shall not be used for playground equipment.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM to improve public playground safety by working with the home playground task groups to address slide strangulations and third-party playground accessories. During the reporting period, staff advocated for the standard to prohibit CCA wood. Staff also participated in two task groups addressing do-it-yourself swing hangers and slide strangulation.

**Meeting(s)** Staff participated in the ASTM F15.09 subcommittee meeting in November to discuss potential changes to the standard.

Staff participated in two different task group meetings, one for do-it-yourself swing hanger failures and the other for slide strangulation.

**Communication(s)** There were no communications during the reporting period.

<i>Applicable Ballot(s)</i>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	February 2022	ASTM F1148	ASTM published ballot F15 22-01, item 1, revision of F1148-2022 <i>Consumer Safety Performance Specification for Home Playground Equipment</i> . The ballot added CCA to the list of materials not to use. This item passed.

**Next Action** Staff will participate in the upcoming subcommittee meeting in November 2022.

### Playground Equipment, Public

**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with public playground equipment.

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
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ASTM F15.29 F1487-21	<i>Standard Consumer Safety Performance Specification for Public Playground Equipment</i>
ASTM F14.10 F2049-2011(2017)	<i>Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM to improve public playground safety by working with task groups to address fall hazards from playground gliders and banister rails. During the reporting period, staff continued to work on updating the CPSC Public Playground handbook and consider ASTM's letter of suggested modifications and attended a subcommittee meeting on playground fencing.

**Meeting(s)** Staff participated in ASTM F14.10 Fencing Subcommittee meetings, where the committee considered changing ASTM F2049 from a specification to a guide but did not end up making the change. Staff had expressed concerns about changing the standard from a specification to a guide.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	ASTM F2049	ASTM published ballot F14 21-02, item 1, reapproval of F2049-2011(2017) <i>Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas</i> . The ballot proposed to make the specification a guide. This item was removed from the ballot due to negative votes. CPSC staff submitted an abstention with comment to support the reapproval of the F2049 standard and not to convert the standard into a guidance document.
April 2022	F1487	ASTM published ballot F15.29 (22-01), item 1, revision of F1487-2021 <i>Consumer Safety Performance Specification for Playground Equipment for Public Use</i> . This ballot proposed definitions and performance

		requirements for fully enclosed play structures. The ballot received several unresolved negative votes, which are still being addressed.
August 2022	F2049	ASTM published ballot F 14 (22-03) item 3, Reapproval of F2049-2011 (2017) <i>Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas</i> . The ballot proposed the reapproval of the existing standard. CPSC staff submitted an abstention with comment to support the reapproval of the standard and not to convert the standard into a guidance document. The ballot remains unresolved.
August 2022	N/A	ASTM published ballot F08.66 (22-01) item 2, <i>New Standard Guide for the Specification, Selection, Design, and Maintenance of Fencing for Outdoor Recreational Activities Areas, Playspaces and Playing Fields used in a Publicly Accessible Site</i> . The ballot proposed a new F08 guide to determine when a playground fence would be recommended. The ballot remains unresolved.

**Next Action** Staff will participate in upcoming subcommittee meetings at the ASTM playground meetings in November 2022.

Playground Surfacing

**Purpose** To work with ASTM to revise the voluntary standards to address the hazard patterns associated with playground surfacing.

**Staff Contact** Lee, Kevin

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F1292-18e1	<i>Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment</i>
ASTM F1951-21	<i>Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment</i>

ASTM F3012-22	<b>Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface Under and Around Playground Equipment</b>
ASTM F2223-19a	<i>Standard Guide for ASTM Standards on Playground Surfacing</i>
ASTM F3313-20	<i>Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field</i>
ASTM F3351-19e1	<i>Standard Test Method for Playground Surface Impact Testing in Laboratory at Specified Test Heights</i>

**Standard(s) Update**

In February 2022, ASTM F3012, *Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface Under and Around Playground Equipment*, was revised to expand the testing for metals in playground surfacing to include non-ferrous metals and increase the total exposed metal content from none to 0.1% measured by weight.

**Relevant Rulemaking**

N/A

**Activities Summary**

Staff continues to work on updating the CPSC Public Playground handbook, which references the listed voluntary standards. Staff will consider ASTM's letter of suggested modifications.

**Meeting(s)**

Staff participated in an ASTM F08.63 playground surfacing subcommittee meeting and updated the group on the status of the CPSC Public Playground handbook revision, estimated to be completed in 2023.

**Communication(s)**

There were no communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
November 2021	ASTM F3012	ASTM published ballot F08 (21-05) item 25 <i>Revision of F3012-2022 Specification for Loose-Fill Rubber for Use as a Playground Safety Surface under and around Playground Equipment</i> . The ballot proposed modifying the total exposed metal content in loose-fill from 0% to <= 0.1% as measured by weight and also expand the testing to include non-ferrous metals. The ballot passed.

There were no ballots during the reporting period.

**Next Action** Staff plans to attend the next ASTM playground surfacing subcommittee meeting in November 2022.

**Pools, Portable Unprotected (Child Drowning)**

**Purpose** To work with ASTM and PHTA (formerly APSP) to revise the voluntary standards to strengthen safety provisions addressing hazards associated with residential drowning in pool products.

**Staff Contact** Bathalon, Susan

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2666-16	<i>Standard Specification for Aboveground Portable Pools for Residential Use</i>
	<b>ANSI/APSP/ICC-4- (R2022)</b>	<b><i>American National Standard for Above-Ground/On-Ground Residential Pools</i></b>
	<b>ANSI/APSP/ICC-5 (R2022)</b>	<b><i>PHTA-5 Residential Inground Swimming Pools</i></b>
	ANSI/APSP/ICC-8 ISPC - 2021 -	<i>American National Standard Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs</i>
	ASTM WK76767	Potential new standard for computerized vision for drowning detection in residential swimming pools

**Standard(s) Update** The ANSI/PHTA/ICC-4 and -5 residential pool standards were reapproved in 2022.

**Relevant Rulemaking** N/A

**Activities Summary** Reapproval of the ANSI/PHTA/ICC- 4 Residential Above-Ground/On-Ground Residential and ANSI/PHTA/ICC-5 Residential In-Ground Swimming Pools occurred in 2022, to avoid the standards becoming inactive. Concurrently, both standards were being updated and will be republished in 2023. During the reporting period, staff participated in task group meetings for a new work item on drowning detection. The ANSI/ICC/PHTA standard activities have updated barrier safety requirements to prevent the drowning of young children.

**Meeting(s)** Staff reviewed proposed changes as part of the Standard Writing Committee (SWC) for the ANSI/PHTA/ICC- 4 Residential Above-Ground/On-Ground Residential and ANSI/PHTA/ICC-5 Residential In-

Ground Swimming Pools. Some of these proposals included more language in barrier safety entrapment hazards, reapproval of the standard, and ladder accessibility and fall hazards. Staff also participated in the task group for ASTM WK76767, a potential new standard for computerized vision for drowning detection in residential swimming pools.

Communication(s)	Date	Type	Summary
	8/30/2022	Data	Staff provided pool ladder incident data to the committee.

Ballot(s)	Date closed	Voluntary Standard	Summary and Results (If Applicable)
	June 2022	ANSI/PHTA/ICC-4	The ballot proposed renewal with no changes. The ballot passed.
	June 2022	ANSI/PHTA/ICC-5	The ballot proposed renewal with no changes. The ballot passed.

**Next Action** Staff will participate in upcoming meetings.

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

**Purpose** To work with ROHVA and OPEI to develop requirements to address fire hazards and debris penetration hazards in off-highway vehicles.

**Staff Contact** Lim, Han

Voluntary Standard(s)	Designation and current version	Title
	ANSI/ROHVA 1- 2016	American National Standard for Recreational Off-Highway Vehicles
	ANSI/OPEI B71.9-2016	American National Standard for Multipurpose Off-Highway Utility Vehicles

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** NPR Recreational Off-Highway Vehicles (ROVs) (79 FR 68964), November 19, 2014.

The Commission published an advance notice of proposed rulemaking (ANPR) Off-Highway Vehicle (OHV) Fire and Debris Penetration Hazards (86 FR 25817), May 11, 2021.

The Commission published a notice of proposed rulemaking (NPR) Off-Highway Vehicle (OHV) Debris Penetration Hazards (87 FR 43688), July 21, 2022.

**Activities Summary**

Staff continues to work with OPEI and ROHVA to develop possible performance standard requirements to address fire and debris penetration hazards in ROVs. During the reporting period, staff met with OPEI and ROHVA members to discuss possible performance standard requirements to address fire hazards, based on other related standards.

**Meeting(s)**

Staff met with OPEI, SVIA, and ROHVA on November 9, 2021, April 1, 2022, June 7, 2022, and September 7, 2022, to discuss possible standard performance requirements for OHV fire hazards and debris penetration hazards. A virtual meeting was held on September 1, 2022, to discuss proposed requirements to address OHV fire hazards. Additionally, at the meeting on April 1, 2022, OPEI and ROHVA members examined the debris penetration test setup at CPSC contractor SEA's facility in Columbus, OH. OPEI and ROHVA committee members presented a drop test method as an alternative to the NPR test procedure to evaluate the debris penetration hazard associated with ROVs and utility task/terrain vehicles (UTVs).

**Communication(s)**

Date	Type	Summary
December 22, 2021	Email	Staff notified OPEI and ROHVA representatives regarding the publication of the December 2021 CPSC contractor report on Debris Penetration Testing
August 9, 2022	Voluntary Standards Letter	Staff confirmed receipt of OPEI and ROHVA's drop test proposal and requested a technical meeting to discuss the proposed drop test method.
September 7, 2022	Voluntary Standards Letter	This letter was in response to a canvass ballot for proposed changes to the ANSI/OPEI B71.9-202x standard that contained numerous requirements to address fire and debris penetration hazards. Staff abstained with comments in the Voluntary Standards Letter. Staff disagreed with OPEI and ROHVA's proposed drop test method. Staff also provided detailed comments on the proposed fire hazard requirements in the letter.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)



November 2022	ANSI/OPEI B71.9-202x	The ballot proposed changes to the ANSI/OPEI B71.9-202x standard to address fire and debris penetration hazards. Staff abstained with comment.
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**Next Action** Staff is tasked with preparing a final rule for ROV/UTV Debris Penetration Hazards and an NPR for Fire Hazards.

**Self-Balancing Scooters and Light Electric Vehicles**

**Purpose** To work with ASTM and ULSE to develop a new voluntary standard or revise the existing standards to strengthen the safety provisions addressing hazards associated with self-balancing scooters, hoverboards, electric-powered scooters and bikes, and other micromobility products for adults.

**Staff Contact** Mella, Lawrence

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2614-15	<i>Recreational Powered Scooters and Pocket Bikes</i>
	ASTM F2642-08 (2015)	<i>Standard Consumer Safety Specification for Safety Instructions and Labeling for Recreational Powered Scooters and Pocket Bikes</i>
	ASTM WK57360	<i>Potential new voluntary standard for self-balancing scooters and hoverboards</i>
	ASTM WK70724	<i>Potential new voluntary standard for commercial electric-powered scooters for adults</i>
	UL 2849, 1 <sup>st</sup> Edition	<i>Standard for Electrical Systems of eBikes</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM and ULSE on existing and new safety standards for micromobility products, such as hoverboards, e-bikes, and self-balancing scooters. During the reporting period, staff participated in multiple meetings and provided the annual micromobility data report to the ASTM F15.58 subcommittee.

**Meeting(s)** Staff participated in multiple subcommittee and task group meetings for ASTM WK70724 on brakes, tires/operable terrain/suspension, and electrical requirements. Staff also participated in an STP meeting on the electrical systems for e-bikes.

Staff participated in a UL STP 2849 meeting focused on functional safety for electrical safety of ebikes.

<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/22/2021	Data Report	Staff sent the ASTM F 15.58 the CPSC report <i>Micromobility Products-Related Deaths, Injuries, and Hazard Patterns: 2017–2020</i> .

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM subcommittee meeting scheduled in November 2022.

### Sports/Recreational Headgear Sensors/Helmet and Sensors

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

**Staff Contact** Dayal, Vineed

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F 1446-20	<i>Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear</i>
	ASTM F 1447-18	<i>Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating</i>
	ASTM F 2220-15	<i>Standard Specification for Headforms</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff attended subcommittee meetings to monitor the standards.

<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	8/17/2022	Letter	Staff requested more information on potential revisions to sports helmet standards and

		raised the issue of better addressing nonfatal hazards.
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**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to attend the next subcommittee meeting in November.

**Swimming Pools/Spas, Drain Entrapment**

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**Purpose** To work with PHTA (formerly APSP) to ensure that the incorporated voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing entrapment hazards associated with pool drain cover products intended for swimming pools, wading pools, spas, and hot tubs, as well as installation of those products in public pools.

**Staff Contact** Eilbert, Mark

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/APSP/ICC 16-2017	American National Standard for Above-Ground/On-Ground Residential Pools

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

**Activities Summary** Staff continues to work with PHTA to improve pool and spa safety. On September 21, 2021, staff wrote to PHTA to recommend additional work take place on a provisional amendment to ANSI/APSP/ICC 16-2017. During the reporting period, staff worked with PHTA to review the requirements.

**Meeting(s)** Staff participated in a meeting with PHTA to review the letter of September 21, 2021, where staff suggested that the provisional amendment to ANSI/APSP/ICC 16-2017 have requirements for the safe spacing of dual drain outlets, specific to the integrated suction outlet fitting assemblies (SOFAs) in storable pools. PHTA agreed to add a reference from PHTA-4, regarding requirements for dual drain separation.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming PHTA meetings.

**Swimming Pools/Spas, Vacuum Relief System**

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**Purpose** To work with PHTA (formally APSP) and ASTM to ensure the voluntary standards for secondary entrapment avoidance systems maintain the adequate backup safety levels, which are required in the federal mandatory standard, for entrapment hazards associated with pool drains in swimming pools, spas, and hot tubs.

**Staff Contact** Eilbert, Mark

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/APSP/ICC-7-2020	<i>Suction Entrapment Avoidance</i>
	ASTM F2387-21	<i>Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs</i>
	PHTA-17	Potential new voluntary standard for safety vacuum release systems, automatic pump shut-off systems, shut-off systems, and vacuum limiting systems for swimming pools, spas, wading pools, hot tubs, and catch pools

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff wrote a letter to the PHTA-17 committee to encourage progress on the standard and to recommend that the committee look at variable speed pumps.

**Meeting(s)** Voluntary standards meetings related to this topic did not take place during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	8/18/2022	Letter	Staff asked that PHTA-17 SWC continue work on the SVRS standard, specifically addressing variable speed pumps.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming PHTA meetings.

## Tents

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**Purpose** To work with ASTM on developing a voluntary standard to address the hazards associated with tent flammability.

**Staff Contact** Tenney, Allyson

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3431-21	<i>Standard Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM on developing performance requirements and test methods to evaluate the flammability of recreational camping tents. During the reporting period, staff participated on the task group to study available technical data and evaluate testing options to develop a possible screening test or alternative test plan for certain product categories. Staff contributed to a test methodology for material evaluation for task group review.

**Meeting(s)** Staff participated in ASTM F08.22 subcommittee and task group meetings during the reporting period.

**Communication(s)** There were no communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will attend subcommittee and task group meetings, as scheduled, and staff will support the development of a potential characterization test, by assisting with sample selection, data review, and test methodology development.

## Treadmills

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**Purpose** To work with ASTM and ULSE to develop and revise treadmill voluntary standards.

**Staff Contact** Bowley, Susan

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2115-19	<i>Standard Specification for Motorized Treadmills</i>
	ASTM F1749-15(2020)	<i>Standard Specification for Fitness Equipment and Fitness Facility Safety Signage and Labels</i>
	ASTM F2276-10(2015)	<i>Standard Specification for Fitness Equipment</i>
	UL 1647, 6 <sup>th</sup> Edition	<i>Motor-Operated Massage And Exercise Machines</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** On April 26, 2021, staff sent a letter to ASTM, requesting that the ASTM F08.30 subcommittee on fitness products develop requirements in ASTM F2115-19 to address hazards observed in incident data pertaining to treadmills, specifically entrapment of children and other objects underneath the rear roller on an operating treadmill. During the reporting period, staff provided incident data covering a 10-year period and participated in monthly subcommittee and task group meetings. Additionally, staff sent a letter to ASTM requesting the ASTM F08.30 Treadmill Task Group to focus on performance requirements for mechanical guards to prevent entrapment and pull-in hazards at the rear of the treadmill, rather than discuss potential solutions for guard designs.

**Meeting(s)** Staff participated in several subcommittee and task group meetings focused on incident data review, hazard identification, testing and characterization enhancements, and other topics to address safety issues related to treadmills.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/23/2021	Incident Data	Staff provided the subcommittee with treadmill incident data for the period January 2010 through September 2021.
	9/22/2022	Letter	Staff provided recommendations on guard designs to mitigate entrapment hazards.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

## Codes, Analytical Methods, and Labeling

### Building Codes

**Purpose** To work with various model building codes to ensure consumer safety considerations of referenced consumer products

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	NFPA 30, 2021 Edition	Flammable and Combustible Liquid Code
	NFPA 58, 2020 Edition	Liquefied Petroleum Gas Code
	NFPA 70, 2020 Edition	National Electrical Code®
	NFPA 72, 2022 Edition	National Fire Alarm Signaling Code®
	NFPA 101, 2021 Edition	Life Safety Code®

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to participate in several NFPA model codes. During the reporting period, staff met with ICC and IAPMO staff separately to learn which model codes staff may be interested in and how to participate.

**Meeting(s)** Staff joined the NFPA 58 committee, the *Liquefied Petroleum Gas Code*. Staff met with ICC and IAPMO staff to learn about other model codes and how to get involved. Most of the ICC and IAPMO codes are nearing the end of their revision cycles, so staff will prepare for the start of the next revision cycle. Staff participated in NFPA 30, where staff advocated for flame mitigation devices. Staff participated in two NFPA 30 correlating meetings.

Staff participated in many CMP meetings and several task groups during the reporting period.

**Communication(s)** There were no communications during the reporting period.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>

January 2022	NFPA 58	Public comments closed in preparation of the second draft of the next edition
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**Next Action** Staff will continue to participate in the various NFPA model codes. Staff will determine which ICC and IAPMO codes are most pertinent and will participate during the next revision cycle.

**Chemical Test Methods**

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**Purpose** To work with ASTM to ensure that the listed chemical test methods referenced in various CPSC test procedures and requirements are adequately maintained.

**Staff Contact** Duque, Maricar

**Voluntary Standard(s)**

Designation and current version	Title
ASTM E1645-21	Standard Practice for Preparation of Dried Paint Samples by Hotplate or Microwave Digestion for Subsequent Lead Analysis
ASTM F2617-15	Standard Test Method for Identification and Quantification of Chromium, Bromine, Cadmium, Mercury, and Lead in Polymeric Material Using Energy Dispersive X-ray Spectrometry
ASTM F2853-10(2015)	Standard Test Method for Determination of Lead in Paint Layers and Similar Coatings or in Substrates and Homogenous Materials by Energy Dispersive X-Ray Fluorescence Spectrometry Using Multiple Monochromatic Excitation Beams
ASTM E3193-21	Standard Test Method for Measurement of Lead (Pb) in Dust by Wipe, Paint, and Soil by Flame Atomic Absorption Spectrophotometry (FAAS)
ASTM E3203-21	Standard Test Method for Determination of Lead in Dried Paint, Soil, and Wipe Samples by Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)
ASTM D7823-20	Standard Test Method for Determination of Low Level Phthalates in Poly (Vinyl Chloride) Plastics by Thermal Desorption—Gas Chromatography/Mass Spectrometry
ASTM D7993-15(2019)	Standard Guide for Analyzing Complex Phthalates
ASTM D8133-21	Standard Test Method for Determination of Low Level Phthalates in Poly(Vinyl Chloride) Plastics



by Solvent Extraction—Gas Chromatography/Mass Spectrometry
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<b>Standard(s) Update</b>	The voluntary standards listed here were not updated during the reporting period.
<b>Relevant Rulemaking</b>	N/A
<b>Activities Summary</b>	<p>Staff worked with the ASTM D20.70 subcommittee on analytical methods to review the status of several analytical methods. Staff volunteered to participate in an ASTM D20.70 Inter-laboratory Study (ILS) of phthalate test methods, focusing on, ASTM D8133.</p> <p>Staff worked with an Expert Group (EG) with The Organization for Cooperation and Economic (OECD) to develop a new test method (HCl 0.032M) that is similar to a method used by CPSC determining cadmium extractability from children’s metal jewelry.</p>
<b>Meeting(s)</b>	<p>Staff participated in two ASTM D20.70 meetings during the reporting period. Staff volunteered to participating in an Inter-Laboratory Study for ASTM D7823 and ASTM D8133.</p> <p>Staff participated in the OECD EG meetings during the reporting period. This group discussed the merits and concerns with the draft Test Guidance on the determination of metal release using HCl 0.032M test method.</p>
<b>Communication(s)</b>	There were no communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff will participate in upcoming ASTM task group meetings or subcommittee meetings, when scheduled. Staff expects to start the ASTM D20.70 ILS work on ASTM D8133 in November 2022, then share results in 2023. The next subcommittee meeting will be in November 2022.

## National Electrical Code

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<b>Purpose</b>	To work with the NFPA to revise the <i>National Electrical Code (NEC)</i> , to strengthen its safety provisions addressing hazards associated with electrical fires, CO poisoning, and shock incidents associated with consumer products, such as household appliances, pools and spas, generators, electrical equipment, and wiring products.
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**Staff Contact** Miller, Einstein

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	NFPA 70, 2023 Edition	National Electrical Code®

**Standard(s) Update** The code listed here was revised and updated from the 2020 Edition of the standard. The 2023 Edition was published on September 1, 2022.

**Relevant Rulemaking** N/A

**Activities Summary** Staff participated in the development of the next edition of the NEC, which is revised every 3 years. During the reporting period, staff advocated for requirements for ground fault circuit interrupters (GFCI) and arc fault circuit interrupters (AFCI) to reduce shock and fire hazards. Staff also participated in a task group to evaluate and reach an informed technical solution to the issues raised regarding unwanted GFCI tripping on outdoor AC units, as required in the 2020 NEC Section 210.8(F).

**Meeting(s)** Staff participated in many code making panel (CMP) 2 and CMP 17 meetings and several task groups during the reporting period. Additionally, staff participated in a task group on *NEC section 210.8(F) Ground-Fault Circuit-Interrupter (GFCI) Protection for Personnel on Outdoor Outlets*, UL STP 101, *Standard for Leakage Current for Utilization Equipment* meetings, and UL STP 943, *Standard for Ground-Fault Circuit-Interrupters* meetings.

**Communication(s)** There were no communications during the reporting period.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	March 2022	NFPA 70	Second Draft Correlating Committee issued the final ballot results for panel actions related to public inputs received. The ballot results correlate to the Second Draft of the 2023 edition of the NEC.

**Next Action** Staff will continue to participate in the NEC future revisions and related task groups to address fire, shock, CO poisoning and other hazards.

## Warning Signs and Labels (and Ad Hoc Language)

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<b>Purpose</b>	To work with SDOs to develop or enhance warnings, labels, and other written means not already covered by another tracked voluntary standard, to convey product safety information to consumers.					
<b>Staff Contact</b>	Smith, Tim					
<b>Voluntary Standard(s)</b>	<table border="1"> <thead> <tr> <th>Designation and current version</th> <th>Title</th> </tr> </thead> <tbody> <tr> <td>ANSI Z535.7</td> <td><i>Warnings in Electronic Media</i></td> </tr> </tbody> </table>	Designation and current version	Title	ANSI Z535.7	<i>Warnings in Electronic Media</i>	
Designation and current version	Title					
ANSI Z535.7	<i>Warnings in Electronic Media</i>					
<b>Standard(s) Update</b>	The voluntary standard listed here was not updated during the reporting period. However, the ASTM F15 Ad Hoc Language task group may influence changes in multiple standards.					
<b>Relevant Rulemaking</b>	N/A					
<b>Activities Summary</b>	During the reporting period, staff participated in ASTM F15 Ad Hoc language task group meetings and reviewed Ad Hoc language updates to multiple ASTM juvenile product standards.					
<b>Meeting(s)</b>	Staff participated in ASTM Ad Hoc language task group meetings focused on possible revisions to the recommended wording of warnings related to safe sleep for products that are not intended for infant sleep, label permanence, editorial changes to the guidance document, and a potential new warning related to the use of soft bedding on products containing restraints.					
<b>Communication(s)</b>	There were no communications during the reporting period.					
<b>Ballot(s)</b>	There were no ballots during the reporting period.					
<b>Next Action</b>	Staff will participate in the next ASTM Ad Hoc Language task group meeting, scheduled for October 2022.					

## Appendix: Organizational Abbreviations

The list below contains abbreviations for SDOs and other groups related to the standards that staff typically participate in. Some abbreviations below may not be used in the current VSTAR.

<b>AATCC</b>	American Association of Textile Chemists and Colorists
<b>AFSL</b>	The American Fireworks Standards Laboratory
<b>AHAM</b>	Association of Home Appliance Manufacturers
<b>AHFA</b>	American Home Furnishing Alliance
<b>AHRI</b>	Air Conditioning, Heating and Refrigeration Institute
<b>ANSI</b>	The American National Standards Institute
<b>APA</b>	American Pyrotechnics Association
<b>APSP</b>	The Association of Pool and Spa Professionals (now part of The Pool & Hot Tub Alliance, see PHTA)
<b>ASHRAE</b>	American Society of Heating, Refrigerating and Air-Conditioning Engineers
<b>ASTM</b>	ASTM International
<b>BIFMA</b>	Business and Institutional Furniture Manufacturing Associations
<b>CAN</b>	Standards Council of Canada designation for a National Standard of Canada
<b>CANENA</b>	Council for Harmonization of Electrotechnical Standards of the Nations in the Americas
<b>CSA</b>	CSA Group
	TSC – Technical Subcommittee
	TC – Technical Committee
<b>EN</b>	European Standards
<b>IAPMO</b>	International Association of Plumbing and Mechanical Officials
<b>ICC</b>	International Code Council
<b>IEC</b>	International Electrotechnical Commission
<b>IEEE</b>	The Institute of Electrical and Electronics Engineers
<b>ISO</b>	International Organization for Standardization
	TAG – Technical Advisory Group
	TC – Technical Committee
<b>NEMA</b>	National Electrical Manufacturers Association
<b>NFPA</b>	National Fire Protection Association
	CMP – Code Making Panel
	NEC – National Electrical Code
	TIA – Technical Interim Agreement
<b>NFSI</b>	National Floor Safety Institute
<b>NIST</b>	National Institute of Standards and Technology
<b>NOCSAE</b>	National Operating Committee on Standards for Athletic Equipment
<b>OPEI</b>	Outdoor Power Equipment Institute
<b>PGMA</b>	Portable Generator Manufacturers Association
<b>PHTA</b>	Pool & Hot Tub Alliance
<b>ROHVA</b>	Recreational Off-Highway Vehicle Association
<b>SAE</b>	Society of Automotive Engineers

**OS 120**

<b>SVIA</b>	Specialty Vehicle Institute of America
<b>ULSE</b>	UL Standards and Engagement (formerly Underwriters Laboratories Inc)
	STP – Standards Technical Panel
	ORD – Other Recognized Document (pertains to voluntary standards recognized in Canada)
<b>ULC</b>	ULSE operations in Canada (formerly Underwriters Laboratories of Canada)
<b>WCMA</b>	Window Covering Manufacturers Association

**From:** McGarvey, Carla  
**Sent:** Tue, 9 Aug 2022 15:12:43 +0000  
**To:** Hoehn-Saric, Alexander  
**Cc:** Levine, Jason; Laitin, Anna; Fong-Swamidoss, Jana; Sandlin, Erin; Austin Schlick; Springs, Pamela  
**Subject:** Gas Stove Response Letter  
**Attachments:** 2022-08-01.RK to Hoehn-Saric-CPSC re Gas Stoves.pdf, House Oversight Krishnamoorthi 8.9.22 - 1108 am.docx

Alex,

(b)(5)

Thanks,  
Carla

**Congress of the United States**  
**House of Representatives**

COMMITTEE ON OVERSIGHT AND REFORM

2157 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6143

Majority (202) 225-5051  
Minority (202) 225-5074  
<https://oversight.house.gov>

August 1, 2022

Mr. Alexander Hoehn-Saric  
Chairman  
Consumer Product Safety Commission  
4330 East-West Highway  
Bethesda, MD 20814

Dear Chairman Hoehn-Saric:

In 1986, the Environmental Protection Agency (EPA) issued a report pressing the Consumer Product Safety Commission (CPSC) to focus on the dangers of gas stove emissions.<sup>1</sup> Five years later, in 1991, CPSC and EPA—in conjunction with the American Lung Association—published a short pamphlet discussing the dangers of indoor air pollution and combustion appliances and warning that possible health effects could include headaches, breathing difficulties, or even death.<sup>2</sup> And just last fall, CPSC began holding meetings with industry stakeholders to discuss the establishment of an independent task force to address indoor air pollution from gas stove emissions.<sup>3</sup> Yet today, more than 35 years after first learning of the potential risks associated with indoor gas stove emissions, CPSC still has issued no regulations or guidelines limiting indoor emissions of harmful pollutants such as nitrogen dioxide, which commonly exceed even the outdoor pollution standards established by EPA.<sup>4</sup> I write to request documents and information about the CPSC's failure to establish safety standards and provide adequate warnings to consumers addressing the significant health risks posed by indoor air pollution from gas stoves.

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<sup>1</sup> Environmental Protection Agency, *Report of the Clean Air Scientific Advisory Committee: A Review of the Consumer Product Safety Commission's Health Effects and Exposure Assessment Documents on Nitrogen Dioxide* (May 1986) (online at <https://tinyurl.com/7va67ays>).

<sup>2</sup> Consumer Product Safety Commission, Environmental Protection Agency, American Lung Association, *What You Should Know About Combustible Appliances and Indoor Air Pollution* (1991) (online at <https://tinyurl.com/3cvz729x>). It is not clear how or to whom the CPSC, EPA, and ALA distributed this pamphlet.

<sup>3</sup> Consumer Product Safety Commission, *Gas Range and Indoor Air Quality Meeting with Stakeholders* (Sept. 1, 2021) (online at [www.cpsc.gov/s3fs-public/2021-09-01-Gas-Range-and-IAQ-Log-of-Meeting.pdf?VersionId=P.JkImnSuyAeOqm6yphxuDkhzW7zizqMw](http://www.cpsc.gov/s3fs-public/2021-09-01-Gas-Range-and-IAQ-Log-of-Meeting.pdf?VersionId=P.JkImnSuyAeOqm6yphxuDkhzW7zizqMw)).

<sup>4</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

Gas stoves—used by more than one-third of U.S. households—emit harmful levels of several pollutants, including nitrogen dioxide (NO<sub>2</sub>).<sup>5</sup> Homes with gas stoves have average NO<sub>2</sub> levels ranging from roughly 50% to 400% higher than homes with electric stoves.<sup>6</sup> When using gas ranges, basic cooking activities, such as baking a cake or roasting meat, can produce indoor NO<sub>2</sub> emissions two to three times greater than both the World Health Organization’s indoor NO<sub>2</sub> guideline of 106 parts per billion (ppb) and EPA’s outdoor NO<sub>2</sub> standard of 100 ppb.<sup>7</sup> Indoor gas stove emissions can exceed EPA’s outdoor NO<sub>2</sub> standard after only a few minutes of stove usage.<sup>8</sup>

Measured NO <sub>2</sub> Emissions from Gas Stoves	Peak (ppb)
Baking cake in oven	230
Roasting meat in oven	296
Frying bacon	104
Boiling water	184
Gas cooktop - no food	82–300
Gas oven - no food	130–546

Source: Rocky Mountain Institute<sup>9</sup>

NO<sub>2</sub> is not the only harmful pollutant about which families living in homes with gas stoves have to worry. A recent study of homes in the Boston area conducted by researchers from the Harvard T.H. Chan School of Public Health concluded that, even when combustion appliances were not in use, “natural gas used in homes ... contains varying levels of volatile organic chemicals that when leaked are known to be toxic, linked to cancer, and can form secondary health-damaging pollutants such as particulate matter and ozone.”<sup>10</sup> More

<sup>5</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)).

<sup>6</sup> Environmental Protection Agency, *Integrated Science Assessment for Oxides of Nitrogen—Health Criteria 2-38* (July 2008) (online at <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=194645>).

<sup>7</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>8</sup> Eric Lebel et al., *Methane and NO<sub>x</sub> Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes*, *Environmental Science & Technology* (Jan. 27, 2022) (online at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c04707>).

<sup>9</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>10</sup> Harvard Chan C-Change, *Natural Gas Used in Homes Contains Hazardous Air Pollutants* (June 28, 2022) (online at [www.hsph.harvard.edu/c-change/news/natural-gas-used-in-homes/](http://www.hsph.harvard.edu/c-change/news/natural-gas-used-in-homes/)).



specifically, the study found worrying levels of benzene, hexane, toluene, heptane, and cyclohexane.<sup>11</sup>

The high levels of indoor pollution from gas stoves present significant health risks, particularly to children. Studies have shown that children living in homes with gas stoves have a 42% greater risk of experiencing asthma symptoms and a 24% greater risk of being diagnosed with asthma.<sup>12</sup> In other words, living in a home with a gas stove presents a similar asthma risk to children as does second-hand cigarette smoke.<sup>13</sup>

Proper stove ventilation (*e.g.*, using an exhaust hood) has the potential to reduce indoor pollution from gas stoves to acceptable levels.<sup>14</sup> However, unlike with gas furnaces, water heaters, and dryers, no federal laws or guidelines require that gas stove emissions be vented outdoors. In the absence of any such requirement, many homes lack exhaust hoods altogether, and others have hoods that merely recirculate air, which does not lower the pollution levels inside a home. And even when exhaust hoods are present in a home, many people do not use them.<sup>15</sup> Furthermore, because no federal regulations govern their capture efficiency in homes, the quality of exhaust hoods varies greatly.<sup>16</sup> While some commercially available hoods can capture up to 98% of indoor pollution from a gas stove, other exhaust hoods capture as little as

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<sup>11</sup> Drew R. Michanowicz et al., *Home Is Where the Pipeline Ends: Characterization of Volatile Organic Compounds Present in Natural Gas at the Point of the Residential End User*, Environmental Science & Technology (June 28, 2022) (online at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c08298>).

<sup>12</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)); Weiwei Lin et al., *Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children*, International Journal of Epidemiology (Dec. 2013) (online at <https://academic.oup.com/ije/article/42/6/1724/737113>).

<sup>13</sup> Climate Council, *Kicking the Gas Habit: How Gas Is Harming Our Health* (May 2021) (online at [www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf](http://www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf)).

<sup>14</sup> Wanyu Chan et al., *Simulations of Short-Term Exposure to NO<sub>2</sub> and PM<sub>2.5</sub> to Inform Capture Efficiency Standards*, Lawrence Berkeley National Laboratory (Mar. 30, 2020) (online at <https://escholarship.org/content/qt6tj6k06j/qt6tj6k06j.pdf>). EPA's Air Quality Index has a value range from 0 to 500. Air quality values between 51 and 100 are considered "acceptable," while air quality values between 0 and 50 are considered "satisfactory." Environmental Protection Agency, *Air Quality Index (AQI) Basics* (online at [www.airnow.gov/aqi/aqi-basics/](http://www.airnow.gov/aqi/aqi-basics/)) (accessed July 29, 2022).

<sup>15</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>16</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)); Weiwei Lin et al., *Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children*, International Journal of Epidemiology (Dec. 2013) (online at <https://academic.oup.com/ije/article/42/6/1724/737113>); Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

15%.<sup>17</sup> Research indicates that exhaust hoods must capture at least 70% of pollutants like nitrogen oxide to make the indoor air quality “acceptable” for residents of homes with gas stoves—meaning many exhaust hoods do not provide adequate safety.<sup>18</sup>

CPSC has the authority either to issue mandatory standards and require warning labels or to work with industry to develop voluntary standards and labels that would address indoor air pollution from gas stoves. Despite this authority, the Commission has failed, among other things, to develop standards limiting most types of indoor air pollution from gas stoves, require effective exhaust hoods, or facilitate the introduction of meaningful warning labels to inform consumers about the health risks from gas stoves and the importance of proper ventilation.<sup>19</sup> CPSC’s Safety Education Materials Library offers only a general, high-level guide about indoor air quality that contains a few cursory mentions of gas stoves.<sup>20</sup>

I am deeply concerned by the Commission’s failure to establish safety standards and communicate clearly to the public about this issue, especially given the serious health risks to children. To assist the Subcommittee in its review of this matter, please produce, by August 15, 2022, the following documents in your possession, custody, or control:

1. All documents, including internal memoranda and analyses, regarding indoor emissions or indoor air pollution from gas stoves, including documents related to the EPA’s May 1986 report entitled *Report of the Clean Air Scientific Advisory Committee: A Review of the Consumer Product Safety Commission’s Health Effects and Exposure Assessment Documents on Nitrogen Dioxide*;
2. All documents, including internal memoranda and analyses, regarding CPSC’s regulation or oversight of indoor emissions or indoor air pollution from gas stoves, including but not limited to draft indoor emissions standards or warning labels for gas stoves; and
3. All documents, including internal memoranda and analyses, discussing the creation of an indoor joint task force related to indoor air quality and gas ranges.

To assist the Subcommittee in its review of this matter, please provide answers to the following questions by August 8, 2022:

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<sup>17</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>18</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)).

<sup>19</sup> *Id.* CPSC has only established voluntary standards relating to carbon monoxide poisoning from gas stove emissions.

<sup>20</sup> Consumer Product Safety Commission, *The Inside Story: A Guide to Indoor Air Quality* (online at [www.cpsc.gov/safety-education/safety-guides/home/inside-story-guide-indoor-air-quality](http://www.cpsc.gov/safety-education/safety-guides/home/inside-story-guide-indoor-air-quality)).

1. Has the Commission considered issuing mandatory or recommending voluntary standards or warning labels to address the health risks of indoor air pollution from gas stoves? If it has, please explain the status of the Commission's work and explain why the Commission has not yet issued any such mandatory—or recommended any such voluntary—standards or warning labels? If it has not, will the Commission consider taking such action based on the publicly available evidence of health harms from gas stoves?
2. Please describe the Commission's plans, if any, to issue mandatory standards or to facilitate the adoption of voluntary standards addressing indoor air pollution from gas stoves.
3. Please describe the Commission's plans, if any, to require a mandatory warning label or facilitate the adoption of voluntary warning labels addressing the health risks of indoor air pollution from gas stoves.
4. Please describe the Commission's plans, if any, to publish public educational materials specifically focused on the significant health risks posed by gas stove emissions.
5. Are there any legislative or other measures that the Commission believes are necessary for it to issue regulations concerning indoor gas stove emissions?
6. Are the following substances toxic: (i) nitrogen dioxide; (ii) benzene; (iii) toluene; (iv) heptane; (v) hexane; and (vi) cyclohexane?

The Committee on Oversight and Reform is the principal oversight committee of the House of Representatives and has broad authority to investigate “any matter” at “any time” under House Rule X. An attachment to this letter provides additional instructions for responding to the Subcommittee's request. If you have any questions regarding this request, please contact Subcommittee staff at (202) 225-5051.

Sincerely,



Raja Krishnamoorthi

Chairman

Subcommittee on Economic and Consumer Policy

Enclosure

cc: The Honorable Michael Cloud, Ranking Member  
Subcommittee on Economic and Consumer Policy

## Responding to Oversight Committee Document Requests

1. In complying with this request, produce all responsive documents that are in your possession, custody, or control, whether held by you or your past or present agents, employees, and representatives acting on your behalf. Produce all documents that you have a legal right to obtain, that you have a right to copy, or to which you have access, as well as documents that you have placed in the temporary possession, custody, or control of any third party.
2. Requested documents, and all documents reasonably related to the requested documents, should not be destroyed, altered, removed, transferred, or otherwise made inaccessible to the Committee.
3. In the event that any entity, organization, or individual denoted in this request is or has been known by any name other than that herein denoted, the request shall be read also to include that alternative identification.
4. The Committee's preference is to receive documents in electronic form (i.e., CD, memory stick, thumb drive, or secure file transfer) in lieu of paper productions.
5. Documents produced in electronic format should be organized, identified, and indexed electronically.
6. Electronic document productions should be prepared according to the following standards:
  - a. The production should consist of single page Tagged Image File ("TIF"), files accompanied by a Concordance-format load file, an Opticon reference file, and a file defining the fields and character lengths of the load file.
  - b. Document numbers in the load file should match document Bates numbers and TIF file names.
  - c. If the production is completed through a series of multiple partial productions, field names and file order in all load files should match.
  - d. All electronic documents produced to the Committee should include the following fields of metadata specific to each document, and no modifications should be made to the original metadata:  
  
BEGDOC, ENDDOC, TEXT, BEGATTACH, ENDATTACH, PAGECOUNT, CUSTODIAN, RECORDTYPE, DATE, TIME, SENTDATE, SENTTIME, BEGINDATE, BEGINTIME, ENDDATE, ENDTIME, AUTHOR, FROM, CC, TO, BCC, SUBJECT, TITLE, FILENAME, FILEEXT, FILESIZE, DATECREATED, TIMECREATED, DATELASTMOD, TIMELASTMOD,

INTMSGID, INTMSGHEADER, NATIVELINK, INTFILPATH, EXCEPTION, BEGATTACH.

7. Documents produced to the Committee should include an index describing the contents of the production. To the extent more than one CD, hard drive, memory stick, thumb drive, zip file, box, or folder is produced, each should contain an index describing its contents.
8. Documents produced in response to this request shall be produced together with copies of file labels, dividers, or identifying markers with which they were associated when the request was served.
9. When you produce documents, you should identify the paragraph(s) or request(s) in the Committee's letter to which the documents respond.
10. The fact that any other person or entity also possesses non-identical or identical copies of the same documents shall not be a basis to withhold any information.
11. The pendency of or potential for litigation shall not be a basis to withhold any information.
12. In accordance with 5 U.S.C. § 552(d), the Freedom of Information Act (FOIA) and any statutory exemptions to FOIA shall not be a basis for withholding any information.
13. Pursuant to 5 U.S.C. § 552a(b)(9), the Privacy Act shall not be a basis for withholding information.
14. If compliance with the request cannot be made in full by the specified return date, compliance shall be made to the extent possible by that date. An explanation of why full compliance is not possible shall be provided along with any partial production.
15. In the event that a document is withheld on the basis of privilege, provide a privilege log containing the following information concerning any such document: (a) every privilege asserted; (b) the type of document; (c) the general subject matter; (d) the date, author, addressee, and any other recipient(s); (e) the relationship of the author and addressee to each other; and (f) the basis for the privilege(s) asserted.
16. If any document responsive to this request was, but no longer is, in your possession, custody, or control, identify the document (by date, author, subject, and recipients), and explain the circumstances under which the document ceased to be in your possession, custody, or control.
17. If a date or other descriptive detail set forth in this request referring to a document is inaccurate, but the actual date or other descriptive detail is known to you or is otherwise apparent from the context of the request, produce all documents that would be responsive as if the date or other descriptive detail were correct.

18. This request is continuing in nature and applies to any newly-discovered information. Any record, document, compilation of data, or information not produced because it has not been located or discovered by the return date shall be produced immediately upon subsequent location or discovery.
19. All documents shall be Bates-stamped sequentially and produced sequentially.
20. Two sets of each production shall be delivered, one set to the Majority Staff and one set to the Minority Staff. When documents are produced to the Committee, production sets shall be delivered to the Majority Staff in Room 2157 of the Rayburn House Office Building and the Minority Staff in Room 2105 of the Rayburn House Office Building.
21. Upon completion of the production, submit a written certification, signed by you or your counsel, stating that: (1) a diligent search has been completed of all documents in your possession, custody, or control that reasonably could contain responsive documents; and (2) all documents located during the search that are responsive have been produced to the Committee.

### **Definitions**

1. The term “document” means any written, recorded, or graphic matter of any nature whatsoever, regardless of how recorded, and whether original or copy, including, but not limited to, the following: memoranda, reports, expense reports, books, manuals, instructions, financial reports, data, working papers, records, notes, letters, notices, confirmations, telegrams, receipts, appraisals, pamphlets, magazines, newspapers, prospectuses, communications, electronic mail (email), contracts, cables, notations of any type of conversation, telephone call, meeting or other inter-office or intra-office communication, bulletins, printed matter, computer printouts, teletypes, invoices, transcripts, diaries, analyses, returns, summaries, minutes, bills, accounts, estimates, projections, comparisons, messages, correspondence, press releases, circulars, financial statements, reviews, opinions, offers, studies and investigations, questionnaires and surveys, and work sheets (and all drafts, preliminary versions, alterations, modifications, revisions, changes, and amendments of any of the foregoing, as well as any attachments or appendices thereto), and graphic or oral records or representations of any kind (including without limitation, photographs, charts, graphs, microfiche, microfilm, videotape, recordings and motion pictures), and electronic, mechanical, and electric records or representations of any kind (including, without limitation, tapes, cassettes, disks, and recordings) and other written, printed, typed, or other graphic or recorded matter of any kind or nature, however produced or reproduced, and whether preserved in writing, film, tape, disk, videotape, or otherwise. A document bearing any notation not a part of the original text is to be considered a separate document. A draft or non-identical copy is a separate document within the meaning of this term.
2. The term “communication” means each manner or means of disclosure or exchange of information, regardless of means utilized, whether oral, electronic, by document or otherwise, and whether in a meeting, by telephone, facsimile, mail, releases, electronic

message including email (desktop or mobile device), text message, instant message, MMS or SMS message, message application, or otherwise.

3. The terms “and” and “or” shall be construed broadly and either conjunctively or disjunctively to bring within the scope of this request any information that might otherwise be construed to be outside its scope. The singular includes plural number, and vice versa. The masculine includes the feminine and neutral genders.
4. The term “including” shall be construed broadly to mean “including, but not limited to.”
5. The term “Company” means the named legal entity as well as any units, firms, partnerships, associations, corporations, limited liability companies, trusts, subsidiaries, affiliates, divisions, departments, branches, joint ventures, proprietorships, syndicates, or other legal, business or government entities over which the named legal entity exercises control or in which the named entity has any ownership whatsoever.
6. The term “identify,” when used in a question about individuals, means to provide the following information: (a) the individual’s complete name and title; (b) the individual’s business or personal address and phone number; and (c) any and all known aliases.
7. The term “related to” or “referring or relating to,” with respect to any given subject, means anything that constitutes, contains, embodies, reflects, identifies, states, refers to, deals with, or is pertinent to that subject in any manner whatsoever.
8. The term “employee” means any past or present agent, borrowed employee, casual employee, consultant, contractor, de facto employee, detailee, fellow, independent contractor, intern, joint adventurer, loaned employee, officer, part-time employee, permanent employee, provisional employee, special government employee, subcontractor, or any other type of service provider.
9. The term “individual” means all natural persons and all persons or entities acting on their behalf.

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act



Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

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of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

**From:** donotreply@cpsc.gov  
**Sent:** Wed, 4 Jan 2023 21:00:23 -0500  
**To:** jray@cpsc.gov  
**Subject:** Incoming Deaths Notification

This email is to notify you about new incoming deaths

For more information, go to the [Incoming Deaths Grid in CPSC 360](#)

Document Number	Investigation Document	Date Received	Date of Incident	Manufacturer's Company Name	Product Description	Incident City	Incident State	Victim's Age	Short Narrative
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Not Responsive

Not Responsive

Not  
Responsive

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Responsive

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Not Responsive

[221011H](#)  
[CC1058](#)

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Other  
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PALLIATI

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Non Responsive Record

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Record

Non Responsive Record

**From:** Mills, Alberta E.  
**Sent:** Wed, 22 Jun 2022 13:25:48 +0000  
**To:** Hoehn-Saric, Alexander; Fong-Swamidoss, Jana; Laitin, Anna; Levine, Jason; Sandlin, Erin; Baiocco, Dana; Yahr, Dorothy; Feldman, Peter; Dziak, Douglas; Fuller, Thomas; Humphreys, Devin; Trumka Jr., Richard; Lipp, Robin; Niemasik, Kaylee  
**Cc:** Austin Schlick; Stone, Pamela; Hampshire, Melissa; Oyewole, Abioye; Vice, Daniel; Boyle, Mary; Ray, DeWane; Summitt, Monica; Yaung, Michelle; McGoogan, Stephen; Boniface, Duane; Recht, Joel; Stadnik, Andrew; Kelleher, Mary; Kumagai, Mark; Hanway, Stephen; Moscoso, Alex; Campbell, Jacqueline; Kaye, Robert; Sultan, Jennifer; Murphy, Mary; Tarnoff, Howard; Ippolito, Leah; Reyes, Gregory; Springs, Pamela; Davis, Patty; McGarvey, Carla; Cusey, William; Midgett, Jonathan; Rouse, Brenda  
**Subject:** Informational Package: Voluntary Standards Activities Fiscal Year 2022 Midyear Report  
**Attachments:** Voluntary Standards Activities Fiscal Year 2022 Midyear Report.pdf

Good morning,

Please find attached, the following informational package:

[Voluntary Standards Activities Fiscal Year 2022 Midyear Report – June 22, 2022.](#)

Regards,  
Alberta

**Alberta E. Mills**

Commission Secretary

[U.S. Consumer Product Safety Commission](#) | Office of the General Counsel  
4330 East West Highway | Bethesda, MD, 20814

Office: (301) 504-7479 | Mobile: (b)(6) | Email: [amills@cpsc.gov](mailto:amills@cpsc.gov)

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# Memorandum

**DATE:** June 22, 2022

**To:** The Commission  
Alberta E. Mills, Secretary

**THROUGH:** Austin C. Schlick, General Counsel  
Mary T. Boyle, Executive Director

**FROM:** Jacqueline H. Campbell,  
Voluntary Standards Coordinator  
Office of Hazard Identification and Reduction

**SUBJECT:** Voluntary Standards Activities Fiscal Year 2022 Midyear Report

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Attached is U.S. Consumer Product Safety Commission (CPSC) staff's Fiscal Year 2022 (FY 2022) Midyear Voluntary Standards Tracking Activities Report (VSTAR), covering the period October 1, 2021 through March 31, 2022. If you have any questions, please contact Jacqueline Campbell at: [jcampbell@cpsc.gov](mailto:jcampbell@cpsc.gov) or [VoluntaryStandards@cpsc.gov](mailto:VoluntaryStandards@cpsc.gov).



United States  
**Consumer Product Safety Commission**  
cpsc.gov | info@cpsc.gov | 800.638.2772

## Memorandum



United States  
**Consumer Product Safety Commission**

# Voluntary Standards Tracking Activity Report

FY 2022 MIDYEAR REPORT

(October 1, 2021–March 31, 2022)

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



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# U.S. CPSC Staff Voluntary Standards Activities:

Reporting Period October 1, 2021–March 31, 2022

## Introduction

Voluntary standards play an important role at the U.S. Consumer Product Safety Commission (CPSC). Under some CPSC statutes, if a relevant voluntary standard addresses the risk of injury that a consumer product presents, the Commission could issue a mandatory standard, if the voluntary standard is not likely to adequately reduce the risk of injury, or there is not likely to be substantial compliance with the voluntary standard. Additionally, some provisions of the Consumer Product Safety Improvement Act of 2008 (CPSIA) include sections regarding certain voluntary standards. Specifically, section 104 of the CPSIA requires the Commission to promulgate mandatory consumer product safety standards for durable infant or toddler products. These mandatory 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.

## VSTAR Content and Organization

The VSTAR is issued biannually as: (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 Fiscal Year 2022 (FY 2022) Midyear Report.

Voluntary standards activities are managed by various standards developing organizations (SDOs), most of these organizations accredited by the American National Standards Institute<sup>1</sup> (ANSI). While most of the voluntary standards discussed in this report are developed by ASTM, International (ASTM) and Underwriters Laboratories Inc. (UL)<sup>2</sup>, staff works with several other SDOs that support consumer product safety activities. This report contains a listing of all the SDOs working with staff on voluntary standards and includes their abbreviated designation(s) in the Appendix at the end of this report.

The VSTAR includes a table listing the voluntary standards that staff contributed to and that were initially published or revised during the reporting period. Additionally, this report identifies

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<sup>1</sup>International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), American Pyrotechnics Association (APA), and The American Fireworks Standards Laboratory (AFSL) are not accredited by ANSI.

<sup>2</sup>UL, an ANSI accredited SDO, is distinct from UL, LLC a product testing and certification laboratory that was formerly part of UL.

staff who were approved to vote on a voluntary standard or hold a leadership position on a standards body during the reporting period.

Lastly, the VSTAR contains a section for each product, product area, or hazard associated with voluntary standards work, as outlined in the FY 2022 CPSC Operating Plan (Op Plan). The FY 2022 Op Plan lists 83 different products, product areas, or hazards for which staff plans to be actively involved in developing voluntary standards during the fiscal year. The voluntary standards covered in this report provide safety provisions addressing potential hazards associated with consumer products found in homes, schools, and recreation areas. More than 40 different staff serve as designated representatives (DRs) for the voluntary standards work that covers the 83 products, product areas, or hazards outlined in this report.

The entries are organized into similar activities with the following groupings:

- Children's Products and Hazards
  - Durable Infant and Juvenile Products
  - Other Children's Products and Hazards
- Emerging Technology
- Home Products and Hazards
- Recreation
- Codes, Analytical Methods, and Labeling.

Each VSTAR entry includes the following information:

**Purpose:** The purpose of staff's involvement with the voluntary standard(s)

**Staff Contact:** The name of staff leading the activity (*i.e.*, the designated representative, DR)

**Voluntary Standard(s):** The designation(s) and name(s) of existing voluntary standards, potential new voluntary standards, and ISO standards associated with the product, with which staff is, was, or may be actively involved. The designation and titles for new or updated voluntary standards are in **bold font**. Titles for current voluntary standards are in *italics*, and titles of draft or potential standards are in plain font (not bold and non-italicized).

**Standard(s) Update:** Any updates to the voluntary standards or potential new voluntary standards with staff's participation

**Relevant Rulemaking:** Any associated CPSC mandatory standard(s), proposed regulation(s), and any relevant petitions, regardless of status. This subsection also includes updates to any of the petitions, mandatory standards, or proposed regulations noted in the subsection above

**Activities:** A high-level description of the activity associated with the voluntary standards that occurred during the reporting period. Staff and Commission activities are highlighted in this subsection. There are sections summarizing staff-attended meetings, documented standards-related staff communications, and relevant ballot activity. It is noted when staff did not attend any meetings, did not send any documented communication, or there were no ballots.

**Next Action:** Staff's anticipated actions on the voluntary standards and associated mandatory standards. This subsection also includes any recommendations associated with the voluntary standard.

VSTAR entries provide a high-level description of staff's activity for the reporting period. For further information on meeting activity, staff meeting logs may be found at: [Newsroom - FOIA | CPSC.gov](#). Staff correspondence may be found on the CPSC Voluntary Standards website at: <https://www.cpsc.gov/Regulations-Laws--Standards/Voluntary-Standards>.

## Updated Standards

Table 1 lists the 11 revised, renewed, or new voluntary standards that staff actively engaged in revising or developing, and that were published during the period October 1, 2021 to March 31, 2022. Details regarding the revisions can be found in the applicable product sections of this report. The designations and titles of these 11 voluntary standards are shown in bold font in the applicable activity section.

**Table 1: New or Revised Voluntary Standards Published****October 1, 2021 - March 31, 2022**

<b>Title</b>	<b>SDO</b>	<b>Standard Designation</b>	<b>Published</b>	<b>DR</b>	<b>New, Revision, Renewal</b>
Standard Consumer Safety Specification for Crib Mattresses	ASTM	F2933	Oct-21	Nesteruk	Revision
Standard Test Method for Evaluating Wind Safety and Durability of Market Umbrellas	ASTM	F3512	Oct-21	Newens	New
Standard Specification for Flame Mitigation Devices on Portable Fuel Containers	ASTM	F3326	Oct-21	Ayers	New
Standard Guide for Ensuring the Safety of Connected Consumer Products	ASTM	F3463	Oct-21	Lee, S	Revision
Standard Consumer Safety Specification for Baby Changing Products for Domestic Use	ASTM	F2388	Jan-22	Mella, L	Revision
Standard Consumer Safety Specification for High Chairs	ASTM	F404	Jan-22	Marques, S	Revision
Standard Specification for Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use	ASTM	F852	Jan-22	Ayers, S	Revision
Standard Consumer Safety Specification for Sealed Storage Chests such as Cedar Chests, Hope Chests, Blanket Chests, Keepsake Chests	ASTM	F2598	Feb-22	Verdino, P	Revision
Standard Safety Specification for Liquid Laundry Packets	ASTM	F3159	Mar-22	Hurley, J	Renewal
Standard Consumer Safety Performance Specification for Home Playground Equipment	ASTM	F1148	Mar-22	Lee, K	Revision
Standard Consumer Safety Specification for Infant Bath Tubs	ASTM	F2670	Mar-22	Foster, Z	Revision

## Voting and Leadership Roles

In accordance with 16 CFR part 1031, *Commission Participation and Commission Employee Involvement in Voluntary Standards Activities*, the VSTAR report includes information about staff voting and leadership activities. These activities are approved annually. In the first half of FY 2022, the Office of the Executive Director (OEX) approved one new staff leadership role and renewed three staff voting requests and one new voting request. There are seven additional voting or leadership activities that have carried over from FY 2021. Listed below are the active leadership and voting approvals during the reporting period:

Staff Name	Date of Approval	New Approval or Renewal	Vote or Leadership	Standards Body and Standard
Thomas, T.	Dec-21	New	Leadership	UL 2904, 3D Printer Emissions
Kish, C.	Jan-22	Renewal	Voting	ASTM F15.18 Infant Inclined Sleep Products
Kish, C.	Jan-22	Renewal	Voting	ASTM F15.18, Bassinets/Cradles
Kish, C.	Jan-22	New	Voting	ASTM F15.18, Non-Full-Size Baby Cribs and Play Yards
Harsanyi, S.	Jan-22	Renewal	Voting	ASTM F15.77, Adult Magnets
Ayers, S.	Apr-21	Renewal	Voting	ASTM F15.72, Flame Mitigation Devices on Disposable Fuel Containers*
Ayers, S.	Apr-21	Renewal	Leadership	ASTM F15.72, Flame Mitigation Devices on Disposable Fuel Containers*
Ayers, S.	Apr-21	Renewal	Leadership	ANSI/CSA Z21 Gas Ranges*
Smith, T.	Apr-21	New	Voting	ANSI Z535 Safety Colors and Signs*
Talcott, K.	Apr-21	New	Voting	ASTM F15.42 Clothing Storage Units*
Ayers, S.	Apr-21	Renewal	Voting	ASTM F15.10 Gasoline Containers*
Ayers, S.	May-21	New	Voting	UL 30 Safety Cans*

\*Voting or leadership activity carried over from FY 2021.

# FY 2022 Staff Voluntary Standards Activities Summary

## Children’s Products and Hazards

### Durable Infant and Juvenile Products

The voluntary standards listed in this section are durable infant or toddler products. Section 104 of the CPSIA directed the Commission to work with stakeholders and SDOs to develop consumer product safety standards for durable infant and toddler products. Once a regulation is promulgated, the Commission is notified of any updates to the standard. Unless the Commission acts, the revised standard will replace the previous rule in 180 days. However, if the Commission determines that the proposed revised standard does not improve the safety of the consumer product covered by the standard, the Commission may notify the SDO that the applicable mandatory children’s product safety rule remains unchanged.

#### Bassinets/Cradles

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**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 bassinets and cradles.

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2194-16e1	<i>Standard Consumer Safety Specification for Bassinets and Cradles</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1218, *Safety Standard for Bassinets and Cradles*

**Activities Summary** Staff continues to work with the subcommittee on safe sleep issues related to bassinets and cradles. During the reporting period, staff provided data on cantilever bassinets and in-bed sleepers, participated in task group meetings on bassinet and cradle scope and performance requirements, and provided feedback on the agency’s recommendations for maintaining or improving safety of these products.

*Meeting(s)*

Staff participated in an ASTM F15.18 subcommittee meeting to discuss ballot outcomes (compact bassinets will be added to standard) and task group updates. The issue of “legs” on bassinets resulted in the formation of a new task group.

Staff participated in a task group meeting to discuss issues related to baby boxes, such as potential suffocation hazards from lids and potential structural failures due to lack of water repellency.

Staff participated in task group meetings to discuss scope and definition issues, such as the issue of a requirement for a “leg-based” frame and how it can be characterized with stability testing and whether in-bed sleepers would be in scope of the new definition.

*Communication(s)*

<b>Date</b>	<b>Type</b>	<b>Summary</b>
12/8/2021	Incident Data	Staff provided ASTM F15.18 subcommittee cantilever bassinet incident data along with a letter requested that a task group be formed to review incidents and propose performance requirements.
12/8/2021	IDI	Staff provided ASTM F15.18 subcommittee a redacted IDI for an in-bed sleeper bassinet.

*Applicable Ballot(s)*

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
October 2021	ASTM F2194	Ballot F15(21-07) item (4) struck the term “bassinet/cradle” from the side height requirements to be more inclusive of different bassinet designs. Staff submitted a comment supporting side heights of at least 7.5 inches. The ballot item passed.
October 2021	ASTM F2194	Ballot F15(21-07) item (5) to find a previous staff negative vote on the “compact bassinet” definition, stability test, and side height non-persuasive. Staff’s negative vote was found non-persuasive.
November 2021	ASTM F2194	Ballot F15(21-08) item (1) addressed suffocation concerns with lids on “baby boxes.” The item did not pass; the subcommittee found negative vote(s) persuasive and removed the item from the ballot.
March 2022	ASTM F2194	Ballot F15(22-02) items (3, 4) addressed water repellency and suffocation concerns with lids on “baby boxes.” The item was unresolved at the end of the reporting period.



**Next Action** Staff will participate in upcoming subcommittee meetings, including the next ASTM subcommittee meeting scheduled in May 2022.

## Bedside Sleepers

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**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.

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2906-13 (2019)	<i>Standard Consumer Safety Specification for Bedside Sleepers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1222, *Safety Standard for Bedside Sleepers*

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting scheduled for May 2022.

## Booster Seats

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

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
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ASTM F2640-18	<i>Standard Consumer Safety Specification for Booster Seats</i>
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**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1237, *Safety Standard for Booster Seats*

**Activities Summary** Staff continues to work with the ASTM F15.16 subcommittee to address safety issues related to booster seats. During the reporting period, staff emailed the subcommittee chair the annual booster seat data review.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)**

Date	Type	Summary
11/23/21	Data	Annual booster seat data review. Staff did not identify any fatalities or new hazard patterns.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

## Carriages and Strollers

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

**Staff Contact** Talcott, Kristen

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F833-21	<i>Standard Consumer Safety Specification for Carriages and Strollers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1227, *Safety Standard for Carriages and Strollers*

The mandatory standard was updated on November 18, 2021 [86 FR 64349] with an effective date of February 15, 2022.

**Activities Summary** Staff continues to work with the ASTM F15.17 subcommittee to address safety issues related to carriages and strollers. During the reporting period, staff presented a direct final rule (DFR) briefing package to the Commission, attended a subcommittee meeting, and developed questions for the subcommittee on testing issues.

**Meeting(s)** Staff participated in a subcommittee meeting where members discussed the potential implications of the CPSC final rule for infant sleep products on carriages and strollers, leading to formation of a task group to appeal to CPSC for guidance on the issue. Members also discussed testing questions from staff. Staff plans to send a list of redrafted questions requested by the subcommittee members.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings in May 2022.

**Changing Products**

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

**Staff Contact** Mella, Lawrence

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F2388-21</b>	<b>Standard Consumer Safety Specification for Baby Changing Products for Domestic Use</b>

**Standard(s) Update** On February 1, 2022, ASTM notified staff that it had published ASTM F2388-21, the latest revision to the *Standard Consumer Safety Specification for Baby Changing Products for Domestic Use*. This revision updates a figure to align information with other standards using the same testing apparatus. Staff was preparing a briefing package for Commission consideration at the end of the reporting period.

Staff evaluated the changes to the rule and, at the end of the reporting period, planned to deliver a briefing package to the Commission in April.

**Relevant Rulemaking** 16 CFR part 1235, *Safety Standard for Baby Changing Products*

**Activities Summary**

Staff continues to work with the ASTM F15.18 subcommittee on safety issues related to baby changing products. During the reporting period, staff provided input that there were no incidents that specifically indicated contoured changing pads and provided input to discussion of potential changes for new designs in the market.

**Meeting(s)**

Staff participated in a subcommittee meeting where members were updated on task groups for cribs/changers, metal fasteners, and CPSC incident data. Members also discussed four new issues: new products on the market, travel diaper changing stations and wearables, contoured changing pads and frames, and they discussed that the subcommittee chair was stepping down. Staff participated in two task group meetings on contoured changing pads.

**Communication(s)**

There were no formal communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F2388	This revision updated a figure, to align information with other standards using the same testing apparatus. Two administrative negatives were withdrawn in November 2021, and the ballot item passed.

**Next Action**

Staff will participate in the next task group or subcommittee meeting, when scheduled.

**Children’s Folding Chairs and Stools**

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**Purpose**

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

**Staff Contact**

Lee, Kevin

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2613-21	<i>Standard Consumer Safety Specification for Children’s Chairs and Stools</i>

**Standard(s) Update**

The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1232, *Safety Standard for Children’s Folding Chairs and Children’s Folding Stools*

**Activities Summary** Staff continues to work with the ASTM F15.59 subcommittee to address hazards associated with children’s chairs and stools. During the reporting period, staff participated in the head entrapment task group to establish a test for head entrapment hazards in these products.

**Meeting(s)** Staff participated in task group meetings to develop a new head entrapment performance requirement between elastic components. Staff provided the task group with head entrapment test methods from the CPSC public playground handbook and other ASTM juvenile product standards.

**Communication(s)**

Date	Type	Summary
12/22/2021	Data	Annual children’s folding chair data review. Staff did not identify any fatalities or new hazard patterns.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings in May 2022.

## Commercial Cribs

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

**Staff Contact** Taxier, Daniel

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2710-19	<i>Standard Consumer Safety Performance Specification for Commercial Cribs</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

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

**Activities Summary** Staff continues to work with the ASTM F15.18 subcommittee to address hazards associated with commercial cribs. There was no activity during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will provide the subcommittee an update on incident data. Staff will participate in any subcommittee meetings that are scheduled.

**Crib Mattresses (including After-Market Mattresses for Play Yards and Non-Full-Size Cribs)**

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**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing hazards and form the basis of a federal standard intended to reduce hazards associated with crib and after-market mattresses.

**Staff Contact** Taxier, Daniel

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F2933-21a</b>	<b>Standard Consumer Safety Performance Specification for Crib Mattresses</b>

**Standard(s) Update** In October 2021, ASTM published a revision to ASTM F2933- 21, ASTM F2933- 21a *Standard Consumer Safety Performance Specification for Crib Mattresses*, which changed warnings and instructions in the standard. Staff voted against the ballot items, but the vote was found non-persuasive.

**Relevant Rulemaking** The notice of proposed rule (NPR) for the *Safety Standard for Crib Mattresses* was published in the *Federal Register* (85 FR 67906) on October 26, 2020. On February 15, 2022, the Commission published the final rule (87 FR 8640) with an effective date of August 15, 2022. The final rule references ASTM F2933-21, the previous version of the voluntary standard.

**Activities Summary** Staff continues to work with the ASTM F15.66 subcommittee on safe sleep issues related to crib mattresses. During the reporting period, staff

participated in task groups and related activities, as well as presented a final rule to the Commission.

*Meeting(s)* Staff participated in an ASTM F15.66 subcommittee meeting to discuss ballot outcomes, including discussions on the ballot that found staff's negative comment non-persuasive, which led to publication of the new revision. Task group updates were also discussed and focused on reviewing staff's draft final rule package.

*Communication(s)* There were no formal communications during the reporting period.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings, including the next ASTM subcommittee meeting scheduled in May 2022.

### Frame Child Carriers

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**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.

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2549-14a	<i>Standard Consumer Safety Specification for Frame Child Carriers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1230, *Safety Standard for Frame Child Carriers*

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee on safety issues related to frame child carriers. During the reporting period, staff participated in two ASTM task group meetings. Staff worked with the task group to update the ad hoc warning language, stability requirements, and the dynamic load test.

*Meeting(s)* Staff participated in task group meetings for testing updates and editorial and Ad Hoc language updates.

*Communication(s)* There were no formal communications during the reporting period.

*Ballot(s)*

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
March 2022	ASTM F2549	Ballot F15(22-02) item (5) added new test requirements, increased the scope of products covered, corrected incorrect citations and refined some passages, and updated Ad Hoc language. The ballot item passed.

**Next Action**

Staff expects to receive notification once the standard is published in June 2022.

**Full-Size Cribs**

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**Purpose**

To work with ASTM on revising the voluntary 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.

**Staff Contact**

Taxier, Daniel

**Voluntary Standard(s)**

<b>Designation and current version</b>	<b>Title</b>
ASTM F1169-19	<i>Standard Consumer Safety Specification for Full-Size Cribs</i>

**Standard(s) Update**

The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking**

16 CFR part 1219, *Safety Standard for Full-Size Cribs*

**Activities Summary**

Staff continues to work with the ASTM F15.18 subcommittee and related task groups on safe sleep issues, including inclined sleep surfaces. During the reporting period, staff provided data on full-size cribs and participated in a task group meeting to discuss proposed sleep angle requirements for full-size cribs and other infant sleep products.

**Meeting(s)**

Staff participated in an ASTM task group meeting to discuss proposed requirements for full-size cribs, non-full-size cribs, and play yards that would address the incline angle of these products.

**Communication(s)**

<b>Date</b>	<b>Type</b>	<b>Summary</b>
10/20/2021	Data	Staff provided the subcommittee with the incident data for full-size cribs from January 2017 through July 2021.



*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff expects to receive notification once the standard is published and will participate in related upcoming subcommittee meetings in May 2022.

## Gates and Expandable Enclosures

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**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 expansion gates and expandable enclosures.

**Staff Contact** Torres, Carlos

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F1004-21	<i>Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1239, *Safety Standard for Gates and Enclosures*

The updated rule became effective in January 2022.

**Activities Summary** Staff continues to work with the ASTM F15.16 subcommittee on improving the safety of gates and enclosures. During the reporting period, staff participated in a subcommittee meeting and a task group meeting on retractable gates.

**Meeting(s)** Staff participated in a subcommittee meeting and a task group meeting on retractable gates. The task group meeting was in response to a safety issue with retractable gates raised by staff in a 2020 letter, which provided data to the subcommittee and advocated for a new fabric performance requirement for certain types of gates. Also, staff suggested including a warning label on the “hook side” of the gate to alert about these issues.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings in May 2022.

## Handheld Infant Carriers

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**Purpose** To work with ASTM on revising the voluntary 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 infant carriers.

**Staff Contact** DeGrano, Frederick

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2050-19	<i>Standard Consumer Safety Performance Specification for Hand-Held Infant Carriers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers*

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

## High Chairs

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

**Staff Contact** Marques, Stefanie

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F404-21	<i>Standard Consumer Safety Specification for High Chairs</i>

**Standard(s) Update** In January 2022, ASTM published ASTM F404-21, the latest revision to the *Standard Consumer Safety Specification for High Chairs*. This revision includes changes to the design and placement of the test weight for stability testing. On January 24, 2021, ASTM notified CPSC of an update to the standard. Staff was preparing a briefing package for Commission consideration at the end of the reporting period.

**Relevant Rulemaking** 16 CFR part 1231, *Standard Consumer Safety Specification for High Chairs*.

**Activities Summary** Staff continues to work with the ASTM F15.16 subcommittee on improving safety of high chairs. During the reporting period, staff participated in task group meetings on placement of the test weights for the stability test requirements.

**Meeting(s)** Staff participated in a meeting where the subcommittee discussed ballot results (F15 21-05, item 4) and moved the standard forward for publication.

**Communication(s)**

Date	Type	Summary
10/20/2022	Incident Data	Staff provided the subcommittee with the incident data for high chairs from March 2017 through July 2021.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** The Commission will review and vote on the latest revision of the standard. There is no high chairs subcommittee meeting scheduled in May 2022.

**Infant Bath Seats**

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**Purpose** To work with ASTM on revising the voluntary 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.

**Staff Contact** Kish, Celestine

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F1967-19	<i>Standard Consumer Safety Specification for Infant Bath Seats</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1215, *Safety Standard for Infant Bath Seats*

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

### Infant Bath Tubs

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**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 bath tubs.

**Staff Contact** Foster, Zachary

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F2670-22</b>	<b><i>Standard Consumer Safety Specification for Infant Bath Tubs</i></b>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1234, *Safety Standard for Infant Bath Tubs*

In March 2022, ASTM published ASTM F2670-22, the latest revision to the *Standard Consumer Safety Specification for Infant Bath Tubs*. This revision includes changes to the introduction, references, marking and labeling provisions, and resistance to collapse. On March 28, 2022, ASTM notified CPSC of an update to the standard. Staff was preparing a briefing package for Commission consideration at the end of the reporting period.

**Activities Summary** Staff continues to work with the ASTM F15.20 subcommittee on issues related to stability and resistance to collapse of infant bath tubs. During the reporting period, staff participated in subcommittee and task group meetings on stability and resistance to collapse. Staff also began preparing a briefing package for Commission consideration.

**Meeting(s)** Staff participated in a subcommittee meeting and several task group meetings related to latching and locking mechanisms and stability.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	N/A	Ballot F15(21-10) addressed latching and locking mechanisms. The ballot item passed.

**Next Action** Staff will participate in any upcoming subcommittee and task group meetings. The next subcommittee or task group meeting has not been scheduled. Staff will also deliver a briefing package to the Commission in June.

### Infant Bouncer Seats

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**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.

**Staff Contact** Wanna-Nakamura, Suad

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2167-19	<i>Standard Consumer Safety Specification for Infant Bouncer Seats</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1229, *Safety Standard for Infant Bouncer Seats*

**Activities Summary** Staff continues to work with the ASTM F15.21 subcommittee to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing hazards associated with infant bouncer seats. During the reporting period, staff provided incident data to the subcommittee and reviewed a ballot proposal.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	10/20/2022	Incident Data	Staff provided the subcommittee with the incident data for infant bouncer seats for June 2017 through July 2021.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	January 2022	N/A	Ballot F15(21-10, item 7) addressed warning language. The ballot item passed.

**Next Action** Staff will participate in upcoming subcommittee meetings for infant bouncer seats on May 23, 2022. Staff will email a summary of the 2021 annual data review of incidents to the ASTM subcommittee chair in June 2022.

## Infant Sleep Products

**Purpose** To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards to form the basis of a federal standard intended to reduce hazards associated with infant sleep products.

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3118-17a	<i>Standard Consumer Safety Specification for Infant Inclined Sleep Products</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1236, *Safety Standard for Infant Sleep Products*

**Activities Summary** Staff continues to work with the ASTM F15.18 subcommittee on infant safe sleep issues. During the reporting period, staff provided feedback to the subcommittee chair on the proposed draft changes to the standard. Staff also voted negative on the balloted changes to the standard.

**Meeting(s)** Staff attended a subcommittee meeting that discussed revisions to the standard in line with the new infant sleep products rule. The group

agreed to proceed with a ballot to remove *inclined* from the title, clarify the suffocation hazard in the introduction, reduce the age range covered, align definitions with other standards, and clarify testing details.

<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	October 1, 2021	Letter	Staff provided the ASTM F15.18 subcommittee chair with comments to the proposed draft changes to the standard.
	January 12, 2022	Letter	Staff provided the ASTM F15.18 subcommittee with a formal response to the negative vote on ballot F15(21-10) item 3.

<i>Ballot(s)</i>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	January 2022	ASTM F3118	Ballot F15(21-10) item 3 removed “inclined” from the title and made changes to be a more inclusive standard for different infant sleep products. Staff submitted a negative vote because the changes did not fully align with the agency final rule. The ballot item was unresolved at the end of the reporting period.

**Next Action** Staff will participate in upcoming meetings, including the next ASTM subcommittee meeting scheduled in May 2022.

## 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 infant swings.

**Staff Contact** Torres, Carlos

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2088-21	<i>Standard Consumer Safety Specification for Infant and Cradle Swings</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

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

In June 2021, ASTM published ASTM F2088-21 *Standard Consumer Safety Specification for Infant and Cradle Swings*. On August 2, 2021, ASTM notified CPSC of the update to the standard. On October 28, 2021, the Commission published a direct final rule in the *Federal Register* to update 16 CFR part 1223 *Safety Standard for Infant Swings*, to incorporate by reference ASTM F2088-21 (86 FR 59612). The rule became effective on January 29, 2022.

**Activities Summary**

Staff continues to work with the ASTM F15.21 subcommittee on strangulation and head entrapment hazards on tethered straps. During the reporting period, staff provided comments and feedback on the definition of “tethered straps” that would be subjected to the performance requirement and testing. Staff recommended requirements and testing. Staff reiterated that the current length requirement (up to 16 inches) is not sufficiently effective for some current tethered straps designs.

*Meeting(s)*

Staff participated in subcommittee meetings and a task group meeting on requirements related to strangulation hazards of tethered straps.

*Communication(s)*

There were no formal communications during the reporting period.

*Ballot(s)*

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	N/A	Ballot F15(21-10, item 6) addressed warning language. A negative vote on the accessibility of warnings in English was found non-persuasive. Staff abstained from voting but provided a comment of support. The ballot item passed.

**Next Action**

Staff will participate in upcoming task group meeting for tethered straps strangulation hazards, when scheduled.

**Infant Walkers**

**Purpose**

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

**Staff Contact**

Mordecai, Ben

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F977-18	<i>Standard Consumer Safety Specification for Infant and Infant Walkers</i>



**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1216, *Safety Standard for Infant Walkers*  
Note: 16 CFR part 1216 references the -12 version

**Activities Summary** Staff continues to work with the ASTM F15.17 subcommittee on safety issues related to infant walkers. During the reporting period, staff engaged in reviews of the new revision to the standard and reviewed a ballot proposal.

**Meeting(s)** Staff participated in a subcommittee meeting where ballot results were discussed.

**Communication(s)** There were no formal communications during the reporting period.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	January 2022	N/A	Ballot F15(21-07, item 2) addressed revisions to notes that recommended performing certain procedures. A negative vote indicating that the these notes constituted more than a “best practice” was found persuasive. The item was removed from the ballot.

**Next Action** Staff will participate in upcoming subcommittee meetings in May 2022.

### Non-Full-Sized Cribs and Play Yards

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**Purpose** To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards to form the basis of a federal standard intended to reduce hazards associated with infant sleep products.

**Staff Contact** DeGrano, Frederick

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F406-19	<i>Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards</i>
	<b>ASTM F2933-21a</b>	<b><i>Standard Consumer Safety Specification for Crib Mattresses</i></b>

**Standard(s) Update** In October 2021, ASTM published a revision to ASTM F2933- 21, ASTM F2933- 21a, *Standard Consumer Safety Performance Specification for*

*Crib Mattresses*, which changed warnings and instructions in the standard. Staff voted against the ballot items, but the vote was found non-persuasive.

**Relevant Rulemaking**

On February 15, 2022, the Commission published the final rule 16 CFR part 1220, *Safety Standard for Non-Full-Size Baby Cribs* (87 FR 8640) with an effective date of August 15, 2022. The final rule references ASTM F2933-21, the previous version of the standard.

16 CFR part 1221, *Safety Standard for Play Yards*

**Activities Summary**

Staff continues to work with the ASTM F15.18 and F15.66 subcommittees on safe sleep issues related to crib mattresses, non-full-size baby cribs, and play yards. During the reporting period, staff participated in task groups and related activities, voted on and suggested an alternate test method for a proposed gap measurement, and presented a crib mattresses final rule to the Commission.

*Meeting(s)*

Staff attended a subcommittee meeting and multiple task group meetings. In the subcommittee meeting, previous ballot results were discussed, with one negative vote found persuasive. Among other task group reports, staff reiterated issues with measuring the gap between the mattress and wall of the play yard. Staff attended task group meetings covering sleep angle, zipper access, and Ad Hoc warnings.

*Communication(s)*

Date	Type	Summary
February 15, 2022	Letter	Staff provided the ASTM F15.18 with a formal response to the negative vote on ballot F15(22-01) item 5.
March 7, 2022	Letter	Staff proposed an alternate test method from what was proposed in ballot F15(22-01) item 5, to address measuring gaps between a play yard mattress and side wall.
March 10, 2022	Data	Staff provided summary play yard incident data to the subcommittee for the period from 7/7/2020 to 7/7/2021.

*Ballot(s)*

Date closed	Voluntary Standard	Summary and Results (If Applicable)
February 2022	ASTM F406	Ballot F15(22-01) item 5 proposed allowing mattresses up to 2.0 inches thick, with a gap requirement for mattresses over 1.5 inches thick and a proposed method for testing the gap. Staff submitted a negative vote. The ballot item was unresolved at the end of the reporting period.

March 2022	ASTM F406	Ballot F15(22-02) item 3 proposed new scope language for products “for play only.” The ballot item was unresolved at the end of the reporting period.
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**Next Action** Staff will participate in upcoming meetings, including the next ASTM subcommittee meeting scheduled in May 2022.

### Portable Bed Rails (Children’s)

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

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2085-19	

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

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

**Activities Summary** Staff continued to work with the ASTM F15.11 subcommittee to improve the safety of children’s portable bedrails. During the reporting period, staff provided incident data to the subcommittee.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
		10/20/2021	Incident Data

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in any scheduled subcommittee meetings.

## Portable Hook-On Chairs

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**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.

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F1235-18	<i>Standard Consumer Safety Specification for Portable Hook-On Chairs</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1233, *Safety Standard for Hook-On Chairs*

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

## Sling Carriers (Infant and Toddlers)

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**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.

**Staff Contact** Foster, Zachary

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2907-21	<i>Consumer Safety Specification for Sling Carriers</i>

**Standard(s) Update** In January 2022, ASTM published a revision to ASTM F2907-19, ASTM F2907-21, *Consumer Safety Specification for Sling Carriers*. During the

final editing process, staff noted a conflict in two of the figures included in the revision. ASTM elected to issue a ballot to correct this conflict and delay notification until a revised version of the standard could be published.

**Relevant Rulemaking**

16 CFR part 1228, *Safety Standard for Sling Carriers*

**Activities Summary**

Staff continues to work with the ASTM F15.21 subcommittee on sling carrier products. During the reporting period, staff participated in multiple task group meetings to re-examine the scope and testing requirements.

**Meeting(s)**

Staff participated in an ASTM F15.21 subcommittee meeting and multiple task group meetings where scope and testing were discussed.

**Communication(s)**

There were no formal communications during the reporting period.

**Applicable Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F2907	Ballot F15(22-02) item 7 included Ad Hoc language and warning updates. The ballot item passed.
January 2022	ASTM F2907	Ballot F15(22-02) item 6 updated pictograms. The ballot item passed.

**Next Action**

Staff will participate in a task group meeting in April 2022 and will participate in any upcoming subcommittee and task group meetings. Staff is also preparing a briefing package to be delivered to the Commission after official notification regarding ASTM F2907-22.

**Soft Infant and Toddler Carriers**

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**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.

**Staff Contact**

Zachary Foster

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2236-16a	<i>Standard Consumer Safety Specification for Soft Infant and Toddler Carriers</i>

**Standard(s) Update**

The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1226, *Safety Standard for Soft Infant and Toddler Carriers*

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

### Stationary Activity Centers

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

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2012-18e1	<i>Standard Consumer Safety Specification for Stationary Activity Centers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1238, *Safety Standard for Stationary Activity Centers*

**Activities Summary** Staff continues to work with the ASTM F15.17 subcommittee on stationary activity centers. The subcommittee did not meet during the reporting period. During the reporting period, staff received and reviewed the annual stationary activity centers-related incident report.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)**

<b>Date</b>	<b>Type</b>	<b>Summary</b>
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10/20/2021	Incident Data	Staff provided the subcommittee with the incident data for children's portable bed rails for the period April 2020 through August 2021.
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**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will provide the subcommittee the annual staff incident data review. Staff will participate in the next subcommittee meeting, when scheduled. Staff will provide the subcommittee with a summary of the annual incident report and continue working with the subcommittee to address the suspension strap failures.

### Toddler Beds

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

**Staff Contact** Kish, Celestine

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F1821-19e1	<i>Standard Consumer Safety Specification for Toddler Beds</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1217, *Safety Standard for Toddler Beds*

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for May 2022.

## Other Children's Products and Hazards

### Child-Resistant Packages (CRP)

**Purpose** To maintain adequate safety levels addressing hazards associated with child-resistant packaging, by monitoring developments that affect the federal mandatory standard, including working with ASTM on voluntary standards for package design and development.

**Staff Contact** Eilbert, Mark

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM D3475-20	<i>Standard Classification of Child-Resistant Packages</i>
	ASTM F17-20	<i>Standard Terminology Relating to Primary Barrier Packaging</i>
	ASTM F3375-19	<i>Standard Test Method for Assessing Non-Metered Restricted Delivery Systems for Liquid Consumer Products</i>
	ASTM D7860-14	<i>Standard Test Methods for Measurement of Torque Retention for Child-Resistant and Non-Child-Resistant Packages with Continuous-Thread Closures Using Automated Torque Testing Equipment</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1700, *Poison Prevention Packaging*

**Activities Summary** During the reporting period, staff participated in subcommittee meetings and requested that the subcommittee notify staff of upcoming meetings in the review of D7860-14, *Standard Test Methods for Measurement of Torque Retention for Child-Resistant and Non-Child-Resistant Packages with Continuous-Thread Closures Using Automated Torque Testing Equipment*.

**Meeting(s)** Staff participated in subcommittee meetings by teleconference, including subcommittee F02.25 on Rigid Container Closure Systems, where the review of D7860-14 was announced.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	10/7/2022	email	Request to ASTM subcommittee chair to participate in review of ASTM D7860-14



*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings in October 2022.

### Crib Bumpers

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**Purpose** To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards and form the basis of a federal standard intended to reduce hazards associated with crib bumpers.

**Staff Contact** Smith, Tim

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F1917-20e1	<i>Standard Consumer Safety Specification for Infant Bedding and Related Accessories</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** The NPR for 16 CFR part 1240, *Safety Standard for Crib Bumpers/Liners* published in the *Federal Register* (85 FR 18878) on April 3, 2020. At the end of the reporting period, staff was developing a draft final rule briefing package.

**Activities Summary** There were no activities during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next infant bedding subcommittee meeting, scheduled for May 2022.

### Gasoline Containers, Child Resistance

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**Purpose** To work with ASTM to revise the voluntary 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 from portable fuel containers.

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2517-17	<i>Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1460, *Children’s Gasoline Burn Prevention Act Regulation*

**Activities Summary** Staff worked with the ASTM F15.10 subcommittee to revise the voluntary standard to expand the scope to allow this standard to be used on other portable fuel containers besides gasoline, diesel, and kerosene containers; to improve the readability and reduce ambiguities in the voluntary standard; and to revise the adult test to include younger adults, more men, and develop a new method to screen participants.

**Meeting(s)** Staff met with the task group revising ASTM F2517 twice to discuss and then reach consensus on proposed changes to the standard.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)**

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
February 2022	ASTM F2517	Ballot (F15(22-01)) item 2 proposed a new adult test to replace the senior test.
February 2022	ASTM F2517	Ballot (F15(22-01)) item 3 proposed improved readability of the child test procedure and changed instructions given to the child to remove ambiguities.
February 2022	ASTM F2517	Ballot (F15(22-01)) item 4 proposed changes to the scope that allows other portable fuel containers to test to this standard.

**Next Action** Staff will continue to participate with ASTM F15.10 subcommittee on the voluntary standard. Staff will prepare a briefing package for the Commission should the voluntary standard be revised.

## Infant Support Pillows and Nursing Support Products

**Purpose** To work with ASTM on establishing voluntary standards to address hazards associated with infant support pillows and nursing support products.

**Staff Contact** Smith, Timothy

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	[Awaiting ASTM designation]	Potential new voluntary standard for Infant loungers
	[Awaiting ASTM designation]	Potential new voluntary standard for feeding and infant support products

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff began work with ASTM F15 committee to develop new safety standards for infant support pillows and nursing support products. During the reporting period, staff provided relevant incident data to the ASTM F15.16 Infant Feeding and Support Products subcommittee and the F15.21 Infant Loungers subcommittee. Staff also participated in subcommittee and task group meetings for these ASTM subcommittees to assist in developing voluntary standards for each of these product categories.

**Meeting(s)** Staff attended multiple subcommittee and task group meetings for infant loungers and infant feeding and support products. Because these are both new efforts, meeting activity has been focused on scope determination and incident data review.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	December 13, 2021	Letter/Incident Data	Staff requested the formation of a subcommittee to address hazards associated with infant support pillows. Along with the letter, staff provided data for nursing pillows and for infant loungers and other support pillows.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM subcommittee meetings scheduled in May 2022.

## Toys

**Purpose** To work with ASTM on revising the voluntary 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.

**Staff Contact** Mordecai, Benjamin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F963-17	<i>Standard Consumer Safety Specification for Toy Safety</i>
	ASTM D8133-21	<i>Standard Test Method for Determination of Low-Level Phthalates in Poly(Vinyl Chloride) Plastics by Solvent Extraction-Gas Chromatography/Mass Spectrometry</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1250, *Safety Standard for Toys*

**Activities Summary** Staff continues to work with the ASTM F15.22 subcommittee on toy safety issues. During the reporting period, staff engaged with ASTM on the ballots below, participated in task group meetings, and provided feedback on the agency's position for improving safety. Staff is expecting ASTM to publish a new revision to the standard in summer 2022.

Staff is working with the ASTM D20.70 subcommittee on analytical methods to review the status of several analytical methods. Staff plans to participate in an ASTM D20.70 Inter-laboratory Study (ILS) of phthalate test methods, focusing on ASTM D8133.

**Meeting(s)** Staff attended several ISO TAG meetings for Working Group (WG) 1, WG 6, and WG 9. Staff also attended a subcommittee meeting where previously issued ballots were discussed.

Staff participated in two ASTM D20.70 meetings during the reporting period. Staff volunteered to participating in an ILS for ASTM D7823 and ASTM D8133.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	October 14, 2021	Letter	Staff provided a formal response supporting ballot F15(21-07) item 9.

Applicable Ballot(s)

Date closed	Voluntary Standard	Summary and Results (If Applicable)
October 2021	ASTM F963	Ballot F15(21-07) item 8 dealt with ingestion hazards related to expanding toys. The ballot item was unresolved at the end of the reporting period.
October 2021	ASTM F963	Ballot F15(21-07) item 9 added an A-weighted limit for push or pull toys. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 10 updated phthalate requirements. The ballot item was unresolved at the end of the reporting period.
October 2021	ASTM F963	Ballot F15(21-07) item 11 updated CPSC exemptions from testing. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 12 clarified alternative testing steps. The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 13 moved and revised the definition of "paper." The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 14 updated labeling requirements. The ballot item was unresolved at the end of the reporting period.
October 2021	ASTM F963	Ballot F15(21-07) item 15 updated the definition of "accessibility." The ballot item was removed.
October 2021	ASTM F963	Ballot F15(21-07) item 16 updated the warnings on stroller and carriage toys. The ballot item was removed.

**Next Action**

Staff will participate in upcoming ASTM task group meetings or subcommittee meetings, when scheduled. Staff expects to start the ASTM D20.70 ILS work on ASTM D8133 in July 2022.

**Emerging Technology**

**Additive Manufacturing/3D Printing**

**Purpose**

To work with UL, ASTM, and other SDOs to develop standards for Additive Manufacturing and 3D Printers to address the hazards associated with 3D printed products and the 3D printing process.

**Staff Contact** Thomas, Treye

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 2904, 1 <sup>st</sup> Edition	<i>Standard Method for Testing and Assessing Particle and Chemical Emissions from 3D Printers</i>
	ASTM WK69730	Potential new voluntary standard for wired directed-energy deposition processes

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to participate in several working and task groups focused on addressing the potential health and safety implications of additive manufacturing. The UL 2904 Working Group began to update standards for emissions testing. Staff served as a task group leader for the development of a guidance document for 3D printer users. Other efforts focused on larger scale use of printers and the responsible use of materials in 3D home construction.

**Meeting(s)** Staff attended several UL 2904 STP meetings discussing comments from the industry review of the next edition to the standard.  
  
Staff led two meetings of a UL 2904 STP task group to address the hazards associated with 3D printer emissions in small manufacturer and home-use scenarios.

**Communication(s)** There were no formal communications during the reporting period.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	April 2022	ASTM WK69730	Ballot item (F42 22-06, Item 1) as a new standard guide for wire arc energy directed deposition was issued during the reporting period but closed after the reporting period.

**Next Action** Staff expects the updates to the UL 2904 standard for emissions testing to be reviewed and balloted. These updates include the safety guidance document for 3D printers.

## Artificial Intelligence

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**Purpose** To work with applicable SDOs to develop standards to address the safety hazards associated with artificial intelligence in consumer products.

**Staff Contact** Lee, Simon

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 4600	<i>Standard for Safety for the Evaluation of Autonomous Products</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** There has been no activity associated with the standard during the reporting period. Staff held an AI Test and Evaluation Forum on March 31, 2022, including a presentation by UL and discussion of standards and considerations for safety in the evaluation of autonomous products.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to participate in the next STP meeting for UL 4600 on June 8 and June 9.

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

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**Purpose** To work with UL, ASTM, and other stakeholders to revise existing voluntary standards and develop new voluntary standards to address hazards associated with connected consumer products.

**Staff Contact** Lee, Simon

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 5500, 1st Edition	<i>Remote Software Updates</i>
	UL 2900-1, 1st Edition	<i>Software Cybersecurity for Network-Connectable Devices</i>
	<b>ASTM F3463-21</b>	<b><i>Standard Guide for Ensuring the Safety of Connected Consumer Products</i></b>

<b>Standard(s) Update</b>	In October 2021, ASTM published ASTM F3463-21, <i>Standard Guide for Ensuring the Safety of Connected Consumer Products</i> . The voluntary standard was revised to clarify language and the objective, define the term <i>consumer product</i> , outline how the guide could be applied, and update references.
<b>Relevant Rulemaking</b>	N/A
<b>Activities Summary</b>	There has been no activity associated with the standard during the reporting period.
<b>Meeting(s)</b>	Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.
<b>Communication(s)</b>	There were no formal communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff plans to participate in the next scheduled subcommittee meeting, when scheduled.

## Nanotechnology

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**Purpose** To work with ASTM and ISO technical committees to develop and revise voluntary standards to strengthen safety provisions addressing hazards associated with nanotechnology.

**Staff Contact** Matheson, Joanna

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM E3025-16	<i>Standard Guide for Tiered Approach to Detection and Characterization of Manufactured Silver Nanomaterials in Textiles</i>
	ASTM E2525-08 (2013) (Withdrawn)	<i>Standard Test Method for Evaluation of the Effect of Nanoparticulate Materials on the Formation of Mouse Granulocyte-Macrophage Colonies</i>
	ASTM E3171-21	<i>Standard Test Method for Determination of Total Silver in Textiles by ICP-OES or ICP-MS Analysis</i>



ASTM E3238-20	<i>Standard Test Method for Quantitative Measurement of the Chemoattractant Capacity of a Nanoparticulate Material in Vitro</i>
ASTM WK60553	Potential new voluntary standard for evaluation of nanoparticulate material internalization by phagocytic cells in vitro
ASTM WK60554	Potential new guide for evaluating impact of particles and other materials on phagocytic function in vitro
ISO/TS 13830:2013	<i>Nanotechnologies — Guidance on voluntary labelling for consumer products containing manufactured nano-objects</i>
ASTM E3025-16	<i>Standard Guide for Tiered Approach to Detection and Characterization of Manufactured Silver Nanomaterials in Textiles</i>
ASTM WK48313	Potential new guide for collection and generation of environment, health, and safety information for nanomaterials and nano-enabled products
ASTM E3238-20	<i>Standard Test Method for Quantitative Measurement of the Chemoattractant Capacity of a Nanoparticulate Material in Vitro</i>
ASTM WK60553	Potential new voluntary standard for evaluation of nanoparticulate material internalization by phagocytic cells in vitro
ASTM WK60554	Potential new voluntary standard for detection of nitric oxide production
ISO/TS 13830:2013	<i>Nanotechnologies — Guidance on voluntary labelling for consumer products containing manufactured nano-objects</i>

**Standard(s)  
Update**

The voluntary standards listed here were not updated during the reporting period.

**Relevant  
Rulemaking**

N/A

**Activities Summary** Staff continues to work with ASTM and ISO on the safety of nanotechnology in consumer products. During the reporting period, staff participated in multiple ASTM and ISO meetings.

**Meeting(s)** Staff participated in the ISO/TC 229 nanotechnologies working group meetings in October 2021, November 2021, December 2021, and January 2022, and discussed current projects and potential new work item proposals. Staff also participated in a US TAG to ISO/TC 229 meeting in December 2021 and discussed work in the ISO/TC 229 working groups.

Staff also participated in an ASTM E56 committee meeting in November 2021, where among other items, staff discussed revising ASTM E3025.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings.

Service, Communication, Information, Education, and Entertainment (SCIEE) Robots

**Purpose** To work with UL to develop a new voluntary standard for SCIEE robots.

**Staff Contact** Dayal, Vineed

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 3300	Potential new voluntary standard for SCIEE robots

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period. The STP is currently revising the first draft of the standard.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the UL STP to develop the new standard and is participating in multiple task groups for the effort.

**Meeting(s)** Staff actively participated in STP meetings focused on developing the standard, as well as task group meetings for Operational Design Domain and Risk Assessment, Robot Type classifications, Non-Robotic Function, Audible Indicators, and Functional Safety.

**Communication(s)** There were no formal communications during the reporting period.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming STP and task group meetings.

## Wearables

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**Purpose** To work with UL and any other SDOs to develop voluntary standards for wearable technologies to keep consumers safe.

**Staff Contact** Thomas, Treye

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 8400	Potential new voluntary standard for the safety for virtual reality (VR), augmented reality (AR), and mixed reality (MR) technology equipment

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continued to work with the UL STP to improve the draft standard and prepare it for ballot. During the reporting period, staff participated in numerous task groups and emphasized safety concerns for the subject immersive technologies, particularly regarding foreseeable use of the products by vulnerable age groups and the importance of normative requirements.

*Meeting(s)* Staff participated in three UL 8400 STP meetings, where staff joined in discussions on the development of UL 8400.

Staff participated in regular, reoccurring meetings for the UL 8400 task group on safety and warning instructions, where staff assisted in developing requirements regarding to safety messaging.

Staff participated in several meetings for the UL 8400 task group on vulnerable age groups, where staff assisted in developing age-related warning requirements.

*Communication(s)* There were no formal communications during the reporting period.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** The STP plans to finalize and ballot a draft of the standard. Following its publication, the STP will continue to meet to address continuing concerns and investigate emerging hazards with the subject immersive technologies.

## Home Products and Hazards

### Adult Portable Bed Rails

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

**Staff Contact** Dayal, Vineed

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3186-17	<i>Standard Specification for Adult Portable Bed Rails and Related Products</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** Petition CP 13-1 *Petition on Adult Portable Bedrails* was docketed in June 2013. The Commission voted to grant the petition on March 15, 2022, directing staff to draft a notice of proposed rulemaking.

**Activities Summary** Staff continued to work with the ASTM F15.70 subcommittee to improve the safety of adult portable bedrails. During the reporting period, staff reviewed proposed revisions, provided and characterized data, and briefed the group on agency activities.

**Meeting(s)** Staff participated in subcommittee and task group meetings. Topics included incident data, hazard identification, potential revisions and safety improvements, and agency activities.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to send a letter requesting the new revision task group to review staff's proposed minimum revisions to the standard, as outlined in the previous briefing package. Staff will work with the task group to review the remainder of the standard and discuss other proposals. Staff will brief the subcommittee on the NPR once it is completed.

## Bath Tubs (Adult)

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**Purpose** To work with ASTM to re-establish F462 or develop a new voluntary standard to address fall hazards associated with adult bath tubs and shower facilities, with particular focus on older consumers.

**Staff Contact** Bowley, Susan

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F462-79(2007) (Withdrawn in 2016)	<i>Consumer Safety Specification for Slip-Resistant Bathing Facilities</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the ASTM F15.03 subcommittee to develop a new standard that addresses slip and fall hazards in bath tubs. During the reporting period, staff provided data on falls in bathtubs and showers covering a 10-year period, participated in subcommittee meetings, and provided feedback on the agency's contract on creating Reference Surfaces (RS) for testing.

**Meeting(s)** Staff participated in several task group meetings focused on incident data review, reference surfaces for testing, and the CPSC's contract to facilitate developing those reference materials, and other tasks to develop a new standard that addresses slip and fall hazards.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/23/2022	Incident Data	Staff provided the subcommittee with fall-related bathtub and shower incident data for the period from August 2010 through August 2021.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled. Staff will share contract work results, when completed

## Batteries, Fire (High-Energy Density)

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

**Staff Contact** Kadiwala, Jay

**Voluntary Standard(s)**

<b>Designation and current version</b>	<b>Title</b>
UL 1642, 6 <sup>th</sup> Edition	<i>Standard for Safety for Lithium Batteries</i>
UL 2272, 1 <sup>st</sup> Edition	<i>Standard for Electrical Systems for Personal E-Mobility Devices</i>
UL 2271, 2 <sup>nd</sup> Edition	<i>Standard for Batteries for Use in Light Electric Vehicle (LEV) Applications</i>
UL 2849, 1 <sup>st</sup> Edition	<i>Standard for Electrical Systems for eBikes</i>
UL 1310, 7 <sup>th</sup> Edition	<i>Standard for Safety for Class 2 Power Units</i>
UL 1012, 8 <sup>th</sup> Edition	<i>Standard for Power Units Other Than Class 2</i>
UL 9540, 2 <sup>nd</sup> Edition	<i>Standard for Energy Storage Systems and Equipment</i>
ANSI C18.2M Part 2-2021	<i>American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard</i>
ANSI C18.3M Part 2-2021	<i>American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard</i>
ANSI C18.4M-2021	<i>American National Standard for Portable Cells and Batteries - Environmental</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM and UL on improving the overall safety of the battery-powered products with primary focus on e-mobility devices and ebikes. This impact also concerns battery chargers. During the reporting period, staff has participated in one STP meeting for UL 2849, focused on functional safety and in technical meetings for ASTM F15.58, including the full group meetings and the electrical systems working group. Staff has participated in several virtual ANSI C18 meetings. Staff's efforts in all these activities focus on improving overall lithium-ion battery safety within the scope of consumer products.

**Meeting(s)** Staff participated in ANSI C18 meetings in October and March, to discuss ingestion and fire-related battery issues.

Staff participated in UL 2849 STP meeting focused on functional safety for electrical safety of ebikes.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in an ANSI C18 standards meetings on June 14-15, 2022. Staff intends to participate in the STP UL 1642 virtual meeting to discuss recent standard proposals on June 15, 2022. Staff intends to continue participation on ANSI C18.6 Lithium-Ion Battery Technical Report, although work has paused temporarily while a new chair for the initiative is determined.

**Batteries, Ingestion (Button)**

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**Purpose** To work with the various SDOs to revise button and coin cell battery safety voluntary standards and end-product voluntary standards for products that use these button and coin cell batteries, to address accidental battery ingestions that can cause severe injury and death.

**Staff Contact** Le, Huy

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 4200A, 1 <sup>st</sup> Edition	<i>Standard for Safety for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies</i>
	UL 60065, 8 <sup>th</sup> Edition	<i>Standard for Audio, Video, and Similar Electronic Apparatus—Safety Requirements</i>
	ANSI C18.1M Part 2-2019	<i>American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - Safety Standard</i>
	ANSI C18.2M Part 2-2021	<i>American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard</i>
	ANSI C18.3M Part 2-2021	<i>American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard</i>
	ANSI C18.4M-2021	<i>American National Standard for Portable Cells and Batteries- Environmental</i>
	ASTM F963-17	<i>Standard Consumer Safety Specification for Toy Safety</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

<b>Relevant Rulemaking</b>	ASTM F963-17, <i>Standard Consumer Safety Specification for Toy Safety</i>  Staff conducted data analysis and research in support of a button battery NPR briefing package.
<b>Activities Summary</b>	During the reporting period, staff provided an update on staff's FY 2022 NPR work for battery ingestion hazards. Staff continues to advocate for strong warning labels and child-resistant packaging for button and coin cell batteries in ANSI C18 standards.
<b>Meeting(s)</b>	Staff participated in ANSI C18 meetings in October and March, to discuss button and coin cell battery ingestion hazards
<b>Communication(s)</b>	There were no formal communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff will participate in ANSI C18 standards meetings on June 14-15, 2022. Staff will participate in other related button and coin cell battery standards, including ASTM F963, as needed. Staff will review end-product standards where button and coin cell batteries are used in products, to determine if existing requirements are adequate to prevent children from accessing the batteries. Staff is also preparing an NPR briefing package to address battery ingestion hazards.

### Candles and Candle Accessories

<b>Purpose</b>	To work with the ASTM F15.45 subcommittee on revising the voluntary standards to strengthen safety provisions addressing hazards associated with candles and candle accessories.							
<b>Staff Contact</b>	Ayers, Scott							
<b>Voluntary Standard(s)</b>	<table border="1"> <thead> <tr> <th>Designation and current version</th> <th>Title</th> </tr> </thead> <tbody> <tr> <td>ASTM F2417-17</td> <td><i>Standard Specification for Fire Safety for Candles</i></td> </tr> <tr> <td>ASTM F2601-18</td> <td><i>Standard Specification for Fire Safety for Candle Accessories</i></td> </tr> </tbody> </table>	Designation and current version	Title	ASTM F2417-17	<i>Standard Specification for Fire Safety for Candles</i>	ASTM F2601-18	<i>Standard Specification for Fire Safety for Candle Accessories</i>	
Designation and current version	Title							
ASTM F2417-17	<i>Standard Specification for Fire Safety for Candles</i>							
ASTM F2601-18	<i>Standard Specification for Fire Safety for Candle Accessories</i>							
<b>Standard(s) Update</b>	The voluntary standards listed here were not updated during the reporting period.							
<b>Relevant Rulemaking</b>	N/A							



**Activities Summary**

Staff continues to work with the ASTM F15.45 subcommittee on candle safety. During the reporting period, staff provided data and participated in discussions on incident data and recalls.

**Meeting(s)**

Staff participated in quarterly incident data teleconferences to discuss recent candle-related recalls and incidents found on SaferProducts.gov and from other sources, such as Canada or Europe. Based on these data, staff supports adding changes that address candle-making kits, end-of-useful life, and wick migration.

Staff participated in two meetings discussing possible changes to F2417.

**Communication(s)**

Date	Type	Summary
2/15/2022	Incident Data	Staff provided a redacted IDI to the subcommittee to discuss during a future quarterly incident data teleconference.

**Ballot(s)**

There were no related ballots during the reporting period.

**Next Action**

Staff will continue to participate in quarterly incident data teleconferences. The subcommittee plans to revise F2417 this calendar year and F2601 next calendar year. Staff will participate in discussions related to potential revisions to ASTM F2417 and ASTM F2601. The next subcommittee meeting is scheduled for May 20, 2022.

**Carbon Monoxide (CO) Alarms**

**Purpose**

To work with UL to ensure that the voluntary standard adequately addresses the safety hazards associated with CO alarms and effective notification of hazardous levels of CO.

**Staff Contact**

Matthew J. Brookman

**Voluntary Standard(s)**

Designation and current version	Title
UL 2034, 4 <sup>th</sup> Edition	<i>Single and Multiple Station Carbon Monoxide Alarms</i>
NFPA 72®, 2022 Edition®	<i>National Fire Alarm and Signaling Code</i>

**Standard(s) Update**

The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking**

N/A

**Activities Summary**

Staff continues to work with the technical committee to enhance the standard and maintain effective performance requirements for CO alarms. During the reporting period, staff drafted a letter of support for the long-term sensor stability test proposal. Staff continued to review proposals and monitor the CO alarm market. Additionally, staff continued working with the contractor in completing the Smoke and CO Alarms Survey.

**Meeting(s)**

Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)**

Date	Type	Summary
2/24/2022	Letter	Staff supported the proposal for a sensor stability test protocol.

**Ballot(s)**

There were no ballots during the reporting period.

**Next Action**

Staff will continue to support the activities of the technical committee and further development of the standard. Staff will continue working with the contractor in completing the Smoke and CO Alarms Survey.

**Clothing Storage Units Tip Over**

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**Purpose**

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

**Staff Contact**

Talcott, Kristen

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2057-19	<i>Standard Safety Specification for Clothing Storage Units</i>
ASTM F3096-21	<i>Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)</i>

**Standard(s) Update**

The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking**

The Commission published an ANPR in November 2017 (82 FR 56752, Nov. 30, 2017) and an NPR, *Safety Standard for Clothing Storage Units*, in February 2022 (87 FR 6246, Feb. 2, 2022).

**Activities Summary**

Staff continues to work with the ASTM F15.42 subcommittee on furniture safety, especially tip-over hazards. During the reporting period, staff

participated in many subcommittee and task group meetings, as well as kept the group informed of the associated rulemaking.

**Meeting(s)** Staff participated in multiple subcommittee and task group meetings related to the proposed changes to the standard. Meetings included scope, interlocks, warning and labeling, tip restraint, and testing task groups. Staff briefed the subcommittee on the NPR and provided feedback on proposals.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
November 2021	ASTM F2057	ASTM F15(21-08) item 2 proposed to address unit height measurements when adjustable feet are included. The item was removed from the ballot.
November 2021	ASTM F2057	ASTM F15(21-08) item 3 proposed to remove the term <i>nightstand</i> from the standard, replacing it with a volume measurement threshold. The item was removed from the ballot.
November 2021	ASTM F2057	ASTM F15(21-08) item 4 proposed language to address testing of interlocking drawers. The item was removed from the ballot.

**Next Action** Staff will continue working on the final rule and will participate in upcoming subcommittee and task group meetings.

## Electric Heaters

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**Purpose** To work with UL to address hyperthermia deaths caused by portable and room heaters and address risks of fire related to electric heater cords and plugs.

**Staff Contact** Lee, Arthur

**Voluntary Standard(s)**

Designation and current version	Title
UL 1278, 4 <sup>th</sup> Edition	<i>Standard for Movable and Wall-or Ceiling-Hung Electric Room Heaters</i>

**Standard(s) Update** In February 2022, UL revised the current edition of UL 1278, *Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters*. The revised edition (February 21, 2022) includes new requirements for warnings and markings to address hyperthermia hazards. UL did not issue a new edition number with the revision.

**Relevant Rulemaking** N/A

**Activities Summary** In October 2021, UL sought preliminary review for a proposal for markings and labeling to address the hyperthermia hazard. Staff chaired the task group that addressed the comments from the preliminary review. The task group addressed the comments via email and prepared a ballot in December 2021. UL issued a ballot of the marking and labeling proposal in December 2021; the ballot closed in January 2022, and it passed. Staff is also analyzing data and researching fire hazards related to electric heaters and has identified some cord and plug issues that the UL STP may be able to address.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)**

Date	Type	Summary
3/7/2022	Letter	Staff requested that the UL STP review findings of an internal CPSC report on inconsistent crimping, welding, and/or soldering on the crimp connectors of heater plug blades.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
January 2022	UL 1278	Ballot to include requirements for warnings and markings to address hyperthermia hazards.

**Next Action** Staff will work with the UL STP to address cord and plug fire-related issues.

**Fire Safety of Portable Fuel Containers and Gasoline Cans**

**Purpose** To work with ASTM and UL to improve or develop fire safety requirements for flame-mitigation devices and other fire safety features in various types of portable fuel containers, such as gasoline containers.

**Staff Contact** Ayers, Scott

**Voluntary Standard(s)**

<b>Designation and current version</b>	<b>Title</b>
ASTM F3429 / ASTM F3429M-20	<i>Standard Specification for Performance of Flame Mitigation Devices Installed in Disposable and Pre-Filled Flammable Liquid Containers</i>
<b>ASTM F852 / ASTM F852M-22</b>	<b><i>Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use</i></b>
<b>ASTM F3326-21</b>	<b><i>Standard Specification for Flame Mitigation Devices on Portable Fuel Containers</i></b>
ASTM F839-15	<i>Standard Specification for Cautionary Labeling of Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use</i>
UL30, 9 <sup>th</sup> Edition	<i>Standard for Metal Safety Cans</i>
NFPA 30, 2021 Edition	<i>Flammable and Combustible Liquids Code</i>

**Standard(s) Update**

In October 2021, ASTM published ASTM F3326-21, *Standard Specification for Flame Mitigation Devices on Portable Fuel Containers*. The voluntary standard was revised to allow metal flame-mitigation devices (FMDs) in metal gasoline containers.

In January 2022, ASTM published ASTM F852/F852M-20, *Standard Specification for Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use*. The voluntary standard was revised to add heat-resistance requirements for the container body.

**Relevant Rulemaking**

Portable Fuel Container Safety Act of 2020

**Activities Summary**

During the reporting period, staff worked with the UL 30 STP to revise the current edition of the voluntary safety standard. CPSC contracted with a testing laboratory to develop a performance test for flame-mitigation devices on safety cans. The STP accepted the test for the next edition of UL 30. Staff is also gauging general industry compliance to ASTM F3429.

**Meeting(s)**

Staff participated in several UL 30 STP and task group meetings to develop a performance test for FMDs on safety cans. Some of these meetings included a CPSC contractor who adapted the ASTM F3429 for safety cans.

Staff participated in an ASTM F15.72 subcommittee meeting that included discussions on FMDs and industry compliance with ASTM F3429.

Staff participated in a NFPA 30 committee meeting, where public inputs for the second draft of the next edition were discussed.

*Communication(s)* There were no formal communications during the reporting period.

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
March 2022	UL 30	Recirculation ballot incorporated a new FMD performance test and other items. The ballot passed with and will be published in April or May 2022.

**Next Action** Staff will chair a meeting of the ASTM F15.72 task group responsible for ASTM F3429 / F3429M in April to discuss compliance to the voluntary standard and possible future requirements.

### Flammable Refrigerants

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**Purpose** To work with the various UL and ASHRAE standards work groups to revise the voluntary standards associated with consumer products that use flammable refrigerants (also known and marketed as “low global warming potential refrigerants” and “natural refrigerants”).

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL/CSA 60335-2-24, 2 <sup>nd</sup> Edition	<i>Safety Requirements for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances, and Ice-Makers</i>
	UL/CSA 60335-2-40, 3 <sup>rd</sup> Edition	<i>Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers</i>
	ASHRAE 15.2P	Potential new voluntary standard for refrigeration systems in residential applications

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff worked with the CANENA UL/CSA 60335-2-40 group as it revised the voluntary standard. Additionally, staff provided comments to ASHRAE on the potential new voluntary standard ASHRAE 15.2P.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)**

Date	Type	Summary
3/15/2022	Formal Letter	Staff supporting statement on the fifth public review of the draft ASHRAE 15.2P standard

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
March 2022	ASHRAE 15.2P	Fifth public review of the draft ASHRAE 15.P standard, addressing comments from the fourth public review.

**Next Action** Staff will participate with the CANENA work group revising UL/CSA 60335-2-40; the next meeting is scheduled for April 8, 2022. Staff will participate with the ASHRAE 15.2P committee, as needed. Staff will participate with the CANENA work group if it considers revising UL/CSA 60335-2-24.

### Flooring (Slips, Trips, and Falls)

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**Purpose** To work with ASTM and NFSI on developing a new voluntary standard or revising the existing voluntary standard to reduce or prevent consumer slips, trips, and falls.

**Staff Contact** Bowley, Susan

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2508-16e1	<i>Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces</i>
ASTM WK60578	Potential new voluntary standard test method for walkway friction testing

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** Petition CP 16-1, *Labeling Requirements Regarding Slip Resistance of Floor Coverings* (Denied) and Petition CP 18-2 *Floor Coverings* (Denied)

**Activities Summary** Staff continued to work with ASTM F13.10 subcommittee to establish better characterization of trip, slip, and fall hazards associated with flooring.

**Meeting(s)** Staff participated in ASTM F13 main committee and subcommittee meetings. Topics included discussion of recent ballot results, standards up for review and new work items, including WK72780 for revision of ASTM F2508-16e1, and related slip-resistance efforts and research, including those underway at CPSC.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming meetings.

### Gas Appliances, CO Sensors

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

**Staff Contact** Jordan, Ronald

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z21.47-2016/ CSA 2.3-2016	<i>Gas-Fired Central Furnaces</i>
	ANSI Z21.13-2017/ CSA 4.9-2017	<i>Gas-Fired Low Pressure Steam and Hot Water Boilers</i>
	ANSI Z21.86-2016/ CSA 2.32-2016	<i>Vented Gas-Fired Space Heating Appliances</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** The Commission published an ANPR for Performance Requirements for Residential Gas Furnaces and Boilers, in the *Federal Register* on August 19, 2019 (84 FR 42847). Staff conducted data analysis and technical research in support of an NPR.

**Activities Summary** Staff continues to monitor the activities of the technical committee and subcommittees for any developments related to CO safety. During the



reporting period, staff corresponded with the SDO to obtain updates on standards activities.

*Meeting(s)* Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

<i>Communication(s)</i>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	10/27/2021	Email	Staff corresponded with the CSA TC project manager to determine whether the TC or TSCs were considering any CO safety-related improvements to the standards.

*Ballot(s)* There were no ballots during the reporting period

**Next Action** Staff will update the voluntary standard bodies on the status of the ANPR/NPR and related contractor reports, when appropriate. Staff will continue to monitor or participate with CSA and any other SDOs interested in gas appliance safety and CO sensors.

## Gas Ranges

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**Purpose** To work with the CSA TSC and other stakeholders to revise the voluntary standard to strengthen its provisions for safety.

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z21.1-2016/ CSA 1.1-2016	Household Cooking Gas Appliances

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff chaired the CSA TSC, which is working on a draft of the next edition of ANSI Z21.1 for ballot this fall. Some of the requirements the TSC is proposing include requirements for smart-enabled cooking. Staff is also working with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges to possibly make recommendations or proposals to affected voluntary standards.

**Meeting(s)** Staff chaired two meetings of the CSA TSC, where the TSC focused on resolving open issues to prepare for balloting the draft of the next edition of the standard.

Staff met monthly with various industry, government, and advocacy stakeholders to review IAQ issues associated with gas ranges. This group is still developing the workflow of establishing recommendations and proposals.

**Communication(s)** There were no formal communications during the reporting period,

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will continue to chair the CSA TSC. Staff will participate in future TSC meetings, as scheduled. Staff will also continue to participate with various industry, government, and advocacy stakeholders to review IAQ issues associated with gas ranges if recommendations or proposals to voluntary standards bodies are the potential outcomes. The next meeting is scheduled for April 12, 2022.

## Indoor Air Quality

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**Purpose** To work with SDOs and other stakeholders to develop and maintain voluntary standards that address hazards associated with indoor air quality.

**Staff Contact** Bevington, Charles

**Voluntary Standard(s)**

Designation and current version	Title
ASTM D8142-17e1	<i>Standard Test Method for Determining Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Using Micro-Scale Environmental Test Chambers</i>
ASTM D8141-17	<i>Standard Guide for Selecting Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) Emission Testing Methods to Determine Emission Parameters for Modeling of Indoor Environments</i>
ASTM D5438-17	<i>Standard Practice for Collection of Floor Dust for Chemical Analysis</i>
ASTM WK58354	Potential new voluntary standard practice for measuring chemical emissions from SPF insulation samples in a large-scale ventilated enclosure

ASTM WK58356	Potential new voluntary standard for modeling indoor concentrations of chemical substances from indoor materials
ASHRAE 62.2-2019	<i>Ventilation and Acceptable Indoor Air Quality in Residential Buildings</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the ASTM D22.05 subcommittee on standards related to measuring and modeling chemicals in the indoor environment. During the reporting period, staff continued to advocate for developing standards that provide information on consumer products and their relationship to the indoor environment, leading to increased coordination with the ASTM F15 subcommittee. Staff is also working with various industry, government, and advocacy stakeholders to review IAQ issues associated with gas ranges to possibly make recommendations or proposals to affected voluntary standards.

**Meeting(s)** Staff participated in ASTM D22.05 subcommittee meetings where ballot results for WK58354 and Per and Poly-Fluoroalkyl Substances (PFASs) were discussed.

Staff met monthly with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges. This group is still considering how to accomplish work.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)**

Date closed	Voluntary Standard	Summary and Results (If Applicable)
February 2022	ASTM WK58354	Ballot item (D22-01, Item 7) to publish as a new standard. The item passed.
March 2022	ASTM D8141	Ballot item (D22-02, Item 1) to include new references. The ballot results were not reviewed before the end of the reporting period.

**Next Action** Staff will continue to participate in ASTM and ASHRAE meetings to develop and review standards related to IAQ and consumer products. Staff will continue to participate with various industry, government, and advocacy stakeholders on reviewing IAQ issues associated with gas ranges if recommendations or proposals to voluntary standards bodies

are a potential outcome. The next meeting is scheduled for April 12, 2022.

## Liquid Laundry Packets

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

**Staff Contact** Hurley, Jill

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F3159-15(2022)</b>	<b>Standard Safety Specification for Liquid Laundry Packets</b>

**Standard(s) Update** On March 4, 2022, ASTM reapproved ASTM F3159-15(2022), *Standard Safety Specification for Liquid Laundry Packets*.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the ASTM F15.71 subcommittee on liquid laundry packet safety issues. During the reporting period, staff participated in task group meetings to determine if the standards' scope should be expanded to include other age groups and hazards, such as ocular and dermal.

**Meeting(s)** Staff attended subcommittee meetings and several task group meetings, focused on scope, data, ocular, and senior/dementia issues. Staff presented on its report, *Effect of Novel Coronavirus Pandemic on 2020 NEISS Estimates*, providing a list and summary count of incidents by code for the years 2019 and 2020.

**Communication(s)** There were no formal communications during the reporting period.

<b>Applicable Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	December 2021	ASTM F3159	Ballot F15(21-09) item 3 proposed to reapprove the standard with no changes. The ballot item passed after a negative vote was found non-persuasive.

**Next Action** Staff will participate in upcoming subcommittee quarterly meetings and monthly task group meetings, as scheduled.

## LP Gas Appliances

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**Purpose** To work with CSA, NFPA, and other stakeholders to revise the voluntary standards to strengthen safety provisions and to ensure that the voluntary standards address hazards associated with LP-gas appliances, such as gas grills and fire pits.

**Staff Contact** Kim, Yeon Souk

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z21.97-2017/ CSA 2.41-2017	<i>Outdoor Decorative Gas Appliances</i>
	ANSI Z21.58b-2018 /CSA 1.6-2018	<i>Outdoor Cooking Gas Appliances</i>
	NFPA 58, 2020 Edition	<i>Liquefied Petroleum Gas Code</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff attended the technical subcommittee meeting in January 2022, to review the task force reports and progress. Staff also reviewed the ballot for ANSI Z21.58.

**Meeting(s)** The joint TSC met once to discuss open work items; this was the first TSC meeting in almost 2 years.

**Communication(s)** There were no formal communications during the reporting period.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	May 2022	ANSI Z21.58	Ballot for the next edition to the standard, including requirements clarifying that spare LP gas cylinders cannot be stored within a gas grill and provisions for smart-enabled outdoor cooking gas appliances.

**Next Action** Staff will participate in upcoming NFPA 58 technical committee meeting scheduled in May 2022. Staff will continue to monitor and participate with CSA and any other SDOs interested in LP gas appliances safety.

## Market Umbrellas/Beach Umbrellas

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**Purpose** To work with ASTM to develop voluntary standards to address hazards associated with market (including patio) umbrellas (MU) and beach umbrellas (BU).

**Staff Contact** Newens, Andrew

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3512-21	<b><i>Standard Test Method for Evaluating Wind Safety and Durability of Market Umbrellas</i></b>
	ASTM WK 81182	Potential new standard for evaluating wind safety and stability of beach umbrellas

**Standard(s) Update** In October 2021, ASTM published F3512-21, *Standard Test Method for Evaluating Wind Safety and Durability of Market Umbrellas*. This new voluntary standard established test methods for evaluating MUs for wind strength and durability.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with the MU Subcommittee and BU Task Group to develop new standards. During the reporting period, staff provided comments on draft documents, actively participated in task group meetings on establishing scope and test requirements, and staff provided feedback on the agency's position for maintaining or improving safety for these products.

**Meeting(s)** Staff participated in an ASTM F15.79 subcommittee meeting in November 2021, where the subcommittee established a task group to develop a new standard for BUs. Staff has since been meeting with the BU task group once a month.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/10/2021	Email	Staff provided the ASTM F15.79 subcommittee information on accessing publicly available incident data on umbrellas.

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	October 2021	N/A	Subcommittee ballot F15.79 (21-01), item 1 to include beach umbrella requirements in any new standards.

**Next Action** Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM F15.79 subcommittee meeting scheduled in May 2022.

## Mowers

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**Purpose** To work with OPEI to revise their voluntary standards to address hazards associated with walk-behind and riding power lawn mowers.

**Staff Contact** Newens, Andrew

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/OPEI B71.1-2017	<i>Standard for Consumer Turf Care Equipment – Pedestrian-Controlled Mower and Ride-On Mowers – Safety Specification</i>
	ANSI/OPEI 60335-2-107-2020	<i>Particular Requirements for Robotic Battery Powered Electrical Lawnmowers</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1205, Safety Standard for Walk-Behind Power Lawn Mowers and Petition CP 19-1 on Walk-Behind Power Lawn Mowers (withdrawn May 2020)

**Activities Summary** Staff continues to work with the OPEI B71.1 committee on rollover and backover hazards relating to residential riding lawn mowers.

**Meeting(s)** Staff met with the OPEI B71.1 committee in March to discuss how CPSC and OPEI can collaborate on the review of riding lawn mower incident data and on possible future mower rollover research. Staff will provide incident data to OPEI for joint review of data.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will have a follow-up meeting with the OPEI B71.1 committee in April 2022, to discuss CPSC's potential contract work to study rollovers of riding mowers. Staff is planning to participate in another meeting with the OPEI B71.1 committee in mid-summer 2022, to jointly review and categorize riding mower incident data. This will facilitate future collaboration on development of the B71.1 standard.

## Portable Generators

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**Purpose** To work with UL and PGMA to revise the voluntary standards to strengthen safety provisions addressing hazards associated with portable generator CO deaths and injuries.

**Staff Contact** Buyer, Janet

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/PGMA G300-2018 (Errata Update)	<i>Safety and Performance of Portable Generators</i>
	UL 2201, 2 <sup>nd</sup> Edition	<i>Carbon Monoxide (CO) Emission Rate of Portable Generators</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** NPR published on November 21, 2016 (81 FR 83556).

**Activities Summary** In February 2022, staff published a briefing package on staff's assessment of the effectiveness of the CO hazard-mitigation requirements in UL 2201 and PGMA G300-2018 and information on the availability of compliant products.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to provide incident data to UL and PGMA in April 2022.

### Pressure Cookers

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**Purpose** To work with UL to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with pressure cookers.

**Staff Contact** Snyder, Duncan Scott

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 136, 8th Edition	<i>Standard for Pressure Cookers</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

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<b>Relevant Rulemaking</b>	N/A
<b>Activities Summary</b>	There has been no activity associated with the standard during the reporting period.
<i>Meeting(s)</i>	Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.
<i>Communication(s)</i>	There were no formal communications during the reporting period.
<i>Ballot(s)</i>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff anticipates a preliminary teleconference with STP 136 members to discuss the issues, depending on the committee's schedule, by July 2022.

### Smoke Alarms

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

**Staff Contact** Lee, Arthur

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 217, 9th Edition	<i>Standard for Single and Multiple Station Smoke Alarms</i>
	NFPA 72, 2022 Edition	<i>National Fire Alarm and Signaling Code®</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** There has been no activity associated with the standard during the reporting period. Staff continued working with the contractor in completing the Smoke and CO Alarms Survey.

*Meeting(s)* Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

*Communication(s)* There were no formal communications during the reporting period.

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*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff plans to attend the UL 217 meeting in the fall/winter 2022. Staff plans to attend the first draft technical meeting of NFPA 72 on Single and Multiple Station Alarms in July 2022. Staff will continue working with the contractor in completing the Smoke and CO Alarms Survey

## Table Saws

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

**Staff Contact** Paul, Caroleene

**Voluntary Standard(s)**

Designation and current version	Title
UL 62841-3-1, 1st Edition	<i>Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-1: Particular Requirements for Transportable Table Saws</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** NPR *Safety Standard Addressing Blade-Contact Injuries on Table Saws* (82 FR 22190)

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will respond to an UL representative inquiry regarding a staff letter to UL dated September 20, 2021. Staff plans to reiterate information in the letter, stating that staff's analysis of NEISS data trends related to blade-contact injuries on table saw shows the trend has not changed since 2010, indicating that the latest revision to UL 987 incorporated into UL

62841-3-1 may not be effective in reducing blade-contact injuries on table saws.

## Torch Fuel and Lamp Oil

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**Purpose** To work with ASTM on the development of voluntary standards addressing the hazards associated with the color and design of torch fuel and lamp oil packaging, the color and odor of torch fuel and lamp oil, and the use and design of devices principally intended to house torch fuel and lamp oil.

**Staff Contact** White, Sharon

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F3304-21	<i>Standard Specification for Lamp Fuel and Torch Fuel Packaging</i>
	ASTM WK76994	Potentially new voluntary standard for lamp and torch fuel odor and color

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff participated in task group meetings to address the hazards associated with the color and odor of torch and lamp fuel. There was consensus among the task group that the ASTM F3304-21 standard that was published in September 2021, contained specific requirements that already address the color and odor of torch and lamp fuel and that the better approach would be to add an Appendix to the packaging standard that shows how the packaging standard addresses this issue, rather than develop a separate standard.

**Meeting(s)** Staff met twice during the reporting period with the ASTM F15.72 task group to develop a potentially new voluntary standard to address the hazards associated with the color and odor of lamp and torch fuel.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next scheduled meeting, which has not been scheduled.

## Upholstered Furniture

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**Purpose** To work with ASTM, NFPA, and other stakeholders to revise voluntary standards to strengthen safety provisions addressing hazards associated with fires involving upholstered furniture

**Staff Contact** Lock, Andrew

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM E1353-21	<i>Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture</i>
	NFPA 260, 2019 Edition	<i>Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1640, *Standard for the Flammability of Upholstered Furniture*

**Activities Summary** Staff continues to work with ASTM subcommittee and NFPA committee. During the reporting period, staff advised the committees on the details of the new federal standard and provided feedback on other tests for upholstered furniture flammability, which are being developed and revised.

**Meeting(s)** Staff attended an ASTM E05.15 subcommittee meeting. The subcommittee met to discuss several flammability standards, including one for upholstered furniture. Staff provided the subcommittee an update on recent CPSC rulemaking.

Staff attended a NFPA fire test committee, second draft meeting, where staff provided the committee with a brief update of activity on implementation of 16 CFR part 1640.

**Communication(s)** There were no formal communications during the reporting period

<b>Ballot(s)</b>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	January 2022	NFPA 260	Closing of the public comment period for the 2023 edition. The second draft is scheduled to be posted in October 2022.

**Next Action** Staff will participate in upcoming ASTM and NFPA meetings in June 2022 and March 2023, respectively. Staff will provide feedback on proposed new and revised standards. Staff will participate in round-robin testing for upholstered furniture testing, as appropriate.

### Washing Machines

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

**Staff Contact** Kim, Yeon Souk

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	UL 2157, 4th Edition	<i>Electric Clothes Washing Machines and Extractors</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** There has been no activity associated with the standard during the reporting period.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to provide incident data to UL.

### Window Coverings

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

**Staff Contact** Balci-Sinha, Rana

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>

ANSI/WCMA A100.1-2018	Standard for Safety of Corded Window Covering Products
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**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** The NPR for the *Safety Standard for Operating Cords on Custom Window Coverings* was published in the Federal Register (87 FR 1014) on January 7, 2022. On the same day, the Commission published the NPR *Substantial Product Hazard List: Window Covering Cords* (87 FR 891).

**Activities Summary** Staff continues to work with WCMA on window covering safety issues. During the reporting period, staff participated in steering committee meetings and reviewed and provided comments on draft revisions to the standard.

**Meeting(s)** Staff participated in a conference call with WCMA to discuss the process on reopening the standard and three WCMA steering committee meetings, where they briefed the group on the staff's recommendations, participated in discussions on potential custom window product requirements, presented incident data, and provided comment on proposed revisions to the standard.

**Communication(s)**

Date	Type	Summary
March 1, 2022	Letter	Staff provided a formal response to WCMA on their opposition to continuous cord loop systems and raised issues with single retractable cord lift systems.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will prepare a final rule briefing package for Commission consideration. Staff will participate in upcoming committee meetings as they are scheduled and will review and comment on any ballots issued by WCMA.

## Recreation

### Amusement Rides, Trampoline Parks, and Adventure Attractions

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

**Staff Contact** Taxier, Daniel

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F747-21a	<b>Standard Terminology Relating to Amusement Rides and Devices</b>
ASTM F770-21a	<b>Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices</b>
ASTM F1193-18a	<i>Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices</i>
ASTM F2137-19	<i>Practice for Measuring the Dynamic Characteristics of Amusement Rides</i>
ASTM F2970-20	<i>Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts</i>
ASTM F2974-20	<i>Standard Practice for Auditing Amusement Rides and Devices</i>
ASTM F2291-21	<i>Standard Practice for Design of Amusement Rides and Devices</i>

**Standard(s) Update**

In October 2021, ASTM published ASTM F747-21a, *Standard Terminology Relating to Amusement Rides and Devices*. This revision removed the definition of *owner/operator*.

In October 2021, ASTM published F770-21a, *Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices*. This revision updated terminology and clarified the scope.

**Relevant Rulemaking**

N/A

**Activities Summary**

Staff continued working with ASTM F24 to improve safety standards for amusement rides, trampoline parks, and adventure attractions. During the reporting period, staff attended multiple subcommittee and task group meetings, reviewed ballot items, and presented an in-depth investigation (IDI) report for an amusement park ride, restraint-related incident.

**Meeting(s)**

Staff attended multiple subcommittee and task group meetings for amusement rides and devices. Subcommittees included those for design, maintenance and inspection, and adventure attractions. Task groups included risk assessment, restraints, ride modification, air-inflated devices, and trampoline courts. Staff presented an IDI for a restraint-related incident.

**Communication(s)**

There were no formal communications during the reporting period.

Ballot(s)

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
October 2021	ASTM F1193	Ballot F24(21-06) item 2 proposed changed language to highlight a manufacturer's responsibilities. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 3 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 4 proposed changed guide to standard. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
October 2021	ASTM F1193	Ballot F24(21-06) item 5 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 6 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
October 2021	ASTM F1193	Ballot F24(21-06) item 8 proposed changed language to highlight a manufacturer's responsibilities. The item was removed from the ballot.
February 2022	ASTM 747	Ballot F24(21-07) item 3 proposed revising the scope. The item was removed from the ballot.
February 2022	ASTM 747	Ballot F24(21-07) item 4 proposed adding a Significance and Use section. The item was removed from the ballot.
February 2022	ASTM F1193	Ballot F24(21-07) item 5 proposed changed language to highlight a manufacturer's responsibilities. The item negatives were withdrawn, but the item remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F1193	Ballot F24(21-07) item 6 proposed changed language to highlight how to handle non-conforming components. The item remains unresolved.
February 2022	ASTM F1193	Ballot F24(21-07) item 7 proposed changed language to harmonize terms between standards. The item was removed from the ballot.



February 2022	ASTM F1193	Ballot F24(21-07) item 8 proposed changed language to harmonize terms between standards. The item was removed from the ballot.
February 2022	ASTM F2291	Ballot F24(21-07) item 9 aligns and adds content from other parts of the standard. The item was removed from the ballot.
February 2022	ASTM F2291	Ballot F24(21-07) item 10 proposed adding a ride class to a requirement that had inadvertently been left out. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F2291	Ballot F24(21-07) item 11 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 12 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 13 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 14 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 15 proposed changes to the electrical requirements. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F2291	Ballot F24(21-07) item 16 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 17 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 18 proposed changes to the electrical requirements. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F2291	Ballot F24(21-07) item 19 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 20 proposed changes to the electrical requirements. The item remains unresolved.

February 2022	ASTM F2291	Ballot F24(21-07) item 21 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 22 proposed changes to the electrical requirements. The item remains unresolved.
February 2022	ASTM F2291	Ballot F24(21-07) item 23 proposed editorial improvements to text. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F2291	Ballot F24(21-07) item 24 proposed changes to highlight responsibilities of designer/engineer. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F2974	Ballot F24(21-07) item 25 proposed changed language to harmonize terms between standards. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F770	Ballot F24(21-07) item 26 proposed changed language to highlight a manufacturer's responsibilities. The item was removed from the ballot.
February 2022	ASTM F770	Ballot F24(21-07) item 27 proposed definition changes. The item received no negatives but remains unresolved. F24 typically publishes revisions in June.
February 2022	ASTM F2291	Ballot F24(21-07) item 38 proposed addressing head-worn accessories. The item negatives were withdrawn, but the item remains unresolved. F24 typically publishes revisions in June.

**Next Action**

Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM subcommittee that has not yet been scheduled.

**ATVs (All-Terrain Vehicles)**

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**Purpose**

To work with SVIA to revise the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels to reduce fire, stability, and occupant protection hazards associated with ATVs.

**Staff Contact** Lim, Han

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/SVIA 1-2017	<i>American National Standard for Four Wheel All-Terrain Vehicles (ATVs)</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1420, *Standard for All-Terrain Vehicles*

**Activities Summary** Staff continues to work with SVIA to develop possible performance standard requirements to address fire hazards. During the reporting period, staff met with manufacturers to discuss ATV hazards and notified SVIA of a contractor report.

**Meeting(s)** Staff met with SVIA, ROHVA, and OPEI representing off highway vehicle (OHV) manufacturers to discuss issues such as fire and hot surface and debris penetration hazards.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	March 15, 2022	Email	Staff notified SVIA of a CPSC-sponsored contractor report that was made publicly available.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff is scheduled to meet with OPEI, SVIA, and ROHVA on April 1, 2022. SEA staff will give a presentation on ATV occupant protection devices (OPDs).

## Bicycles

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**Purpose** To work with ASTM to develop new or revised ASTM voluntary standards to reduce or eliminate hazards associated with bicycles and bicycle components.

**Staff Contact** Mella, Lawrence

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2793-14	<i>Standard Specification for Bicycle Grips</i>

<b>Standard(s) Update</b>	The voluntary standard listed here was not updated during the reporting period.
<b>Relevant Rulemaking</b>	16 CFR part 1512 <i>Requirement for Bicycles</i>
<b>Activities Summary</b>	Staff continues to work with the subcommittee on issues related to bicycles. During the reporting period, staff provided input on an incident regarding an exposed handlebar. Staff provided their feedback of the proposed new test method for handlebar grip resistance to abrasion and on the agency's position for maintaining or improving safety for these products.
<b>Meeting(s)</b>	Staff attended the ASTM F08.96 ISO TAG meeting to monitor ISO and CEN standards related to bicycles. Additionally, staff attended the ASTM F08.10 Bicycles fall subcommittee meeting, where the handlebar task group presented a proposed new test method for handlebar grip resistance to abrasion. Staff will participate in the development of the new test method.
<b>Communication(s)</b>	There were no formal communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff will participate in upcoming subcommittee meetings in May 2022.

## Fireworks

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

**Staff Contact** Valliere, Rodney

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	APA 87-1A, 2018 Version	<i>Standard for Construction, Classification, Approval, and Transportation of Consumer Fireworks</i>
	AFSL 101 – 115, February 2019	<i>AFSL Standards for Consumer Fireworks</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

<b>Relevant Rulemaking</b>	16 CFR § 1500.17, <i>Banned Hazardous Substances</i> and 16 CFR part 1507, <i>Firework Devices</i>
<b>Activities Summary</b>	Staff continued to work with APA and AFSL on fireworks issues. During the reporting period, staff provided a summary of CPSC fireworks regulations.
<b>Meeting(s)</b>	Staff participated in one APA meeting where staff discussed potential revisions to APA 87-1A.
<b>Communication(s)</b>	There were no formal communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff will participate in upcoming APA and AFSL standards committee meetings, including the APA annual meeting scheduled in September 2022.

## Magnet Sets

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<b>Purpose</b>	To work with ASTM to revise the voluntary standard to adequately address the hazard associated with ingestion of magnets from magnet sets.					
<b>Staff Contact</b>	Harsanyi, Stephen					
<b>Voluntary Standard(s)</b>	<table border="1"> <thead> <tr> <th>Designation and current version</th> <th>Title</th> </tr> </thead> <tbody> <tr> <td>ASTM F3458 – 21</td> <td><i>Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index <math>\geq 50 \text{ kG}^2\text{mm}^2</math>)</i></td> </tr> </tbody> </table>	Designation and current version	Title	ASTM F3458 – 21	<i>Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index <math>\geq 50 \text{ kG}^2\text{mm}^2</math>)</i>	
Designation and current version	Title					
ASTM F3458 – 21	<i>Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index <math>\geq 50 \text{ kG}^2\text{mm}^2</math>)</i>					
<b>Standard(s) Update</b>	The voluntary standard listed here was not updated during the reporting period.					
<b>Relevant Rulemaking</b>	The Commission published an NPR, <i>Safety Standard for Magnets</i> on January 10, 2022 (87 FR 1260).					
<b>Activities Summary</b>	Staff continued to work with ASTM F15.77 to improve the safety of magnet sets while also working towards a final rule for magnets. Much of this work centered on drafting ballot items pertaining to performance requirements, and marketing and educational requirements.					
<b>Meeting(s)</b>	Staff participated in a subcommittee meeting, where they briefed the group on the scope and process of the NPR. The group discussed					

potential changes to the standard and the majority voted to establish a new work item to revise the standard by balloting performance and marketing/educational requirements.

*Communication(s)* There were no formal communications during the reporting period.

*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will work with the subcommittee on drafting the abovementioned ballot items. These items will be balloted for the full F15 committee.

### Playground Equipment, Home

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

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	<b>ASTM F1148-22</b>	<b><i>Standard Consumer Safety Performance Specification for Home Playground Equipment</i></b>

**Standard(s) Update** The voluntary standard listed here was updated March 8, 2022. The revision added chromated copper arsenate (CCA) to the list of materials that shall not be used for playground equipment.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM to improve public playground safety by working with the home playground task groups to address slide strangulations and third-party playground accessories. During the reporting period, staff advocated for the standard to prohibit CCA wood as even though it is not sold in the US, it could be imported. Staff also participated in two task groups addressing do-it-yourself swing hangers and slide strangulation.

**Meeting(s)** Staff participated in the ASTM F15.09 subcommittee meeting in November to discuss potential changes to the standard.  
  
Staff participated in two different task group meetings, one for do-it-yourself swing hanger failures and the other for the slide strangulation.

*Communication(s)* There were no formal communications during the reporting period.

<i>Applicable Ballot(s)</i>	<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
	February 2022	ASTM F1148	ASTM published ballot F15 22-01, item 1, revision of F1148-2022 <i>Consumer Safety Performance Specification for Home Playground Equipment</i> . The ballot added CCA to the list of materials not to use. This item passed.

**Next Action** Staff will participate in upcoming subcommittee meeting on May 16, 2022.

### Playground Equipment, Public

**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with public playground equipment.

**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F15.29 F1487-21	<i>Standard Consumer Safety Performance Specification for Public Playground Equipment</i>
	ASTM F14.10 F2049-2011(2017)	<i>Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM to improve public playground safety by working with task groups to address fall hazards from playground gliders and banister rails. During the reporting period, staff continued to work on updating the CPSC Public Playground handbook and consider ASTM's letter of suggested modifications and attended a subcommittee meeting on playground fencing.

**Meeting(s)** Staff participated in ASTM F14.10 Fencing Subcommittee meetings on playground fencing, where the committee considered changing ASTM F2049 from a specification to a guide but did not end up making the change. Staff had concerns about changing the standard from a specification to a guide.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)**

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
January 2022	ASTM F2049	ASTM published ballot F14 21-02, item 1, reapproval of F2049-2011(2017) <i>Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas</i> . The ballot proposed to make the specification a guide. This item was removed from the ballot due to negative votes.
April 2022		ASTM published ballot F15.29 (22-01), item 1, revision of F1487-2021 <i>Consumer Safety Performance Specification for Playground Equipment for Public Use</i> . This ballot had not closed at the end of the reporting period.

**Next Action** Staff will participate in upcoming subcommittee meetings at the ASTM playground meetings in May 2022.

### Playground Surfacing

**Purpose** To work with ASTM to revise the voluntary standards to address the hazard patterns associated with playground surfacing.

**Staff Contact** Lee, Kevin

**Voluntary Standard(s)**

<b>Designation and current version</b>	<b>Title</b>
ASTM F1292-18e1	<i>Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment</i>
ASTM F1951-14	<i>Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment</i>
ASTM F3012-14	<i>Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface Under and Around Playground Equipment</i>
ASTM F2223-19a	<i>Standard Guide for ASTM Standards on Playground Surfacing</i>
ASTM F3313-20	<i>Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field</i>



ASTM F3351-19	<i>Standard Test Method for Playground Surface Impact Testing in Laboratory at Specified Test Heights</i>
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**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work on updating the CPSC Public Playground handbook, which references the listed voluntary standards. Staff will consider ASTM's letter of suggested modifications.

**Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff plans to attend the next ASTM playground surfacing subcommittee meeting in May 2022.

### Pools, Portable Unprotected (Child Drowning)

**Purpose** To work with ASTM and PHTA (formerly APSP) to revise the voluntary standards to strengthen safety provisions addressing hazards associated with residential drowning in pool products.

**Staff Contact** Bathalon, Susan

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2666-16	<i>Standard Specification for Aboveground Portable Pools for Residential Use</i>
	ANSI/APSP/ICC-4a-2013	<i>American National Standard for Above-Ground/On-Ground Residential Pools</i>
	ANSI/APSP/ICC-8 2005 (R2013)	<i>American National Standard Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs</i>
	ASTM WK76767	Potential new standard for computerized vision for drowning detection in residential swimming pools

<b>Standard(s) Update</b>	The voluntary standards listed here were not updated during the reporting period.
<b>Relevant Rulemaking</b>	N/A
<b>Activities Summary</b>	During the reporting period, staff participated in task group meetings for a new work item on drowning detection. The ASTM and ANSI/ICC/PHTA standard activities are centered on revision of barrier safety requirements to prevent drowning of young children.
<b>Meeting(s)</b>	Staff participated in the task group for ASTM WK76767, a potential new standard for computerized vision for drowning detection in residential swimming pools. Additionally, staff attended meetings of the PHTA-4 Standard Writing Committee (SWC) for aboveground/on-ground swimming pools, and assisted with incident data review, as well as developing more specific language in barrier safety, entrapment hazards, reapproval of the standard, and ladder accessibility and fall hazards.
<b>Communication(s)</b>	There were no formal communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff will participate in upcoming task group meetings.

### Recreational Off-Highway Vehicles (ROVs)

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**Purpose** To work with ROHVA and OPEI to develop requirements to address fire hazards and debris penetration hazards in off-highway vehicles.

**Staff Contact** Lim, Han

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/ROHVA 1- 2016	<i>American National Standard for Recreational Off-Highway Vehicles</i>
	ANSI/OPEI B71.9-2016	<i>American National Standard for Multipurpose Off-Highway Utility Vehicles</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** NPR Recreational Off-Highway Vehicles (ROVs) (79 FR 68964), November 19, 2014.

The Commission published an advance notice of proposed rulemaking (ANPR) Off-Highway Vehicle (OHV) Fire and Debris Penetration Hazards (86 FR 25817), May 11, 2021.

**Activities Summary**

Staff continues to work with OPEI and ROHVA to develop possible performance standard requirements to address fire and debris penetration hazards in ROVs. During the reporting period, staff met with OPEI and ROHVA members to discuss possible performance standard requirements to address fire hazards, based on other related standards.

**Meeting(s)**

Staff met with OPEI, SVIA, and ROHVA to discuss possible standard performance requirements for OHV fire hazards. Also, OPEI and ROHVA committee members presented preliminary ideas for test methods to evaluate the debris penetration hazard associated with ROVs and utility task/terrain vehicles (UTVs).

**Communication(s)**

Date	Type	Summary
December 22, 2021	Email	Staff notified OPEI and ROHVA representatives regarding the publication of the December 2021 CPSC contractor report on Debris Penetration Testing

**Ballot(s)**

There were no ballots during the reporting period.

**Next Action**

At the end of the reporting period, staff was scheduled to meet with OPEI, SVIA, and ROHVA on April 1, 2022 to discuss and witness testing for ROV/UTV debris penetration. Staff is preparing a draft NPR for ROV/UTV Debris Penetration Hazards for Commission consideration.

**Self-Balancing Scooters and Light Electric Vehicles**

**Purpose**

To work with ASTM and UL to develop a new voluntary standard or revise the existing standards to strengthen the safety provisions addressing hazards associated with self-balancing scooters, hoverboards, electric-powered scooters and bikes, and other micromobility products for adults.

**Staff Contact**

Mella, Lawrence

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F2614-15	<i>Recreational Powered Scooters and Pocket Bikes</i>
ASTM F2642-08 (2015)	<i>Standard Consumer Safety Specification for Safety Instructions and Labeling for Recreational Powered Scooters and Pocket Bikes</i>

ASTM WK57360	<i>Potential new voluntary standard for self-balancing scooters and hoverboards</i>
ASTM WK70724	<i>Potential new voluntary standard for commercial electric-powered scooters for adults</i>
UL 2849, 1 <sup>st</sup> Edition	<i>Standard for Electrical Systems of eBikes</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM and UL on existing and new safety standards for micromobility products such as hoverboards, ebikes, and self-balancing scooters. During the reporting period, staff participated in multiple meetings and provided the annual micromobility data report to the ASTM F15.58 subcommittee.

**Meeting(s)** Staff participated multiple task group meetings for ASTM WK70724 on brakes, tires/operable terrain/suspension, and electrical requirements. Staff also participated in a STP meeting on the electrical systems for ebikes.

Staff participated in UL 2849 STP meeting focused on functional safety for electrical safety of ebikes.

**Communication(s)**

Date	Type	Summary
11/22/2021	Data Report	Staff sent the ASTM F15.58 the CPSC report <i>Micromobility Products-Related Deaths, Injuries, and Hazard Patterns: 2017–2020</i> .

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming subcommittee and task group meetings, including the next ASTM subcommittee meeting scheduled in May 2022.

### Sports/Recreational Headgear Sensors/Helmet and Sensors

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

**Staff Contact** Dayal, Vineed

**Voluntary Standard(s)**

Designation and current version	Title
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ASTM F1446-20	<i>Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear</i>
ASTM F1447-18	<i>Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating</i>
ASTM F2220-15	<i>Standard Specification for Headforms</i>

<b>Standard(s) Update</b>	The voluntary standards listed here were not updated during the reporting period.
<b>Relevant Rulemaking</b>	N/A
<b>Activities Summary</b>	There has been no activity associated with the standard during the reporting period.
<b>Meeting(s)</b>	Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.
<b>Communication(s)</b>	There were no formal communications during the reporting period.
<b>Ballot(s)</b>	There were no ballots during the reporting period.
<b>Next Action</b>	Staff plans to attend the next subcommittee meeting this April and attend the upcoming F08 subcommittee week in May.

### Swimming Pools/Spas, Drain Entrapment

**Purpose** To work with PHTA (formerly APSP) to ensure that the incorporated voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing entrapment hazards associated with pool drain cover products intended for swimming pools, wading pools, spas, and hot tubs, as well as installation of those products in public pools.

**Staff Contact** Eilbert, Mark

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/APSP/ICC 16-2017	<i>American National Standard for Above-Ground/On-Ground Residential Pools</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** 16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

**Activities Summary** Staff continues to work with PHTA to improve pool and spa safety. On September 21, 2021, staff wrote to PHTA to recommend further work take place on a provisional amendment to ANSI/APSP/ICC 16-2017. During the reporting period, staff worked with PHTA to review the requirements.

**Meeting(s)** Staff participated in a meeting with PHTA to review the September 21, 2021 letter, where staff suggested that the provisional amendment to ANSI/APSP/ICC 16-2017 have requirements for the safe spacing of dual drain outlets, specific to the integrated suction outlet fitting assemblies (SOFAs) in storable pools. PHTA agreed to add a reference from PHTA-4, which references requirements for dual drain separation.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming PHTA meetings.

**Swimming Pools/Spas, Vacuum Relief System**

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**Purpose** To work with PHTA (formally APSP) and ASTM to ensure the voluntary standards for secondary entrapment avoidance systems maintain the adequate backup safety levels, that are required in the federal mandatory standard, for entrapment hazards associated with pool drains in swimming pools, spas, and hot tubs.

**Staff Contact** Eilbert, Mark

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI/APSP/ICC-7-2020	<i>Suction Entrapment Avoidance</i>
	ASTM F2387-21	<i>Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs</i>
	PHTA-17	Potential new voluntary standard for safety vacuum release systems, automatic pump shut-off systems, shut-off systems, and vacuum limiting systems for swimming pools, spas, wading pools, hot tubs, and catch pools

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant** N/A

## Rulemaking

- Activities Summary** There has been no activity associated with the standard during the reporting period.
- Meeting(s)** Staff did not participate in any voluntary standards meetings related to this topic during the reporting period.
- Communication(s)** There were no formal communications during the reporting period.
- Ballot(s)** There were no ballots during the reporting period.
- Next Action** Staff will participate in upcoming PHTA meetings.

## Tents

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**Purpose** To work with ASTM on developing a voluntary standard to address the hazards associated with tent flammability.

**Staff Contact** Tenney, Allyson

**Voluntary Standard(s)**

Designation and current version	Title
ASTM F3431-21	Standard Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff continues to work with ASTM on developing performance requirements and test methods to evaluate the flammability of recreational camping tents. During the reporting period, staff participated on the task group to study available technical data and evaluate testing options to develop a possible screening test or alternative test plan for certain product categories. Staff proposed a test methodology for material evaluation for task group review.

**Meeting(s)** Staff participated in two ASTM F08.22 subcommittee meetings during the reporting period. Staff volunteered to participate in a task group.

**Communication(s)** There were no formal communications during the reporting period.

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*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will participate in a June meeting of the subcommittee and September meeting of the task group. Staff will support the development of a potential screening test or testing exemptions or exceptions related to the weight or construction of a recreational camping tent by assisting with sample selection and test methodology development.

## Treadmills

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**Purpose** To work with ASTM and UL to develop and revise treadmill voluntary standards.

**Staff Contact** Bowley, Susan

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ASTM F2115-19	<i>Standard Specification for Motorized Treadmills</i>
	ASTM F1749-15(2020)	<i>Standard Specification for Fitness Equipment and Fitness Facility Safety Signage and Labels</i>
	ASTM F2276-10(2015)	<i>Standard Specification for Fitness Equipment</i>
	UL 1647, 6 <sup>th</sup> Edition	<i>Motor-Operated Massage and Exercise Machines</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** On April 26, 2021, staff sent a letter to ASTM, requesting that the ASTM F08.30 subcommittee on fitness products develop requirements in ASTM F2115-19 to address hazards observed in incident data pertaining to treadmills, specifically entrapment of children and other objects underneath the rear roller on an operating treadmill. During the reporting period, staff provided incident data over a 10-year period and participated in subcommittee and task group meetings.

**Meeting(s)** Staff participated in several subcommittee and task group meetings focused on incident data review, hazard identification, testing and characterization enhancements, and other topics to address safety issues related to treadmills.

<b>Communication(s)</b>	<b>Date</b>	<b>Type</b>	<b>Summary</b>
	11/23/2022	Incident Data	Staff provided the subcommittee with treadmill incident data for the period January 2010 through September 2021.



*Ballot(s)* There were no ballots during the reporting period.

**Next Action** Staff will continue participating in monthly task group meetings and will participate in-person in May 2022 subcommittee meetings.

## Codes, Analytical Methods, and Labeling

### Building Codes

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**Purpose** To work with various model building codes to ensure consumer safety considerations of referenced consumer products

**Staff Contact** Ayers, Scott

**Voluntary Standard(s)**

Designation and current version	Title
NFPA 30, 2021 Edition	Flammable and Combustible Liquid Code
NFPA 58, 2020 Edition	Liquefied Petroleum Gas Code
NFPA 70, 2020 Edition	<i>National Electrical Code</i> ®
NFPA 72, 2022 Edition	<i>National Fire Alarm Signaling Code</i> ®
NFPA 101, 2021 Edition	<i>Life Safety Code</i> ®

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff have been participating in several NFPA model codes for many years. During the reporting period, staff joined the NFPA 58 committee. Staff met with ICC and IAPMO staff to learn about other model codes and how to get involved. Staff participated in NFPA 30 and NFPA 70 meetings during the reporting period. Staff is advocating for flame mitigation devices in NFPA 30 and ground fault interrupter circuits in NFPA 70.

**Meeting(s)** Staff met with ICC and IAPMO staff separately to learn which model codes staff may be interested in and how to participate

Staff participated in two NFPA 30 correlating meetings.

Staff participated in many CMP meetings and several task groups during the reporting period.

*Communication(s)* There were no formal communications during the reporting period.

<b>Date closed</b>	<b>Voluntary Standard</b>	<b>Summary and Results (If Applicable)</b>
January 2022	NFPA 58	Public comments closed in preparation of the second draft of the next edition

**Next Action** Staff will continue to participate in the various NFPA model codes. As part of the FY2023 Operating Plan, staff will propose to join ICC and IAPMO committees next FY, at the start of the next revision cycle.

## Chemical Test Methods

**Purpose** To work with ASTM to ensure that the listed chemical test methods referenced in various CPSC test procedures and requirements are adequately maintained.

**Staff Contact** Duque, Maricar

<b>Designation and current version</b>	<b>Title</b>
ASTM E1645-21	<i>Standard Practice for Preparation of Dried Paint Samples by Hotplate or Microwave Digestion for Subsequent Lead Analysis</i>
ASTM F2617-15	<i>Standard Test Method for Identification and Quantification of Chromium, Bromine, Cadmium, Mercury, and Lead in Polymeric Material Using Energy Dispersive X-ray Spectrometry</i>
ASTM F2853-10(2015)	<i>Standard Test Method for Determination of Lead in Paint Layers and Similar Coatings or in Substrates and Homogenous Materials by Energy Dispersive X-Ray Fluorescence Spectrometry Using Multiple Monochromatic Excitation Beams</i>
ASTM E3193-21	<i>Standard Test Method for Measurement of Lead (Pb) in Dust by Wipe, Paint, and Soil by Flame Atomic Absorption Spectrophotometry (FAAS)</i>
ASTM E3203-21	<i>Standard Test Method for Determination of Lead in Dried Paint, Soil, and Wipe Samples by Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)</i>
ASTM D7823-20	<i>Standard Test Method for Determination of Low Level Phthalates in Poly (Vinyl Chloride) Plastics by Thermal Desorption—Gas Chromatography/Mass Spectrometry</i>

ASTM D7993-15(2019)	<i>Standard Guide for Analyzing Complex Phthalates</i>
ASTM D8133-21	<i>Standard Test Method for Determination of Low Level Phthalates in Poly(Vinyl Chloride) Plastics by Solvent Extraction—Gas Chromatography/Mass Spectrometry</i>

**Standard(s) Update** The voluntary standards listed here were not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff worked with the ASTM D20.70 subcommittee on analytical methods to review the status of several analytical methods. Staff volunteered to participate in an ASTM D20.70 Inter-laboratory Study (ILS) of phthalate test methods, focusing on, ASTM D8133.

Staff worked with an Expert Group (EG) with The Organization for Cooperation and Economic (OECD) to develop a new test method (HCl 0.032M) that is similar to a method used by CPSC determining cadmium extractability from children’s metal jewelry.

**Meeting(s)** Staff participated in two ASTM D20.70 meetings during the reporting period. Staff volunteered to participate in an Inter-Laboratory Study for ASTM D7823 and ASTM D8133.

Staff participated in the OECD EG meeting during the reporting period. This group discussed the merits and concerns with the draft Test Guidance on the determination of metal release using HCl 0.032M test method.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in upcoming ASTM task group meetings or subcommittee meetings, when scheduled. Staff expects to start the ASTM D20.70 ILS work on ASTM D8133 in July 2022, then share results around August 2022. The next subcommittee meeting will be in November 2022. Staff will participate in the EG meeting with the OECD in June 2022.

**National Electrical Code**

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**Purpose** To work with the NFPA to revise the *National Electrical Code (NEC)*, to strengthen its safety provisions addressing hazards associated with electrical fires, CO poisoning, and shock incidents associated with consumer products such as household appliances, pools and spas, generators, electrical equipment, and wiring products.

**Staff Contact** Miller, Einstein

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	NFPA 70, 2020 Edition	<i>National Electrical Code</i> ®

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period.

**Relevant Rulemaking** N/A

**Activities Summary** Staff is participating in the development of the next edition to the NEC; the NEC is revised every three years. During the reporting period, staff advocated for requirements for ground fault circuit interrupters and arc fault circuit interrupters to reduce shock and fire hazards. Staff also began participating in a task group to evaluate and reach an informed technical solution to the issues raised regarding unwanted GFCI tripping on outdoor AC units as required in the 2020 NEC Section 210.8(F).

**Meeting(s)** Staff participated in many code-making panels (CMP) 2 and CMP 17 meetings and several task groups during the reporting period.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will provide electrocution data and other input to the task group. Staff will monitor for any TIAs and motions made during the NFPA annual meeting in June 2022. Staff will continue to participate in the NEC future revisions and related task groups to address fire, shock, CO poisoning and other hazards.

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### Warning Signs and Labels (and Ad Hoc Language)

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**Purpose** To work with SDOs to develop or enhance warnings, labels, and other written means of conveying product safety information to consumers, not already covered by another tracked voluntary standard.

**Staff Contact** Smith, Tim

<b>Voluntary Standard(s)</b>	<b>Designation and current version</b>	<b>Title</b>
	ANSI Z535.7	<i>Warnings in Electronic Media</i>

**Standard(s) Update** The voluntary standard listed here was not updated during the reporting period. However, the ASTM F15 Ad Hoc Language task group may influence changes in multiple standards.

**Relevant Rulemaking** N/A

**Activities Summary** During the reporting period, staff participated in ASTM F15 task group meetings and reviewed Ad Hoc language updates to multiple ASTM standards.

**Meeting(s)** Staff participated in an ASTM Ad Hoc language task group meeting working on possible revisions to the recommended wording of warnings related to safe sleep for products that are not intended for infant sleep.

**Communication(s)** There were no formal communications during the reporting period.

**Ballot(s)** There were no ballots during the reporting period.

**Next Action** Staff will participate in the next ASTM Ad Hoc Language task group meeting, scheduled for May 23, 2022.

## Appendix: Organizational Abbreviations

The list below contains abbreviations for SDOs and other groups related to the standards that staff typically participate in. Some abbreviations below may not be used in the current VSTAR.

<b>AATCC</b>	American Association of Textile Chemists and Colorists
<b>AFSL</b>	The American Fireworks Standards Laboratory
<b>AHAM</b>	Association of Home Appliance Manufacturers
<b>AHFA</b>	American Home Furnishing Alliance
<b>AHRI</b>	Air Conditioning, Heating and Refrigeration Institute
<b>ANSI</b>	The American National Standards Institute
<b>APA</b>	American Pyrotechnics Association
<b>APSP</b>	The Association of Pool and Spa Professionals (now part of The Pool & Hot Tub Alliance, see PHTA)
<b>ASHRAE</b>	American Society of Heating, Refrigerating and Air-Conditioning Engineers
<b>ASTM</b>	ASTM International
<b>BIFMA</b>	Business and Institutional Furniture Manufacturing Associations
<b>CAN</b>	Standards Council of Canada designation for a National Standard of Canada
<b>CANENA</b>	Council for Harmonization of Electrotechnical Standards of the Nations in the Americas
<b>CSA</b>	CSA Group
	TSC – Technical Subcommittee
	TC – Technical Committee
<b>EN</b>	European Standards
<b>IAPMO</b>	International Association of Plumbing and Mechanical Officials
<b>ICC</b>	International Code Council
<b>IEC</b>	International Electrotechnical Commission
<b>IEEE</b>	The Institute of Electrical and Electronics Engineers
<b>ISO</b>	International Organization for Standardization
	TAG – Technical Advisory Group
	TC – Technical Committee
<b>NEMA</b>	National Electrical Manufacturers Association
<b>NFPA</b>	National Fire Protection Association
	CMP – Code Making Panel
	NEC – National Electrical Code
	TIA – Technical Interim Agreement
<b>NFSI</b>	National Floor Safety Institute
<b>NIST</b>	National Institute of Standards and Technology
<b>NOCSAE</b>	National Operating Committee on Standards for Athletic Equipment
<b>OPEI</b>	Outdoor Power Equipment Institute
<b>PGMA</b>	Portable Generator Manufacturers Association
<b>PHTA</b>	Pool & Hot Tub Alliance
<b>ROHVA</b>	Recreational Off-Highway Vehicle Association
<b>SAE</b>	Society of Automotive Engineers
<b>SVIA</b>	Specialty Vehicle Institute of America

<b>UL</b>	Underwriters Laboratories Inc. (Research and standards, nonprofit)
	UL, LLC is a testing and certification laboratory formerly part of Underwriters Laboratories, Inc. but now a legally separate, for profit firm
	STP – Standards Technical Panel
	ORD – Other Recognized Document (pertains to voluntary standards recognized in Canada)
<b>ULC</b>	Underwriters Laboratories of Canada
<b>WCMA</b>	Window Covering Manufacturers Association

**From:** Mills, Alberta E.  
**Sent:** Wed, 15 Dec 2021 15:47:53 +0000  
**To:** Hoehn-Saric, Alexander; Fong-Swamidoss, Jana; Laitin, Anna; Baiocco, Dana; Yahr, Dorothy; Schall, Brandon; Feldman, Peter; Tanzer, Theodore; Dziak, Douglas  
**Cc:** Austin Schlick; Stone, Pamela; Hampshire, Melissa; Oyewole, Abioye; Vice, Daniel; Boyle, Mary; Ray, DeWane; Summitt, Monica; Yaung, Michelle; McGoogan, Stephen; Boniface, Duane; Recht, Joel; Stadnik, Andrew; Keller, Sabrina; Hanway, Stephen; Moscoso, Alex; Adair, Patricia; Campbell, Jacqueline; Kaye, Robert; Sultan, Jennifer; Murphy, Mary; Tarnoff, Howard; Ippolito, Leah; Davis, Patty; McGarvey, Carla; Cusey, William; Rouse, Brenda  
**Subject:** Informational Packages: Voluntary Standards Activities Fiscal Year 2021 Annual Report AND Reviewing SaferProducts.gov Patterns and Trends through FY2021  
**Attachments:** Voluntary Standards Activities Fiscal Year 2021 Annual Report.pdf, Reviewing Saferproducts.gov patterns and trends through FY2021.pdf

Good morning,

Please find attached, the following informational packages:

[Voluntary Standards Activities Fiscal Year 2021 Annual Report – December 15, 2021](#)

[Reviewing SaferProducts.gov Patterns and Trends Through FY 2021 – December 15, 2021](#)

Regards,  
Alberta

---

**Alberta E. Mills**

**Commission Secretary, Division of the Secretariat**

[U.S. Consumer Product Safety Commission](#) | Office of the General Counsel  
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# Memorandum

**DATE:** December 15, 2021

**To:** The Commission  
Alberta E. Mills, Secretary

**THROUGH:** Mary T. Boyle, Executive Director

**FROM:** Jacqueline H. Campbell,  
Voluntary Standards Coordinator  
Office of Hazard Identification and Reduction

**SUBJECT:** Voluntary Standards Activities Fiscal Year 2021 Annual Report

---

Attached is U.S. Consumer Product Safety Commission (CPSC) staff's Fiscal Year 2021 (FY 2021) Annual Voluntary Standards Tracking Activities Report (VSTAR), covering the period October 1, 2020 through September 30, 2021. If you have any questions, please contact Jacqueline Campbell at: [jcampbell@cpsc.gov](mailto:jcampbell@cpsc.gov) or [VoluntaryStandards@cpsc.gov](mailto:VoluntaryStandards@cpsc.gov).



United States  
**Consumer Product Safety Commission**

# Voluntary Standards Tracking Activity Report

FY 2021 ANNUAL REPORT

(October 1, 2020–September 30, 2021)

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

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# Voluntary Standards Activities

October 1, 2020–September 30, 2021

## Summary

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

The Voluntary Standards Tracking Activity Report (VSTAR) is issued biannually as: (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 Fiscal Year 2021 (FY 2021) Annual Report.

Voluntary standards activities are handled by various standards developing organizations (SDOs), most of them accredited by the American National Standards Institute<sup>1</sup> (ANSI). Most of the voluntary standards discussed in this report are developed by ASTM International (ASTM) and Underwriters Laboratories Inc. (UL). This report contains a listing of all the SDOs working with staff on voluntary standards and includes their abbreviated designation(s).

The VSTAR also includes a table listing the voluntary standards that staff contributed to and that were initially published or revised during the reporting period. Additionally, this report identifies staff who were approved to vote on a voluntary standard or hold a leadership position on a standards body during the reporting period.

Lastly, the VSTAR contains a section for each product or product area associated with voluntary standards work, as outlined in the FY 2021 CPSC Operating Plan (Op Plan). The FY 2021 Op Plan outlines 78 different products or product areas for which staff was actively involved in developing voluntary standards during the fiscal year. The voluntary standards covered in this report provide safety provisions addressing potential hazards associated with consumer products found in homes, schools, and recreation areas. More than 30 different staff serve as

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<sup>1</sup>International Organization for Standardization (ISO), American Pyrotechnics Association (APA), and The American Fireworks Standards Laboratory (AFSL) are not accredited by ANSI.

designated representatives (DRs) for the voluntary standards work that covers the 78 product or product areas outlined in this report.

Each VSTAR product section includes the following information:

- Staff Contact:** The name of staff leading the activity (*i.e.*, the designated representative, DR);
- Voluntary Standard(s):** The designation(s) and name(s) of existing voluntary standards, potential new voluntary standards, and ISO standards associated with the product, with which staff is, was, or may be actively involved. The designation and titles for new or updated voluntary standards are in **bold font**. Titles for current voluntary standards are in *italics*, and titles of draft or potential standards are in plain font (not bold and non-italicized).
- Relevant Rulemaking:** Any associated CPSC mandatory standard(s), proposed regulation(s), and any relevant petitions, regardless of status.
- Standard(s) Update:** Any updates to the voluntary standards or potential new voluntary standards with staff's participation. This subsection also includes updates to any of the petitions, mandatory standards, or proposed regulations noted in the subsection above.
- Purpose:** The purpose of staff's involvement with the voluntary standard(s).
- Activities:** Activity associated with the voluntary standards, mandatory standards, proposed regulations, and petitions that occurred during the reporting period. Staff and Commission activities are highlighted in this subsection.
- Next Action:** Staff's anticipated actions on the voluntary standards and associated mandatory standards. This subsection also includes any recommendations associated with the voluntary standard.

## Updated Standards

Table 1 lists the 32 revised, renewed, or new voluntary standards that staff actively engaged in revising or developing, and that were published during the period October 1, 2020 to March 31, 2021. Details regarding the revisions can be found in the applicable product sections of this report. The designations and titles of these 32 voluntary standards are shown in bold font in the applicable product sections.

**Table 1: New or Revised Voluntary Standards Published**

**October 1, 2020 - September 30, 2021**

<b>Title</b>	<b>SDO</b>	<b>Standard Designation</b>	<b>Published</b>	<b>DR</b>	<b>New, Revision, Renewal</b>
<i>Guide for Ensuring the Safety of Consumer Connected Products</i>	ASTM	F3463-20	Oct-20	Lee, S.	New
<i>Polymeric nanocomposite films for food packaging with barrier properties - Specification of characteristics and measurement methods</i>	ISO	ISO/TS 21975:2020	Oct-20	Matheson, J.	New
<i>Standard Test Method for Determining Impact Attenuation of Playground Surfaces</i>	ASTM	F3313-20	Nov-20	Lee, K.	Revision
<i>Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear</i>	ASTM	F1446-20	Nov-20	Dayal, Vineed	Revision
<i>Standard Consumer Safety Specification for High Chairs</i>	ASTM	F404-20	Dec-20	Marquis, S.	Revision
<i>Standard for Construction, Classification, Approval, and Transportation of Consumer Fireworks</i>	APA	APA 87-1A	Dec-20	Valliere, R.	Revision
<i>Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories</i>	ASTM	F1917-20e1	Dec-20	Smith, T.	Revision
<i>Particular Requirements for Robotic Battery Powered Electrical Lawnmowers</i>	OPEI	ANSI/OPEI 60335-2-107-2020	Dec-20	Paul, C.	Revision
<i>Standard Consumer Safety Specification for Child Safety Locks and Latches for Use</i>	ASTM	F3492-21	Feb-21	Lee, K.	New



<i>with Cabinet Doors and Drawers</i>					
<i>Standard Consumer Safety Specification for Children's Chairs and Stools</i>	ASTM	F2613-21	Feb-21	Lee, K.	Revision
<i>Standard Specification for Candle Fire Safety Labeling</i>	ASTM	F2058-07 (2021)	Feb-21	Ayers, S.	Renewal
<i>Standard Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards</i>	ASTM	F3431-21	Feb-21	Tenney, A.	Revision
<i>Standard Test Method for Collection and Analysis of Visible Emissions from Candles as they Burn</i>	ASTM	F2326-04 (2021)	Feb-21	Ayers, S.	Renewal
<i>Structural characterization of graphene Part 1: Graphene from powders and dispersions</i>	ISO	ISO/TS 21356-1:2021	Feb-21	Matheson, J.	New
<i>American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard</i>	NEMA	ANSI C18.3M Part 2-2021	Mar-21	Le, H.	Revision
<i>Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index <math>\geq 50 \text{ kG}^2 \text{ mm}^2</math>)</i>	ASTM	F3458-21	Mar-21	Harsanyi, S.	New
<i>Standard Consumer Safety Performance Specification for Home Playground Equipment</i>	ASTM	F1148-21	May-21	Lee, K.	Revision
<i>Standard Consumer Safety Performance Specification for Playground Equipment for Public Use</i>	ASTM	F1487-21	May-21	Lee, K.	Revision
<i>Standards Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs</i>	ASTM	F2387-21	May-21	Eilbert, M.	Revision
<i>Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices</i>	ASTM	F770-21	Jun-21	Taxier, D.	Revision

<i>Standard Terminology Relating to Amusement Rides and Devices</i>	ASTM	F747-21	Jun-21	Taxier, D.	Revision
<i>Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures</i>	ASTM	F1004-21	Jun-21	Nesteruk, H.	Revision
<i>Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)</i>	ASTM	F3096-14(2021)	Jun-21	Talcott, K.	Revision
<i>Standard Practice for Design of Amusement Rides and Devices</i>	ASTM	F2291-21	Jun-21	Taxier, D.	Revision
<i>Standard Consumer Safety Specification for Infant and Cradle Swings</i>	ASTM	F2088-21	Jun-21	Torres, C.	Revision
<i>Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture</i>	ASTM	E1353-21	Jun-21	Lock, A.	Revision
<i>Evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial-containing polymer composites</i>	ISO	ISO/TR 22293:2021	Jul-21	Matheson, J.	New
<i>Standard Consumer Safety Specification for Crib Mattresses</i>	ASTM	F2933-21	Jul-21	Nesteruk, H.	Revision
<i>Standard for Electric Clothes Dryers</i>	UL	2158	Jul-30	Lee, A.	Revision
<i>Standard Consumer Safety Performance Specification for Carriages and Strollers</i>	ASTM	F833-21	Aug-21	Talcott, K.	Revision
<i>National Fire Alarm and Signaling Code</i>	NFPA	72	Aug-21	Lee, A.	Revision
<i>Standard Specification for Lamp Fuel and Torch Fuel Packaging</i>	ASTM	F3304-21	Sep-21	White, S.	New

## Voting and Leadership Roles

In accordance with 16 CFR part 1031, *Commission Participation and Commission Employee Involvement in Voluntary Standards Activities*, the VSTAR report includes information about staff voting and leadership activities. In FY 2021, the Office of the Executive Director (OEX)

approved one new staff leadership role and seven new staff voting requests. OEX also approved three renewal requests for a leadership role and six renewal requests for voting during the reporting period. Listed below are the requests approved during FY 2021:

<b>Staff Name</b>	<b>Date of Approval</b>	<b>New Approval or Renewal</b>	<b>Vote or Leadership</b>	<b>Standards Body and Standard</b>
Lee, A.	Feb-21	Renewal	Leadership	UL 1042, Electric Room Heaters
Dayal, V.	Mar-21	New	Leadership	ASTM F08.53 Helmet Sensors
Ayers, S.	Apr-21	Renewal	Leadership	ASTM F15.72, Flame Mitigation Devices on Disposable Fuel Containers
Ayers, S.	Apr-21	Renewal	Leadership	ANSI/CSA Z21 Gas Ranges
Kish, C.	Oct-20	New	Voting	ASTM F15.18 In-Bed Sleepers
Kish, C.	Dec-20	New	Voting	ASTM F15.18 Infant Inclined Sleep Products
Kish, C.	Dec-20	Renewal	Voting	ASTM F15.18, Bassinets/Cradles
Harsanyi, S.	Jan-21	Renewal	Voting	ASTM F15.77, Adult Magnets
Lee, K.	Feb-21	Renewal	Voting	ASTM F15.29 Public Playgrounds
Tenney, A.	Mar-21	Renewal	Voting	ASTM F08.22, Tent Flammability
Dayal, V.	Mar-21	New	Voting	ASTM F08.53 Helmet Sensors
Harsanyi, S.	Mar-21	New	Voting	ASTM F15.66 Crib Mattresses
Ayers, S.	Apr-21	Renewal	Voting	ASTM F15.72, Flame Mitigation Devices on Disposable Fuel Containers
Smith, T.	Apr-21	New	Voting	ANSI Z535 Safety Colors and Signs*
Talcott, K.	Apr-21	New	Voting	ASTM F15.42 Clothing Storage Units
Ayers, S.	Apr-21	Renewal	Voting	ASTM F15.10 Gasoline Containers
Ayers, S.	May-21	New	Voting	UL 30 Safety Cans

\*Not included in the voluntary standards table for the FY 2021 Operating Plan

## Organizational Abbreviations

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

<b>AATCC</b>	American Association of Textile Chemists and Colorists
<b>AFSL</b>	The American Fireworks Standards Laboratory
<b>AHFA</b>	American Home Furnishing Alliance
<b>AHRI</b>	Air Conditioning, Heating and Refrigeration Institute
<b>ANSI</b>	The American National Standards Institute
<b>APA</b>	American Pyrotechnics Association
<b>APSP</b>	The Association of Pool and Spa Professionals (now part of The Pool & Hot Tub Alliance, see PHTA)
<b>ASHRAE</b>	American Society of Heating, Refrigerating and Air-Conditioning Engineers
<b>ASTM</b>	ASTM International
<b>BIFMA</b>	Business and Institutional Furniture Manufacturing Associations
<b>CAN</b>	Health Canada Regulation
<b>CANENA</b>	Council for Harmonization of Electrotechnical Standards of the Nations in the Americas
<b>CSA</b>	CSA Group
	TSC – Technical Subcommittee
	TC – Technical Committee
<b>EN</b>	European Standards
<b>ICC</b>	International Code Council
<b>IEC</b>	International Electrotechnical Commission
<b>IEEE</b>	The Institute of Electrical and Electronics Engineers
<b>ISO</b>	International Organization for Standardization
	TAG – Technical Advisory Group
	TC – Technical Committee
<b>NEMA</b>	National Electrical Manufacturers Association
<b>NFPA</b>	National Fire Protection Association
	CMP – Code Making Panel
	NEC – National Electrical Code
	TIA – Technical Interim Agreement
<b>NFSI</b>	National Floor Safety Institute
<b>NIST</b>	National Institute of Standards and Technology
<b>NOCSAE</b>	National Operating Committee on Standards for Athletic Equipment
<b>OPEI</b>	Outdoor Power Equipment Institute
<b>PGMA</b>	Portable Generator Manufacturers Association
<b>PHTA</b>	Pool & Hot Tub Alliance
<b>ROHVA</b>	Recreational Off-Highway Vehicle Association
<b>SAE</b>	Society of Automotive Engineers
<b>SVIA</b>	Specialty Vehicle Institute of America
<b>UL</b>	Underwriters Laboratories Inc.
	STP – Standards Technical Panel
	ORD – Other Recognized Document (pertains to voluntary standards recognized in Canada)
<b>WCMA</b>	Window Covering Manufacturers Association

# FY 2021 Staff Voluntary Standards Activities Summary

## Additive Manufacturing/3D Printing

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**Staff Contact** Thomas, Treye

**Voluntary Standard(s)** UL 2904, 1<sup>st</sup> Edition *Standard Method for Testing and Assessing Particle and Chemical Emissions from 3D Printers*

ISO/ASTM WD 52932 Potential new joint ISO and ASTM voluntary standard for determining the particle and chemical emission rates from desktop 3D printer material extrusion

ASTM WK69730 Potential new voluntary standard for wired directed-energy deposition processes

**Relevant Rulemaking** NA

**Standard(s) Update** The voluntary standards listed above were not updated during the reporting period.

**Purpose** To work with UL, ASTM, CSA, and other SDOs to develop standards for Additive Manufacturing and 3D Printers to address the hazards associated with 3D printed products and the 3D printing process

**Activities** Staff established interagency agreements to support collaborative research on 3D printers. Federal agency collaborators include the US EPA, NIOSH, NIST, and the US Army ERDC. This research involves developing methods to quantify and characterize chemical releases during printing and from printed products. An important potential outcome of this 3D printing

research is developing voluntary standards and safety guidance for schools and consumers.

In May 2021, staff attended the ASTM F42 committee meetings on additive manufacturing. During the meetings, staff attended the F42.07 subcommittee meeting on applications and the F42.06 subcommittee meeting on environmental health and safety. During the F42.06 meeting, the task group discussed the progress of a joint ASTM and ISO work item led by the Korean delegation that focused on the reduction of hazardous substances emitted during operation. The F42.06 subcommittee is also developing a test method to characterize emissions from 3D printers. Additionally, staff participated in a workshop on 3D printing during the ASTM meetings.

On September 29, 2021, staff participated in an UL 2904 STP meeting to review the existing standard, discuss possible revisions, and identify new research needed to address changes in printer technology.

Staff is also conducting testing on 3D printers to support these efforts, including characterizing feed stocks and emissions during and after printing.

**Next Action** Staff will participate in the ASTM F42 committee meeting on additive manufacturing in July 2022. Staff will work with the UL 2904 STP to revise the voluntary standard and will continue test and evaluation efforts.

## Adult Portable Bed Rails

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**Staff Contact** Dayal, Vineed

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

**Relevant Rulemaking** 13-1 *Petition on Adult Portable Bedrails* docketed in June 2013

**Standard(s) Update** The voluntary standard and the petition listed above were not updated during the reporting period.

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

**Activities** In January 2021, staff supplied ASTM with incident data pertaining to adult portable bed rails. On March 26, 2021, staff followed up with a letter to the ASTM subcommittee chair requesting that a subcommittee meeting be scheduled to review the data and to answer the subcommittee's questions related to the staff briefing package presented to the Commission in June 2020. Staff participated in a subsequent ASTM F15.70 Adult Safety Products subcommittee meeting on May 21, 2021.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for December 2021. Staff will complete testing and analysis in support of a FY 2022 briefing package for Commission consideration regarding the petition and will share the briefing package with the subcommittee.

## All-Terrain Vehicles (ATVs)

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**Staff Contact** Paul, Caroleene

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

**Relevant Rulemaking** 16 CFR part 1420, *Standard for All-Terrain Vehicles*

The Commission published an advance notice of proposed rulemaking (ANPR) *Off-Highway Vehicle Fire and Debris Penetration Hazards* (86 FR 25817), May 11, 2021.

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**Purpose** To work with SVIA to revise the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels to reduce fire, stability, and occupant protection hazards associated with ATVs.

**Activities** *Fire Hazards:* At the end of FY 2020, staff attended a meeting with SVIA and OPEI, where rollover containment, fuel hose tensile test, fuel system ventilation, and fuel tank structural integrity were discussed. OPEI informed staff that some SDO members may present proposals to revise the standard in FY 2021. On March 23, 2021, SVIA informed CPSC that ANSI/SVIA 1-2017 is open for revision and was still open at the end of the reporting period. Staff sent a letter to OPEI, SVIA, and ROHVA on July 21, 2021, asking for a meeting to discuss fire and debris penetration hazards.

*Stability Hazards:* Staff conducted research on ATVs equipped with antilock brake systems, and staff will share initial test data with SVIA.

*Occupant Protection Hazards:* Staff reviewed and provided comments to a contractor report on proof-of-concepts of occupant protection devices, dynamically tested and evaluated with a rollover sled device. Staff will share with the committee.

**Next Action** Staff will review comments received on the ANPR and any proposed requirements from SVIA to address fire hazards. Staff will also share published contractor reports on ATV stability and occupant protection with SVIA. Staff has a meeting with SVIA, OPEI, and ROHVA in November 2021 to discuss requirements to address fire hazards and debris penetration hazards.



## Amusement Rides, Trampoline Parks, and Adventure Attractions

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**Staff Contact** Taxier, Daniel

**Voluntary Standard(s)**     **ASTM F747-21**     ***Standard Terminology Relating to Amusement Rides and Devices***

**ASTM F770-21**     ***Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices***

   ASTM F1193-18a     *Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices*

   ASTM F2137-19     *Practice for Measuring the Dynamic Characteristics of Amusement Rides*

   ASTM F2970 – 20     *Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts*

   ASTM F2974-20     *Standard Practice for Auditing Amusement Rides and Devices*

**ASTM F2291-21**     ***Standard Practice for Design of Amusement Rides and Devices***

**Relevant**     N/A

**Rulemaking**

**Standard(s) Update** In June 2021, ASTM published ASTM F747-21, the latest revision to *Standard Terminology Relating to Amusement Rides and Devices*. Updates to this standard include the scope, revised references, removal of terms no longer used in the committee’s standards or that are used per the dictionary definition, and the addition of new terms.

In June 2021, ASTM published ASTM F770-21, the latest revision to *Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices*. Updates to this standard include clarifications on communicating safety information to patrons and the introduction of a requirement for a document retention program.

In June 2021, ASTM published F2291-21, the latest revision to *Standard Practice for Design of Amusement Rides and Devices*. Updates to this standard include requirements to assess hazards associated with environmental conditions, and requirements to mitigate corrosion hazards.

**Purpose** To work with ASTM on revising their voluntary standards to strengthen safety provisions addressing hazards associated with amusement rides

**Activities** Staff participated in the October 12-16, 2020 general meetings of ASTM Committee F24 on Amusement Park Rides and Devices.

During the F24.24 task group meetings on F2291 Acceleration, staff expressed interest in reviewing a proposal from MLIT Japan to limit lateral acceleration. The review has not yet taken place. Staff also suggested potential changes to non-mandatory language in the F2291 standard during the F24.24 Loads and Strengths meeting.

Staff participated in the February 2021 general meeting of ASTM Committee F24 on Amusement Park Rides and Devices. During the F24.90 task group 1 meeting in February 2021, staff suggested a potential change to balloted language to resolve a negative vote. This discussion resumed during the March 24, 2021 meeting.

On March 24, 2021, staff participated in a task group 1 meeting that since 2017, has been working to address corrosion issues related to the design/engineering of amusement rides and devices in response to a letter from staff.

On April 29 and June 17, 2021, staff participated in ASTM F24.61 Trampoline Courts meetings to discuss updates for ASTM F2970 – 20 *Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts*.

Staff participated in the revision of the following three F24 standards published in June 2021: ASTM 747-21 *Standard Terminology Relating to Amusement Rides and Devices*, ASTM F770-21 *Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices*, and ASTM F2291-21 *Standard Practice for Design of Amusement Rides and Devices*. Many of these revisions came out of the task groups formed in response to a staff request after an incident that occurred in 2017.

In September 2021, staff sent a redacted In-Depth Investigation (IDI) to the F24 chair to initiate discussions on how the standards might be improved to address the hazards seen in the incident.

**Next Action** Staff will continue to participate on F24 subcommittees, including attending the committee meetings in October 2021.

## Artificial Intelligence (AI)

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**Staff Contact** Taylor, Nevin

**Voluntary Standard(s)** UL 3300 Potential new voluntary standard for safety of service, communication, information, education, and entertainment (SCIEE) robots

**Relevant Rulemaking** NA

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with applicable SDOs to develop standards to address the safety hazards associated with artificial intelligence in consumer products

**Activities** In October 2020, staff held meetings with ASTM staff and with ANSI staff, to introduce CPSC's new Chief Technologist, Nevin Taylor, and to discuss staff's plan on artificial intelligence as it pertains to the safety of consumer products.

On February 2, 2021, staff attended a UL STP kickoff meeting for stakeholders interested in developing a new consensus standard - UL 3300, for SCIEE robots. The STP reviewed a summary of the Outline of Investigation - UL 3300, which serves as the new voluntary standard's seed document. Staff participated in STP meetings to address comments on the draft new standard on April 15, 20, and 29, 2021. On May 10, 11, 13, 25, and 26, and on June 8, 2021, staff participated in task group (TG1) meetings on the draft standard scope. On July 28 and August 25, 2021, staff participated in STP meetings to review the TG1 work on scope. On September 21, 23, 28, and 30, 2021, staff participated in the second task group (TG2) meetings to develop an Operational Design Domain and Risk Assessment for the proposed standard. Staff provided technical input to the effort, as well as highlighted the agency's interest in establishing a role for consumer product safety in the new standard.

On March 2, 2021, staff hosted a forum on AI and Machine Learning (ML) technology and consumer product safety. The event's objective was to exchange information with stakeholders about the safety of consumer products that use AI and ML technology. The forum participants discussed AI and ML policy, voluntary standards, application, assessments, and safety. On August 26, 2021, staff met with representatives of various AI/ML or related voluntary standards activities to discuss how to advance consumer product safety voluntary standards related to this technology.

**Next Action** Staff will continue to work with SDOs to identify other potential voluntary standards pertaining to AI and will continue to participate in the UL STP 3300 meetings.

## Bassinets/Cradles

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**Staff Contact** Kish, Celestine

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

**Relevant Rulemaking** 16 CFR part 1218, *Safety Standard for Bassinets and Cradles*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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 bassinets and cradles

**Activities** At the end of FY 2020, ASTM issued a ballot containing three bassinet items: stability, scope/terminology, and side height. In October 2020, staff cast negative votes for those ballot items, reasoning that the proposals to reduce side-height and the 20° inclined surface stability test for compact bassinets are less stringent than the existing requirements for traditional bassinets. Staff's negative vote on the stability requirement was found to be non-persuasive. Meanwhile, negative votes cast by other subcommittee members on the scope/terminology and side height were found to be persuasive, and these ballot items were subsequently re-balloted in December 2020. Staff again voted negative on these two items, referring to the same rationale from the October 2020 letter.

In February 2021, ASTM issued a ballot containing two items on bassinets: (1) requirements for baby box-style bassinet lids, and (2) cardboard water-repellency requirements for baby boxes.

In April 2021, ASTM issued a ballot containing one item on bassinets regarding Ad Hoc warnings. The ballot item remained unresolved at the end of the reporting period.

In September 2021, ASTM issued a ballot with two bassinet-related items: side height and a vote to uphold finding staff's negative vote non-persuasive. Both items were still open at the end of the reporting period.

In addition to balloting activity, staff participated at the ASTM subcommittee meeting on November 10, 2020. During the meeting, ballot results were discussed, and two new task groups were formed to: (1) clarify Section 6.8 Fabric-Sided Enclosed Openings, and whether it is an entrapment or fall hazard; and (2) clarify product definitions and wording in Section 6.10. Staff will participate in each task group.

Task group meetings were held on December 17, 2020 for Baby Box products, on January 22, 2021 for Ad Hoc Language and Sleeping Pads; on February 23, 2021 for Ad Hoc Language; May 5, 2021 to discuss ballot items on baby box lids, water repellency, and Ad Hoc language; and on August 19, 2021 to discuss ballot items on the definition of compact bassinets, stability testing, and side-height. Staff participated in each of these task group meetings.

**Next Action** Staff will participate in upcoming meetings, including the next ASTM subcommittee meeting scheduled in November 2021.

## Bath Tubs (Adult)

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**Staff Contact** Bowley, Susan

**Voluntary Standard(s)** ASTM F462 - 79(2007) (Withdrawn in 2016) *Consumer Safety Specification for Slip-Resistant Bathing Facilities*

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with ASTM to re-establish F462, or develop a new voluntary standard to address fall hazards associated with adult bath tubs and shower facilities, with particular focus on older consumers.

**Activities** On March 19, 2021, staff participated in an ASTM F15.03 subcommittee meeting to discuss the withdrawn standard, ASTM F462, and the obstacles to creating a new standard to address slip/fall hazards in bath tubs. The ASTM F462 standard was not based on human slip research, and it focused on using only one slip-resistance tester to determine coefficient of friction. The subcommittee wants to focus on developing a new standard that uses reference surfaces and human subject testing. Staff encouraged the task group to focus on developing a new standard that also included addressing fall hazards to vulnerable populations, such as the elderly. Staff revisited awarding a contract to conduct tribology research and human slip studies.

Staff participated in meetings on April 21, May 26, July 8, and September 30, 2021, to advance this effort.

On September 30, 2021, CPSC awarded a contract to ASU/Forconn to evaluate tribometers (including test methods for bath surfaces) and to conduct human slip research.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled, providing incident data and other support to the task groups. Staff will share contract work results, when completed.

## Batteries, Fire (High-Energy Density)

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**Staff Contact** Kadiwala, Jay

**Voluntary Standard(s)** UL 1642, 6<sup>th</sup> Edition *Standard for Safety for Lithium Batteries*

UL 2743, 2<sup>nd</sup> Edition *Standard for Portable Power Packs*

UL 1310, 7<sup>th</sup> Edition *Standard for Safety for Class 2 Power Units*

UL 62133, 2<sup>nd</sup> Edition *Standard for Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications*

**ANSI C18.2M Part 2-2021** *American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard*

**ANSI C18.3M Part 2-2021** *American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard*

ANSI C18.4M-2017 *American National Standard for Portable Cells and Batteries - Environmental*

**Relevant** N/A

**Rulemaking**



**Standard(s)** On November 20, 2020, NEMA published ANSI C18.2M Part 2-2021, the latest revision to the *American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard*. Requirements for lithium-ion batteries were removed and are instead covered by ANSI C18.5M.

**Update**

On March 2, 2021, NEMA published ANSI C18.3M Part 2-2021, the latest revision to the *American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard*, to harmonize with IEC 60086-4:2019, *Primary batteries – Part 4: Safety of lithium batteries*, and the revisions primarily address ingestion hazards (see next entry).

**Purpose**

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

**Activities**

Staff participated in two NEMA/ANSI C18 Subcommittee on Portable Cells and Batteries meetings on December 2 and 3, 2020, and on March 24 and 25, 2021. During the December meeting, staff continued to advocate for adding a recommended practices guide (ANSI C18-5, part 2) for designers of lithium-ion battery products to address the overheating and fires of lithium-ion battery products. The subcommittee also decided to make the recommended practices guide for ANSI C18.5 Part 2 an ANSI technical report (TR), Recommended Practices Guide for Designers of Lithium-Ion Battery Products and will continue drafting the TR in working group meetings.

During the March meeting, staff initiated a discussion on recalled lithium batteries and its inclusion in ANSI C18.4. Staff is coordinating with the Department of Transportation and the Environmental Protection Agency to improve guidance for returning, shipping, and recycling recalled lithium battery products. ANSI C18.4 currently does not have any specific requirements for recalled lithium batteries.

Staff participated in four meetings to develop the ANSI-branded TR from an ad hoc working group of the NEMA C18 committee on April 8, 2021, May 20, 2021, June 30, 2021, and September 1, 2021. The purpose of the working group is to develop best practices and guidance for products for which an end-use standard does not exist, and the product incorporates or uses lithium-ion cells or batteries. Staff initiated this work to help address an increase in incidents and recalls of lithium battery products. The work is

ongoing to address the three main areas of electrical, mechanical, and environmental use scenarios and is anticipated to complete in FY 2023.

**Next Action** Staff will continue to participate in NEMA, UL, IEEE, ASTM and other pertinent meetings, to draft, revise, and harmonize requirements to eliminate or reduce overheating and fire hazards in high-energy density batteries. Staff will participate in a meeting in December 2021, to continue developing the draft ANSI TR, Recommended Practices Guide for Designers of Lithium-Ion Battery Products.

### Batteries, Ingestion (Button)

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**Staff Contact** Le, Huy

<b>Voluntary Standard(s)</b>	UL 1642, 5 <sup>th</sup> Edition	<i>Standard for Safety for Lithium Batteries</i>
	UL 4200A, 1 <sup>st</sup> Edition	<i>Standard for Safety for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies</i>
	UL 60065, 8 <sup>th</sup> Edition	<i>Standard for Audio, Video, and Similar Electronic Apparatus—Safety Requirements</i>
	ANSI C18.1M Part 2-2017	<i>American National Standard for Portable Primary Cells and Batteries with Aqueous Electrolyte - Safety Standard</i>
	<b>ANSI C18.2M Part 2-2021</b>	<b><i>American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard</i></b>

**ANSI C18.3M Part 2-2021**     ***American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard***

ANSI C18.4M-2017     *American National Standard for Portable Cells and Batteries*

**Relevant**     N/A

**Rulemaking**

**Standard(s)**

**Update**

On November 20, 2020, NEMA published ANSI C18.2M Part 2-2021, the latest revision to the *American National Standard for Portable Rechargeable Cells and Batteries—Safety Standard*, and the revisions primarily address fire hazards (see previous entry, *Batteries, Fire (High-Energy Density)*).

On March 2, 2021, NEMA published ANSI C18.3M Part 2-2021, the latest revision to the *American National Standard for Portable Lithium Primary Cells and Batteries - Safety Standard*, to harmonize with IEC 60086-4:2019, *Primary batteries – Part 4: Safety of lithium batteries*, and to add a “Keep out of reach” icon and warnings text to address battery ingestion hazards. The new revision includes requirements for the IEC pictogram, child resistant packaging, and warning text for button cell packaging.

**Purpose**

To work with the various SDOs to revise button and coin cell battery safety voluntary standards and end-product voluntary standards for products that use these button and coin cell batteries, to address accidental battery ingestions that can cause severe injury and death

**Activities**

Staff participated in two NEMA / ANSI C18 Subcommittee on Portable Cells and Batteries meetings on December 2 and 3, 2020, and on March 24 and 25, 2021. The main C18 committee is waiting on the balloted results of an IEC 60086-5:2016, *Primary Batteries – Part 5: Safety of Batteries with Aqueous Electrolyte*, proposed draft on button cell packaging and warning labels for non-lithium button cells. Also, staff continued to support the ANSI recommendation to use “WARNING” when serious injury or death can be

the outcome. "CAUTION" is used when minor or moderate injury is a likely outcome.

Staff participated in two Button Battery Task Force (BBTF) meetings on December 9, 2020 and April 19, 2021. The task force's mission statement is: "a collaborative effort of representatives from relevant organizations in industry, medicine, public health and government to develop, coordinate and implement strategies to reduce the incidence of button battery injuries in children." During the meetings, staff provided an update on recent ANSI C18 voluntary standards efforts. Incident data compiled by one of the BBTF Co-chairs was previously provided to the ANSI C18 committee. Their data show that there are deaths associated with ingestion of non-lithium button cell batteries and serious lifelong injuries are also a possible outcome if non-lithium cells are placed and lodge in other openings of the body.

**Next Action** Staff will continue to participate in NEMA, UL, ASTM, and other related meetings to draft, revise, and harmonize requirements to eliminate or reduce battery ingestion hazards. Staff will participate in the next button battery task force meeting scheduled for November 2021.

## Bedside Sleepers

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**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** ASTM F2906-13(2019) *Standard Consumer Safety Specification for Bedside Sleepers*

**Relevant Rulemaking** 16 CFR part 1222, *Safety Standard for Bedside Sleepers*

**Standard(s)** The voluntary and mandatory standards listed above were not updated during the reporting period.

## **Update**

<b>Purpose</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 bedside sleepers
<b>Activities</b>	To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with bedside sleepers and provided the findings via email to the subcommittee in July 2021. Staff did not identify any new hazard patterns since the last review.
<b>Next Action</b>	Staff will participate in the next ASTM subcommittee meeting, when scheduled, and also will review incident data to ensure the continued adequacy of the voluntary standard.

## **Bicycles**

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<b>Staff Contact</b>	Mella, Lawrence
<b>Voluntary Standard(s)</b>	ASTM F2793-14 <i>Standard Specification for Bicycle Grips</i>
<b>Relevant Rulemaking</b>	16 CFR part 1512 <i>Requirement for Bicycles</i>
<b>Standard(s) Update</b>	The voluntary and mandatory standards listed above were not updated during the reporting period.

**Purpose** To develop new or revised ASTM voluntary standards to reduce or eliminate hazards associated with bicycles and bicycle components

**Activities** On May 4, 2021, staff participated in the ASTM F08.10 Bicycles subcommittee meeting. In the meeting, staff encouraged ASTM to revise F2793-14, *Standard Specification for Bicycle Grips*, based on a fatal incident involving impalement on a handlebar end with a grip that had failed and no longer provided protection.

**Next Action** Staff will attend the next scheduled ASTM F08.10 meeting in November 2021, to discuss a proposed abrasion test method and requirement for bicycle grips.

## Booster Seats

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**Staff Contact** Kish, Celestine

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

**Relevant Rulemaking** 16 CFR part 1237, *Safety Standard for Booster Seats*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

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

**Activities** To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with booster seats and provided the findings via email to the subcommittee in March 2021. Staff did not identify any new hazard patterns since the last review.

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

## Candles and Candle Accessories

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**Staff Contact** Ayers, Scott

**Voluntary Standard(s)** **ASTM F2326-04(2021)** ***Standard Test Method for Collection and Analysis of Visible Emissions from Candles as They Burn***

**ASTM F2058-07(2021)** ***Standard Specification for Candle Fire Safety Labeling***

ASTM F2417-17 *Standard Specification for Fire Safety for Candles*

ASTM F2601-18 *Standard Specification for Fire Safety for Candle Accessories*

**Relevant Rulemaking** Petition CP 04-1 and HP 04-01 were denied September 2014. Commission directed staff to continue to work with ASTM.

**Standard(s) Update** In February 2021, ASTM reapproved, without change, ASTM F2326-04, *Standard Test Method for Collection and Analysis of Visible Emissions from Candles as they Burn* and ASTM F2058-07, *Standard Specification for Candle Fire Safety Labeling*.

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

**Activities** On December 2, 2020, staff provided the ASTM F15.45 subcommittee candle incident data. Staff participated in six teleconferences on December 15, 2020, January 22, 2021, February 12, 2021, March 12, 2021, June 4, 2021, and August 13, 2021, with a task group analyzing the candle incident data. Staff actively participated with the task group in categorizing the data based on the narratives. The task group prepared a presentation for the other candle task groups.

Staff participated in several task group meetings on September 15, 2021, where the candle data presentation was shared. Staff also actively participated in discussions on candle labeling, candle fire safety, and candle accessories. ASTM F2417 will be up for review next calendar year and ASTM F2601 will be up for review in calendar year 2023. The candle fire safety task group plans to review recent candle holder recalls and other watch list items that may need new or revised requirements.

Staff also participated three quarterly teleconferences with a task group that reviews recent candle recalls and incident reports on January 26, 2021, April 20, 2021, and July 20, 2021. Staff actively participates in this task group as they review recalls and reports from SaferProducts.gov, Health Canada, and any other sources to understand if the current ASTM standards address the identified issue or discuss gaps in the requirements that may need to be addressed.

**Next Action** Staff will participate in the October 7, 2021 subcommittee meeting, the October 19, 2021 quarterly review of recent candle related recalls and reports teleconference, and a planned January 2022 candle fire safety task group meeting.



## Carbon Monoxide (CO) Alarms

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**Staff Contact** Brookman, Matthew

**Voluntary** UL 2034, 4<sup>th</sup> Edition *Single and Multiple Station Carbon Monoxide Alarms*

**Standard(s)**

**NFPA 72<sup>®</sup>, 2022 Edition<sup>®</sup>** ***National Fire Alarm and Signaling Code***

**Relevant** N/A

**Rulemaking**

**Standard(s)** In August 2021, NFPA published NFPA 72<sup>®</sup>-2022, the latest edition to the  
**Update** *National Fire Alarm and Signaling Code<sup>®</sup>*.

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

**Activities** Staff continued to work with the contractor on the Smoke and CO Alarm Survey. Biweekly meetings were held with the contractor, staff, and the main sponsors of the survey (NFPA and NIST), to discuss various strategies to continue the survey in 2021, and the progress of the survey. On August 16, 2021, staff sent a letter to the UL 217 and UL 2034 STPs detailing the status of the CPSC-funded Smoke and CO Alarm Survey. The letter explained that the CPSC contractor conducted a successful pilot survey in the metropolitan Washington, DC, area, ending in March 2020. The contractor restarted the survey nationally in April 2021 and expects to be completed in fall 2022. On August 17, 2021, staff participated in a biannual joint UL 217

and UL 2034 STP meeting summarizing the pilot survey and the status of the survey for the STPs members.

**Next Action** Staff will continue working with the contractor in completing the Smoke and CO Alarms Survey and provide the survey to interested stakeholders, when available. Staff will continue working with UL, NFPA, and other stakeholders on CO alarms and safety.

## Carriages and Strollers

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**Staff Contact** Talcott, Kristen

**Voluntary Standard(s)** **ASTM F833-21** **Standard Consumer Safety Specification for Carriages and Strollers**

**Relevant Rulemaking** 16 CFR part 1227, *Safety Standard for Carriages and Strollers*

**Standard(s) Update** In August 2021, ASTM published ASTM F833-21, the latest revision to the *Standard Consumer Safety Specification for Carriages and Strollers*. This revision includes: an allowance for a concrete floor test surface, clarification of requirements that apply to combination unit of a car seat on a stroller, and addition of test methods to determine that the parking brake cannot be disengaged by a child.

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

**Activities** On December 17, 2020, ASTM issued an F15 ballot containing an item to revise the parking brake requirements for the carriage and stroller standard. The ballot received no negative votes and one comment.

On August 18, 2021, ASTM notified CPSC that it had published a revised 2021 version of ASTM F833 *Standard Consumer Safety Performance Specification for Carriages and Strollers*. On September 3, 2021, staff contacted the subcommittee chair via email with an updated schedule of the rulemaking timeline. At the end of the reporting period, staff was in the process of evaluating the changes to present the findings to the Commission.

**Next Action** Staff will present a briefing package to the Commission on updates to the standard in October 2021 and participate in the next ASTM subcommittee meeting in November 2021.

## Changing Products

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**Staff Contact** Nesteruk, Hope

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

**Relevant Rulemaking** 16 CFR part 1235, *Safety Standard for Baby Changing Products*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

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

**Activities** In March 2021, staff reviewed and analyzed incident data associated with baby changing products. Staff found five new incidents since the last review and no new hazard patterns. Staff shared this information via email with the subcommittee on March 9, 2021. These data were discussed in task group meetings on May 4 and August 26, 2021, in which staff participated.

**Next Action** Staff will participate in the next ASTM subcommittee meeting in November 2021.

### Child-Resistant Packages (CRP)

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**Staff Contact** Eilbert, Mark

**Voluntary Standard(s)** ASTM D3475-20 *Standard Classification of Child-Resistant Packages*

ASTM F17-20 *Standard Terminology Relating to Primary Barrier Packaging*

ASTM F3375-19 *Standard Test Method for Assessing Non-Metered Restricted Delivery Systems for Liquid Consumer Products*

**Relevant Rulemaking** 16 CFR part 1700, *Poison Prevention Packaging*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

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

**Activities** Staff participated in the ASTM F02 subcommittee meetings on October 28, 2020, in which members discussed several standards requiring review, including many in the medical and food industries that address flexible packaging. A work item was announced for a new standard to address the relationship between primary barrier packaging material attributes and performance.

During the ASTM F02 subcommittee meetings April 14-16, 2021, subcommittee F02.25 on Rigid Container Closure Systems announced the review of D7860-14 *Standard Test Methods for Measurement of Torque Retention for Child-Resistant and Non-Child-Resistant Packages with Continuous Thread Closures Using Automated Torque Testing Equipment*. Staff requested to be included in the review of that standard when the work item becomes available.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for October 2021.

## Children's Folding Chairs and Stools

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**Staff Contact** Lee, Kevin

**Voluntary Standard(s)** ASTM F2613-21 **Standard Consumer Safety Specification for Children's Chairs and Stools**

**Relevant Rulemaking** 16 CFR part 1232, *Safety Standard for Children’s Folding Chairs and Children’s Folding Stools*

**Standard(s) Update** In February 2021, ASTM published ASTM F2613-21, the latest revision to the *Standard Consumer Safety Specification for Children’s Chairs and Stools*. This revision updates the scope to include children’s ottomans and to exclude infant and toddler rockers, which are covered under a different voluntary standard. In addition, this revision contains an editorial change to remove an extraneous test method.

Staff evaluated the changes to the rule and presented a briefing package to the Commission. In May 2021, the Commission published a direct final rule to reference ASTM F2613-21, which became effective August 2021.

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

**Activities** On September 17, 2020, ASTM issued a ballot containing an item to revise the scope of the voluntary standard to clarify that the scope does not include toddler rockers. In October 2020, the ballot results indicated that this ballot item had one negative vote, but the negative was subsequently withdrawn.

On November 10, 2020, staff participated in the ASTM subcommittee meeting, where the attendees discussed the recent ballot results, and a task group on children’s ottomans was formed. In addition, staff raised an issue in the current standard in which a test procedure was duplicated erroneously during the last revision. The subcommittee agreed it needed a ballot item to correct the issue.

On December 4, 2020, staff participated in the new ottoman task group meeting, and the task group agreed to add ottomans to the standard's scope.

On December 17, 2020, ASTM issued an F15 ballot containing two items for F2613: the removal of the extraneous test method, and a scope clarification regarding children's ottomans. Both items passed.

In February 2021, ASTM published a revised version of F2613, and notified CPSC on February 22, 2020. The Commission published a direct final rule to reference ASTM F2613-21 in May 2021.

Staff participated in task group meetings May 4, June 8, and July 16, 2021, where head-entrapment hazards were discussed, among other issues. The subcommittee balloted new requirements for head entrapment on August 20, 2021, but the proposal received negative votes that had not been resolved by the end of the reporting period.

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

## Clothes Dryers

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**Staff Contact** Lee, Arthur

**Voluntary Standard(s)** UL 2158, 6<sup>th</sup> Edition **Standard for Electric Clothes Dryers**

**Relevant Rulemaking** N/A

**Standard(s) Update** On July 30, 2021 UL published UL 2158, 6<sup>th</sup> Edition, the latest edition to the *Standard for Electric Clothes Dryers*. The 6<sup>th</sup> edition proposal was submitted by the Technical Harmonization Committee for Clothes Washers and Dryers to update the references and harmonize the UL standard.

**Purpose** To work with UL to revise the voluntary standard to strengthen its safety provisions addressing the hazards associated with clothes dryer fires.

**Activities** During the reporting period, staff conducted an evaluation program looking for possible gaps in the current fire containment test within the voluntary standard. On May 25, 2021, staff provided the report to the UL 2158 STP chair. The report:

- reviewed incident data looking for any information on the efficacy of the fire containment tests;
- examined electric clothes dryers built before and after the UL 2158 fire containment test requirements' 2013 effective date: and
- detailed a fire-containment test performed by staff on a new clothes dryer, to gain insight on possible gaps in the test procedures.

Based on the report's finding, staff has no recommendations to UL 2158, but given this information is evolving, staff will continue to monitor clothes dryer fire data.

**Next Action** Staff will continue to review incident data and will provide recommendations to the UL 2158 STP if new incident data warrants.

## Clothing Storage Units Tip Overs

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**Staff Contact** Talcott, Kristen

**Voluntary Standard(s)** ASTM F2057-19 *Standard Safety Specification for Clothing Storage Units*

**ASTM F3096-21** *Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)*

**Relevant Rulemaking** The Commission published an ANPR in November 2017 (82 FR 56752, Nov. 30, 2017) and in July 2021, delivered a draft NPR for Commission consideration.



**Standard(s) Update** In May 2021, ASTM reapproved, without change, ASTM F3096-21, *Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)*.

**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing the hazards associated with furniture tip-over incidents

**Activities** On October 5, 2020, ASTM issued an F15 main committee ballot and an F15.42 subcommittee ballot. Between the ballots, there were five items containing revisions to various sections of ASTM F2057-19: warning language, instructional literature, stability testing, test figures, and test weight. All but the latter two had persuasive negative votes and were removed from the ballot. The two items that passed are currently on hold pending future balloting of other revisions.

During the reporting period, staff participated in several ASTM task group meetings that discussed potential revisions to the voluntary standard:

- October 1, 2020: Labeling task group
- October 23, 2020: Loaded and Multiple Drawers task group
- December 2, 2020: Scope task group
- December 9, 2020: Scope task group
- January 26, 2020: Loaded and Multiple Drawers task group
- March 11, 2021: Scope task group
- April 21, 2021: Dynamic Testing task group
- August 20, 2021: Scope task group

Staff also participated in the subcommittee meetings on November 12, 2020, and May 13, 2021. During the November meeting, the October ballot results were reviewed, and various task groups provided updates. Staff provided an update regarding the contractor work on furniture tip overs. During the May meeting, the April ballot results were reviewed, and task

groups provided updates. Staff provided an update on rulemaking, and the recently released CPSC tip-over-related reports.

On December 17, 2020, ASTM issued another F15 ballot containing an item to reapprove ASTM F3096, without changes. In May 2021, ASTM reapproved ASTM F3096-21, *Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)*, without changes.

In January 2021, staff issued a report entitled, *Product Instability of Tip-Over Injuries and Fatalities Associated with Televisions, Furniture and Appliances: 2020 Report* and notified the subcommittee.

Staff also participated in ISO TC 136 meetings during the reporting period on February 26, 2021, and on March 19, 2021. During the meetings, the work group members discussed comments and edits to the draft standard, ISO/DIS 7170 *Furniture – Storage Units – Test methods for the determination of strength, durability, and stability*.

ASTM issued a ballot on April 1, 2021, which contained two items for ASTM F2057: a revision to the stability test to clarify the most onerous position for doors, and a revision to the scope regarding dresser heights. The items received numerous negatives and were removed from the ballot.

**Next Action** Staff will participate in the next subcommittee meeting scheduled for November 2021. The Commission is expected to consider the draft NPR in FY 2022.

## Commercial Cribs

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**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** ASTM F2710-19 *Standard Consumer Safety Performance Specification for Commercial Cribs*

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

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

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

**Activities** In September 2021, staff reviewed and analyzed incident data associated with commercial cribs and provided via email the summary analysis to the subcommittee. Staff found two new incidents since the last review, but no new hazard patterns were identified.

**Next Action** Staff will participate in the next subcommittee or task group meeting, when scheduled.

### Crib Bumpers (Infant Bedding)

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**Staff Contact** Smith, Tim

**Voluntary Standard(s)** ASTM F1917-20e1 *Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories*

**Relevant Rulemaking** 16 CFR part 1240, *Safety Standard for Crib Bumpers/Liners* (Proposed Rule)

<b>Standard(s) Update</b>	In November 2020, ASTM published an editorial revision to ASTM F1917-20, ASTM F1917-20e1 <i>Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories</i> , to correct an error in the instructional literature section.
<b>Purpose</b>	To work with ASTM on revising the voluntary 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>Activities</b>	<p>Staff attended a task group meeting on February 17, 2021, focused on possible changes to ASTM F1917 that would bring it and the proposed rule into closer alignment. Staff updated the task group with the current timeframe related to the final rule.</p> <p>On March 31, 2021, staff participated in an airflow task group meeting to discuss the development of an airflow requirement for crib bumpers.</p> <p>On April 23, 2021, staff participated in a task group meeting to discuss the Crib Bumper/Liner Entrapment in Openings requirement and test method that appear in CPSC's proposed rule for crib bumpers/liners, and whether these should be balloted for the ASTM F1917 voluntary standard. After discussion, the task group consensus was that the Entrapment in Openings requirement and test method should not be balloted as-is, and that the addition of such a requirement should wait until after the CPSC final rule on crib bumpers/liners has been published.</p> <p>On May 4, 2021, staff participated in an ASTM F15.19 Infant Bedding subcommittee meeting covering multiple task group topics, including standard updates, airflow requirements, crib shrinkage, and the Section 6.5 <i>Entrapment in Openings</i> requirement in the CPSC proposed rule. Additionally, the subcommittee discussed a letter from Consumer Reports about safe sleep principles, resulting in a new task group being formed on requirements for baby blankets.</p>
<b>Next Action</b>	Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021. Staff is preparing a final rule briefing package for delivery to the Commission in FY 2022.

## Crib Mattresses (including Supplemental and Aftermarket Mattresses)

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**Staff Contact** Nesteruk, Hope

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

**Relevant Rulemaking** Petition CP 15-2: *Petition Requesting Ban on Supplemental Mattresses for Play Yards with Non-Rigid Sides*  
NPR, *Safety Standard for Crib Mattresses* (85 FR 67906)

**Standard(s) Update** The NPR for the *Safety Standard for Crib Mattresses* was published in the *Federal Register* (85 FR 67906) on October 26, 2020. In September 2021, staff delivered a draft final rule briefing package to the Commission for consideration.

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

**Activities** The NPR for crib mattresses was published in the *Federal Register* on October 26, 2020. Staff reviewed the submitted comment in preparation for drafting a final rule briefing package. In September 2021, staff delivered a draft final rule briefing package to the Commission for consideration.  
Staff participated in the ASTM subcommittee meeting on November 10, 2020. During the meeting, staff reported on the NPR and provided a link to regulations.gov, reminding the subcommittee that the comment period ends

on January 11, 2021. Staff also answered questions from subcommittee members about the NPR content.

Staff also participated in the following task group meetings during the reporting period:

- Corner Gap Task Group on December 3, 2020 and February 25, 2021
- Cyclic Testing Task Group on December 8 and 9, 2020 and March 4, 2021
- Non-Segmented Aftermarket Mattresses on December 18, 2020
- Mattress Firmness on February 10, 2021.

Staff participated in another subcommittee meeting held on February 16, 2021, where the task groups all provided updates.

On March 12, 2021, ASTM issued an F15 ballot containing two items pertaining to ASTM F2933-19. A member of CPSC's Human Factor's Directorate subsequently received authorization to vote on the ballot items, and voted negative on the ballot regarding warnings and instructions, as it was in conflict with the NPR.

On March 4, 2021, staff participated in a Crib Mattresses Standard Language Review Task Group meeting to discuss various aspects of the standard for Crib Mattresses.

On June 9, 2021, staff participated in an ASTM F15.66 subcommittee on crib mattresses to discuss the results of two ballot items, ASTM F15 (21-02), Items 12 and 13, and updates from task groups. The subcommittee found staff's negative vote non-persuasive and proceeded to publish a revised standard

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

## Electric Heaters

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**Staff Contact** Lee, Arthur

**Voluntary Standard(s)** UL 1278, 4<sup>th</sup> Edition *Standard for Movable and Wall-or Ceiling-Hung Electric Room Heaters*

**Relevant Rulemaking** N/A

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with UL to address hyperthermia deaths caused by portable and room heaters

**Activities** Staff serves as the UL 1042 STP chair for the hyperthermia task group.

Staff chaired and participated in nine hyperthermia task group meetings on October 1, 2020, October 22, 2020, October 29, 2020, December 10, 2020, February 2, 2021, March 15, 2021, May 3, 2021, June 28, 2021, and July 29, 2021. The task group's objective is to develop proposals for portable heaters in UL 1278 to address incidents of hyperthermia from use of portable electric heaters in small rooms. Staff raised this issue to UL in response to the March 2019 staff report, "A Preliminary Analysis of Hyperthermia Deaths Associated with Electric Room/Space Heaters." The task group is focused on proposals for labeling and educational campaigns as the number of incidents per year (2 or less) do not warrant any new performance requirements at this time. The task group agreed that heaters rated at 850 W or more require hyperthermia labeling. This number is based on staff testing showing that an 868 W heater can raise the temperature from 70 F to 100 F in a 490 FT<sup>3</sup> room. The task group also agreed to requirements for a removable label that informs the consumer of

the hyperthermia hazards with portable heaters. The task group completed a proposal for labeling, markings, and instructions for electric heaters and the task staff task group chair forwarded that proposal to the UL 1042 STP for preliminary review before balloting the proposal shortly after the July meeting.

**Next Action** Staff will continue to lead the task group if changes to the proposal are warranted. Staff will continue to work with the UL 1042 STP on hyperthermia risks.

### Fire Safety of Portable Fuel Containers and Gasoline Cans

**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	ASTM F3429 / ASTM F3429M-20	<i>Standard Specification for Performance of Flame Mitigation Devices Installed in Disposable and Pre-Filled Flammable Liquid Containers</i>
	ASTM F852 / ASTM F852M-20	<i>Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use</i>
	ASTM F3326-21	<i>Standard Specification for Flame Mitigation Devices on Portable Fuel Containers</i>
	ASTM F839-15	<i>Standard Specification for Cautionary Labeling of Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use</i>
	UL30, 9 <sup>th</sup> Edition	<i>Standard for Metal Safety Cans</i>



<b>Relevant</b>	Portable Fuel Container Safety Act of 2020
<b>Rulemaking</b>	
<b>Standard(s)</b>	On September 1, 2021, ASTM approved ASTM F3326-21, <i>Standard Specification for Flame Mitigation Devices on Portable Fuel Containers</i> .
<b>Update</b>	This voluntary standard will be published in October 2021. The voluntary standard was revised to allow metal FMDs in metal gasoline containers
<b>Purpose</b>	To work with ASTM and UL to improve or develop fire safety requirements for flame mitigation devices in various type of portable fuel containers, such as gasoline containers
<b>Activities</b>	<p>Staff participated in two ASTM F15.10 task group meetings on October 8, 2020, and October 29, 2020, on possible revisions to gasoline container labeling requirements in ASTM F839. The task group is interested in updating the labeling on gasoline containers and harmonizing labeling requirements with Canada. Staff provided comments to the task group on the proposed changes. During a June 17, 2021 subcommittee meeting, work on this standard was put on hold so that requirements for gasoline container labeling in Canada can be aligned with ASTM requirements.</p> <p>Staff participated in eight UL 30 STP meetings on November 17, 2020, December 7, 2020, February 4, 2021, February 23, 2021, April 14, 2021, May 5, 2021, August 23, 2021, and September 13, 2021. The UL 30 STP is preparing a new draft UL 30 joint standard that incorporates requirements from the current UL 30, UL 1313, and ULC ORD-30 voluntary standards that cover safety cans, a type of portable flammable liquid container. The new draft of UL 30 joint standard includes requirements for flame mitigation devices. The draft UL 30 voluntary standard was balloted in June 2021. On July 19, 2021, staff voted on the standard and provided a cleared letter with comments on the scope of the standard, the definition of “safety can,” and the request to develop a performance test for FMDs. The ballot closed in July 2021. The ballot reached consensus. The STP addressed all ballot comments, except for a staff comment regarding the development of a performance test for FMDs. The STP assigned an existing task group to address staff’s comment.</p> <p>Staff participated in six UL 30 task group meetings on February 11, 2021, March 4, 2021, March 11, 2021, March 19, 2021, March 26, 2021, and April</p>

9, 2021. This task group is responsible for the proposed requirements for flame mitigation devices. Staff's comment letter proposed developing a test protocol for safety cans, based on ASTM F3429 with pre-conditioning samples before testing like ASTM F3326. In July 2021, staff contracted with Jensen Hughes to adapt an existing FMD test protocol for safety cans to be included in the draft UL 30. This task group will review the contract work.

ASTM appointed a new F15.72 subcommittee chair in December. Staff participated in two ASTM F15.72 subcommittee meetings on December 17, 2020 and February 17, 2021. The subcommittee discussed the scope of the subcommittee, the current standards, and the draft standard. The subcommittee was initially formed to develop requirements related to the ingestion of torch fuel and lamp oil. Over time, portable fireplaces and flame mitigation devices were added to the subcommittee activities. The subcommittee members in the meeting discussed broadening the scope of the subcommittee, but not changing the scope of the current standards and draft standard. On March 11, 2021, ASTM balloted a name change for the subcommittee, which passed. The new subcommittee name is, "prefilled flammable and combustible liquid containers."

The subcommittee also met on July 15, 2021. While the topics of discussion during this teleconference focused on torch fuel and lamp oil, several stakeholders remained in the meeting after the subcommittee meeting closed to discuss ASTM F3429 and the Portable Fuel Container Safety Act with staff. Some members of industry making products in-scope of this standard, and the Act only recently became aware of the existence of ASTM F3429. Staff explained the process of developing the standard, the reason why fuels sold for two-stroke engines were purposely included within the scope of ASTM F3429, and the scope of the Act. There is concern that complying with ASTM F3429 by some members of industry may be difficult by June 2022. Staff encouraged those effected industry members to comment, when available, and contact CPSC Office of Compliance.

In December 2020, the US Congress passed the Portable Fuel Container Safety Act of 2020. This Act requires that the CPSC promulgate a final rule to require flame mitigation devices in portable fuel containers not later than 30 months after the date of enactment of this Act unless a voluntary standard for a class of portable fuel container exists and is in effect 18 months after the date of enactment of this Act.

CPSC executed a contract to perform a modified round-robin study of the test protocol in ASTM F3429. The contractor and two other laboratories will perform the testing specified in F3429 on the same samples and compare results.

**Next Action** Staff will continue to work with ASTM F15.10 on possible revisions to F839. Staff will also work with ASTM F15.10 on possible revisions to for flame mitigation requirements or other fire safety requirements in ASTM F852 and ASTM F3326. Staff will continue to work with UL 30 and the contractor to develop a FMD performance test for safety cans. Staff will provide the results of the modified round-robin testing to ASTM after the work is completed.

## Fireworks

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**Staff Contact** Valliere, Rodney

**Voluntary Standard(s)** **APA 87-1A, 2018 Version** ***Standard for Construction, Classification, Approval, and Transportation of Consumer Fireworks***

AFSL 101 – 115, February 2019 *AFSL Standards for Consumer Fireworks*

**Relevant Rulemaking** 16 CFR § 1500.17, *Banned Hazardous Substances* and 16 CFR part 1507, *Firework Devices*

**Standard(s) Update** On December 28, 2020, APA finalized APA 87-1A, the new *Standard for Construction, Classification, Approval, and Transportation of Consumer Fireworks*, following action by the U.S. DOT. Previously, all fireworks requirements were contained in APA 87-1, 2001. Now APA has three separate standards covering consumer fireworks (APA 87-1A), display fireworks (APA 87-1B), and entertainment, and technical pyrotechnics (APA 87-1C).

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

**Activities** The U.S. DOT published a final rule in November 2020, incorporating by reference into its regulations the update, splitting APA 87-1 into three separate voluntary standards, APA 87-1A, APA 87-1B, and APA 87-1C. (85 75680). APA 87-1A contains requirements for consumer fireworks; the other two standards pertain to other types of fireworks.

On September 16, 2021, staff sent letters to the AFSL and APA committees requesting more information on a new type of fireworks, “cool burning sparklers.” Staff was interested to learn the chemical make-up of these devices, the temperature range of the device while burning and of the sparks emitted, the instructions for the safe use of these sparklers, and any other pertinent information or data not specified above. In these letters, staff asked if a new classification for these devices was needed and requested that each committee meet to discuss if new requirements were needed.

**Next Action** Staff will work with AFSL and APA to establish any new requirements needed for “cool burning sparklers” and participate in any future AFSL and APA meetings, if those meetings are open to the public.

## Flammable Refrigerants

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**Staff Contact** Ayers, Scott

<b>Voluntary Standard(s)</b>	UL/CSA 60335-2-24, 2 <sup>nd</sup> Edition	<i>Safety Requirements for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances, and Ice-Makers</i>
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UL/CSA 60335-2-40, 3<sup>rd</sup> Edition *Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers*

UL/CSA 60335-2-89, 1<sup>st</sup> Edition *Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Unit or Compressor*

ASHRAE 15 *Safety Standard for Refrigeration Systems*

ASHRAE 15.2P Potential new voluntary standard for refrigeration systems in residential applications

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** The voluntary standards listed above were not updated during the reporting period.

**Purpose** To work with SDOs to revise the voluntary standards to strengthen the safety provisions addressing hazards associated with flammable refrigerants (also known/marketed as “low global warming potential refrigerants” and “natural refrigerants”) used in household refrigerators, freezers, and air conditioners

**Activities** Staff participated in eight meetings looking at gaps and inconsistencies between three flammable refrigerant standards, ASHRAE Standard 15, the draft new ASHRAE Standard 15.2P, and UL/CSA 60335-2-40 on October 2, 2020, October 21, 2020, November 11, 2020, June 9, 2021, June 23, 2021, August 25, 2021, September 8, 2021, and September 22, 2021.

Staff participated in a meeting on the draft new ASHRAE Standard 15.2P on January 26, 2021. The committee updated the participants on the status of the draft standard, sharing that the third Publication Public Review (PPR) would be sent out within a month. On February 23, 2021, ASHRAE released the third PPR for the draft ASHRAE Standard 15.2P. On April 1, 2021, staff submitted a comment on the PPR, in general supporting the draft standard with some minor comments to improve clarity. On May 27, 2021, staff attended a meeting to review PPR comments where staff agreed that staff's comments could be addressed after initial publication and during continuous maintenance.

Staff participated in 25 meetings focused on revising the current edition of UL/CSA 60335-2-40 on October 12, 2020, October 19, 2020, November 2, 2020, November 16, 2020, November 30, 2020, January 11, 2021, February 1, 2021, February 22, 2021, March 8, 2021, April 5, 2021, April 19, 2021, May 3, 2021, May 11, 2021, May 12, 2021, May 13, 2021, May 17, 2021, May 26, 2021, June 8, 2021, June 9, 2021, June 10, 2021, June 14, 2021, June 15, 2021, June 16, 2021, June 17, 2021, and June 28, 2021. UL received more than 180 proposed changes to the current edition. The working group needed to ballot a recirculation of the revisions by July in time for the next mechanical code cycle. An area of interest for staff is the required safety symbols, as the fire service wishes to change the symbol and align it with products. Staff supports changing the safety symbols.

Staff participated in five meetings focused on revision the current edition of UL/CSA 60335-2-24 on February 22, 2021, March 23, 2021, April 29, 2021, June 08, 2021, and August 3, 2021. The fire service made similar proposals to this group on the required safety symbols as with the UL/CSA 60335-2-40 group. Staff also supports this change.

Staff participated in one Safe Refrigerant Transition Task Force (SRTFF) meeting on December 11, 2020. This group was originally formed to educate stakeholders on the transition to flammable refrigerants through a variety of methods, but has evolved to a group focused on outreach to the fire service.

Staff participated in one meeting with ASHRAE, held over two days regarding possible odorants in flammable refrigerants on January 25, 2021 and January 26, 2021, and February 1, 2021. Staff informed ASHRAE of the CPSC contract to research possible odorants in flammable refrigerants. The CPSC contract is intended to complement other research ASHRAE is conducting on possible odorants in flammable refrigerants.

Staff also participated in four meetings with a flammable refrigerant working group focused on requirements in NFPA 70, *National Electric Code* that

affect residential HVAC appliances on May 21, 2021, May 25, 2021, June 4, 2021, and June 8, 2021. The working group concluded, and staff supported, that residential HVAC equipment should be subjected to greater scrutiny and more stringent requirements for available touch currents than what was proposed in the draft 2023 edition of NPFA 70. To address the issue, the working group prepared a proposal, which was submitted by AHRI to the NEC during the public comments period and the working group proposed a change to UL 60335-2-40.

**Next Action** Staff continues to participate in the development of codes and voluntary standards intended to allow greater quantities of flammable refrigerants in refrigeration and HVAC equipment safely. Staff intends to continue participating in industry meetings related to revising UL/CSA 60335-2-24, UL/CSA 60335-2-40, UL/CSA 60335-2-89, and ASHRAE Standard 15.2P as needed. Staff will work with the contractor to study the compatibility of possible flammable refrigerants with various odorants, lubricants, and metal hardware. The contract is expected to be completed by November 2021.

## Flooring (Slips, Trips, and Falls)

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**Staff Contact** Bowley, Susan

**Voluntary Standard(s)** ASTM F2508-16e1 *Standard Practice for Validation, Calibration, and Certification of Walkway Tribometers Using Reference Surfaces*

ASTM WK60578 Potential new voluntary standard test method for walkway friction testing

**Relevant Rulemaking** Petition CP 16-1, Labeling Requirements Regarding Slip Resistance of Floor Coverings (Denied) and Petition CP 18-2 Floor Coverings (Denied)

<b>Standard(s) Update</b>	The voluntary standards and the petitions listed above were not updated during the reporting period.
<b>Purpose</b>	To work with ASTM and NFSI on developing a new voluntary standard or revising the existing voluntary standard to reduce or prevent consumer slips, trips, and falls
<b>Activities</b>	<p>The NFSI B101 committee develops multiple standards related to flooring safety. As part of the continued efforts derived from the floor surface labeling petition, to develop our understanding of floor safety, staff participated in a floor surface standard development meeting on January 29, 2021. This was the first time that staff participated with the NFSI B101 committee. The committee discussed the status and updates on their existing standards. Various materials were mentioned during the meeting, such as the human ambulation study, as well as a NIOSH publication referencing the B101.1 standard. Staff will review these materials to increase our understanding of floor surface safety.</p> <p>On February 2, 2021, staff participated in an ASTM F13 meeting, in which updates on the development of subcommittee standards were discussed. The subcommittee is actively researching tile testing and writing and reviewing human subject data research for future publication in an ASTM journal. The subcommittee also discussed how various tribometers provide different output values and how the value of a specific device is unique to that device and setup.</p> <p>On June 29-30, 2021, staff participated in ASTM F13 committee meetings. The F13.10 subcommittee on traction is developing a suite of standards to create a friction rating system.</p>
<b>Next Action</b>	Staff will participate in the next NFSI B101 and ASTM F13 committee meetings, when scheduled.

## Frame Child Carriers

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**Staff Contact** Lee, Kevin

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

**Relevant Rulemaking** 16 CFR part 1230, *Safety Standard for Frame Child Carriers*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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** Staff participated in eight ASTM task group meetings throughout the fiscal year, as well as the semi-annual ASTM subcommittee meeting held on November 9, 2020. During the meetings, incident data supplied by staff, were reviewed. In addition, the task groups worked on ad hoc warnings language, strength testing, stability, and discussed and reviewed proposals for new ballot items. At the close of the reporting period, no ballot items for frame child carriers had been issued.

**Next Action** Staff will participate in the subcommittee meeting scheduled for November 2021.

## Full-Size Cribs

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**Staff Contact** Nesteruk, Hope

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

**Relevant Rulemaking** 16 CFR part 1219, *Safety Standard for Full-Size Cribs*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**Purpose** To work with ASTM on revising the voluntary 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** Staff participated in a F15.18 ASTM subcommittee meeting on November 10, 2020. A subcommittee member raised a question about a certain type of toe hold on ornamental pieces outside the crib bars that could form a non-horizontal toe hold. A task group was formed to look at the issue, and staff joined the task group.

On January 6, 2021, the toe-hold task group met to discuss the use of the word “horizontal” with respect to toe holds. The goal was to consider deleting “horizontal,” which is viewed to be subjective and may not address all toe holds. The task group chair discussed international standards, none of which use “horizontal.” Staff reviewed pictures of various crib designs with non-horizontal toe holds and agreed to talk with staff test engineers for input.

On May 5, 2021, staff participated in an ASTM F15.18 Full-Size Cribs subcommittee meeting that continued discussion of the issue of toe holds. The chair asked staff to talk to CPSC compliance before the next task group meeting to determine their opinion. Staff agreed to do so.

**Next Action** Staff will participate in the next scheduled ASTM subcommittee meeting. Staff will also provide input from test engineers for the toe hold task group.

## Gas Appliances, CO Sensors

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**Staff Contact** Jordan, Ronald

<b>Voluntary Standard(s)</b>	ANSI Z21.47-2016/ CSA 2.3-2016	<i>Gas-Fired Central Furnaces</i>
	ANSI Z21.13-2017/ CSA 4.9-2017	<i>Gas-Fired Low Pressure Steam and Hot Water Boilers</i>
	ANSI Z21.86-2016/ CSA 2.32-2016	<i>Vented Gas-Fired Space Heating Appliances</i>

**Relevant Rulemaking** The Commission published an ANPR for Performance Requirements for Residential Gas Furnaces and Boilers, in the *Federal Register* on August 19, 2019 (84 FR 42847).

**Standard(s) Update** The voluntary standards and the ANPR listed above were not updated during the reporting period.

**Purpose** To work with technical committees on revising the voluntary 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 continued to monitor the relevant voluntary standards for any revisions that would strengthen protection from CO exposure risks. Staff also

managed two contracts in support of standards development in this area.

On September 24, 2021, staff emailed the CSA TC and TSCs for central furnaces, boilers, and wall and floor furnaces a status update on the NPR timeline. Staff reiterated requests that the TC and TSCs develop performance requirements for CO exposure.

**Next Action** Staff will update the voluntary standard bodies, if appropriate, on the status of the ANPR/NPR and related contractor reports when appropriate. Staff will continue to monitor or participate with CSA and any other SDOs interested in gas appliance safety and CO sensors.

## Gas Ranges

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**Staff Contact** Ayers, Scott

**Voluntary Standard(s)** ANSI Z21.1-2016/ *Household Cooking Gas Appliances*  
CSA 1.1-2016

**Relevant Rulemaking** N/A

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with CSA to revise the voluntary standard to strengthen its safety provisions and to ensure that the voluntary standard addresses hazards associated with gas ranges

**Activities**

Staff serves as the CSA TSC chair for domestic gas ranges.

Staff chaired and participated in three CSA TSC meetings on December 10, 2020, April 14, 2021, and June 15, 2021. During these meetings, the TSC formed a task group to review data provided by CPSC. Staff volunteered to participate on the task group. The TSC also resolved several issues related to the second amendment to the current edition of ANSI Z21.1. The amendment includes provisions for smart enabled gas ranges. Comments to the amendment were not completely resolved by the end of the reporting period.

On January 8, 2021, staff provided the CSA TSCs gas range incident data between November 1, 2015 and October 31, 2019 for review. The TSC empaneled a task group, with staff participation. The task group met six times, on May 19, 2021, June 16, 2021, June 30, 2021, July 14, 2021, August 11, 2021, and September 28, 2021. The task group's first objective was to code approximately 1800 internet and hotline incidents reports. Developing a robust coding method has taken time. In late August, Health Canada staff temporarily withdrew from the task group during the Canadian election season. The task group decided to suspend work until Health Canada staff are able to rejoin the task group. Staff expects Health Canada staff to participate again sometime in the fall of 2021.

Staff participated in two smart enabled gas range task force meetings, on May 27, 2021 and June 21, 2021. The task force finalized proposed revisions to ANSI Z21.1 for smart enabled gas ranges. Staff supported the proposed revisions. The revisions were forwarded to the full TSC for consideration.

**Next Action**

Staff will continue to chair and participate in the TSC meetings. Staff will continue to work with the data task group to review CPSC gas range incident data. Staff will continue to review the status of the draft second amendment which includes requirements for smart enabled gas ranges.

## Gasoline Containers, Child Resistance

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**Staff Contact** Ayers, Scott

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

ASTM F852/ ASTM F852M-20 *Standard Specification for Portable Gasoline Kerosene, and Diesel Containers for Consumer Use*

**Relevant Rulemaking** 16 CFR part 1460, *Children's Gasoline Burn Prevention Act Regulation*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**Purpose** To work with ASTM to revise the voluntary 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 from portable fuel containers

**Activities** On June 17, 2021 staff participated in an ASTM F15.10 subcommittee teleconference where the subcommittee agreed to form a task group to draft revisions to ASTM F2517. In particular, the task group will look at changes to the adult testing, including using a different age group. Staff volunteered to work on the task group.

Staff participated in three task group meetings, on July 20, 2021, August 10, 2021, and September 7, 2021, to propose revisions to F2517. The task group focused on proposed revisions to the scope, the make-up of the adult test panel, how to test containers with removeable spouts, and approving a family of containers. The proposed scope changes would allow other types of containers, such as safety cans to use this voluntary standard to test child resistance. The make-up of the adult panel would allow younger adults and require at least 30 percent to be female. An adult participant would not be required to un-stow then properly attach a removeable spout during the test. The smallest container from a family of containers tested with child and the

largest container from a family tested with adults would be used to approve a family of containers. The task group has more work to remove ambiguities in the adult test procedure before the draft revisions will be ready for ballot.

**Next Action** Staff will participate in a task group meeting on October 13, 2021. Staff will work with the task group to remove ambiguities with the proposed adult test procedure test procedure.

## Gates and Expandable Enclosures

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**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** **ASTM F1004-21** **Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures**

**Relevant Rulemaking** **16 CFR part 1239, Safety Standard for Gates and Enclosures**

**Standard(s) Update** In June 2021, ASTM updated ASTM F1004-21, Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures. This revision includes items that brought the voluntary standard in harmonization with 16 CFR part 1239.

The final rule, *Safety Standard for Gates and Enclosures*, 16 CFR part 1239 became effective on July 6, 2021. ASTM provided notification to CPSC of an update to the standard in July 2021. The Commission published a direct final rule in the Federal Register (86 FR 53535) on September 28, 2021 to update the standard.

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

**Activities** On May 4, 2021, staff participated in an ASTM F15.16 Gates & Enclosures subcommittee meeting to discuss a remaining outstanding negative vote from a 2020 ballot item on visual side pressure indicators, which was found non-persuasive in order to be consistent with CPSC’s final rule. Additionally, staff noted that the standard did not include the warning label required in the final rule.

On July 6, 2021, ASTM notified CPSC that they had published a revised 2021 version of ASTM F1004, *Standard Consumer Safety Specification for Expansion Gates and Expandable Enclosures*. In response, the Commission published a direct final rule in the *Federal Register* in September 2021 to update the standard.

On August 3, 2021, staff provided summary data to the subcommittee via email, consisting of 23 incident reports over approximately two years.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

## Hand-Held Infant Carriers

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**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** ASTM F2050-19 *Standard Consumer Safety Performance Specification for Hand-Held Infant Carriers*

**Relevant** 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers*



## Rulemaking

**Standard(s)** The direct final rule to update the corresponding federal regulation, 16 CFR part 1225, *Safety Standard for Hand-Held Infant Carriers*, to incorporate by reference ASTM F2050-19, became effective on January 1, 2021.

**Update**

**Purpose** To work with ASTM on revising the voluntary 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 infant carriers

**Activities** On December 23, 2020, staff participated in a task group meeting dealing with the slip-resistance test procedure. The chair began the meeting by stating that one of the test labs brought up the issue that there appear to be some inconsistencies in the slip-resistance testing. The task group agreed to create a questionnaire on the test procedure for the labs to answer regarding surfaces and cleaning. Staff will participate in the questionnaire. Once the chair has information from the test labs, the group will review the results and identify factors that need to be addressed for consistency.

On July 30, 2021, staff provided summary data to the subcommittee via email.

**Next Action** Staff will participate in the task group and also in the next ASTM subcommittee meeting, when scheduled.

## High Chairs

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**Staff Contact** Marques, Stefanie

**Voluntary**      **ASTM F404-20**      **Standard Consumer Safety Specification for High Chairs**

**Standard(s)**

**Relevant** 16 CFR part 1231, *Safety Standard for High Chairs*

**Rulemaking**

**Standard(s)** In December 2020, ASTM published ASTM F404-20, the latest revision to the *Standard Consumer Safety Specification for High Chairs*. This revision includes revisions to the stability requirement for reclining high chairs. On January 4, 2021, ASTM provided notification to CPSC of an update to the standard. The Commission published a direct final rule in the *Federal Register* (86 FR 17296) on April 2, 2021, to update the standard.

**Update**

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

**Activities** Staff participated in the ASTM subcommittee for high chairs on November 9, 2020. During the meeting, the subcommittee chair announced that the negatives on previous ballot items pertaining to reclining high chairs have been resolved and that the revised standard would be published in December 2020. In addition, a number of new business items were discussed during the subcommittee meeting, including new figures for the reclined seat high chair stability testing procedure. Staff and the group agreed that the proposed revisions added clarity to the new test methods, but they could be further improved. Therefore, a task group was formed to revise the figures, and staff will participate. The task group will also look at the terminology for restraint systems. The subcommittee also discussed a test method for placement of test weights for forward and rearward stability in high chairs that have different seat designs. A task group was formed to address this issue, and staff will participate.

In December 2020, ASTM approved a revised version of F404, which was published in January 2021. On January 4, 2021, ASTM notified CPSC of this revision. The Commission published a direct final rule in the *Federal Register* (86 FR 17296) on April 2, 2021, to update the standard. On March 25, 2021, staff participated in an ASTM F15.16 Weight Placement task group meeting where the issue of test weight placement during stability

testing was discussed. The task group discussion was continued on May 3, 2021, and the subcommittee chair was tasked with sending out a ballot item.

**Next Action** Staff will participate in the next ASTM high chair subcommittee meeting, scheduled for November 2021.

## Infant Bath Seats

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**Staff Contact** Kish, Celestine

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

**Relevant Rulemaking** 16 CFR part 1215, *Safety Standard for Infant Bath Seats*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**Purpose** To work with ASTM on revising the voluntary 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** To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with bath seats in March 2021, and communicated the results to ASTM. Staff did not identify any new hazard patterns for this product since the last review.

On May 4, 2021, staff participated in an ASTM Ad Hoc Scope meeting that included the discussions of whether child shower chairs and infant flotation devices fell under the scope of the infant bathers standard. Consensus was to refer the product to the bather subcommittee, and also the high chair subcommittee. The issue was referred to both subcommittees to be discussed at the next scheduled subcommittee meetings.

**Next Action** Staff will supply incident data on infant bath seats to the ASTM subcommittee and will participate in the next subcommittee or task group meeting, when scheduled.

## Infant Bath Tubs

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**Staff Contact** Kish, Celestine

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

**Relevant Rulemaking** 16 CFR part 1234, *Safety Standard for Infant Bath Tubs*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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**

To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with infant bath tubs in March 2021, and staff communicated the results to ASTM via email. Staff did not identify any new hazard patterns for this product since the last review.

On May 3, 2021, staff participated in an ASTM F15.20 infant bath tubs subcommittee meeting. The subcommittee discussed the CPSC incident data and staff confirmed that incidents appear consistent with previous data. A task group for latching and locking mechanisms was formed, which included staff.

In August 2021, ASTM issued a ballot with four items related to infant bath tubs; latching and locking mechanisms and three instances of alignment with Ad Hoc recommended language. The items remained unresolved at the end of the reporting period.

**Next Action**

Staff will provide incident data on infant bath tubs to the ASTM subcommittee and will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

**Infant Bouncer Seats**

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**Staff Contact** Wanna-Nakamura, Suad

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

**Relevant Rulemaking** 16 CFR part 1229, *Safety Standard for Infant Bouncer Seats*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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** On June 8, 2021, staff participated in an ASTM F15.21 infant bouncer subcommittee meeting to discuss the removal of “sleep-related” wording from the warning labels. The subcommittee decided to form a task group to explore the change, which included staff. The task group met on July 7, 2021. The task group chair introduced draft language to remove existing wording and add instructions never to use the product for infant sleep. Staff suggested modifications to the language to align more closely with the language recommended by the Ad Hoc Language task group. Task group members, including staff, also agreed with an additional proposed statement on what to do if an infant falls asleep because it aligns with safe sleep recommendations. The task group chair sent the language to be included in the next F15 ballot. In August 2021, ASTM issued a ballot that included the change to the warning label language. The item remained unresolved at the end of the reporting period.

**Next Action** Staff will review incident data associated with infant bouncers and attend the next subcommittee meeting in November 2021.

## Infant Inclined Sleep Products

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**Staff Contact** Kish, Celestine

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

**Relevant** 16 CFR part 1236 *Safety Standard for Infant Sleep Products*

**Rulemaking**

**Standard(s)** On June 23, 2021, the Commission published a final rule for 16 CFR 1236  
**Update** *Safety Standard for Infant Sleep Products* in the Federal Register (86 FR 33022).

**Purpose** To work with ASTM on revising the voluntary standard to strengthen its safety provisions addressing hazards to form the basis of a federal standard intended to reduce hazards associated with infant sleep products

**Activities** Staff participated in the ASTM subcommittee meeting held on November 10, 2020. During the meeting, staff provided an update on the SNPR. Also, during the meeting, the Title/Scope, Labeling, and Other Juvenile Products task groups provided updates.

In December 2020, ASTM issued an F15.18 Subcommittee ballot containing one item to revise the introduction, scope, and title of ASTM F3117, removing the word “inclined.” The ballot item received many negative votes. Staff submitted a comment in support of removing the word “inclined” from the title, introduction, and scope, but abstained from voting.

On January 27, 2021 staff participated in an ASTM subcommittee meeting where the previous ballot results were reviewed. The subcommittee found that many of the negative votes were persuasive, and the item was removed from ballot and sent back to the task group for additional work.

On March 30, 2021, staff participated in a F15.18 Standards Comparison/Performance Infant Sleep Products task group meeting, looking at “breathability” of side wall materials, restraints, maximum sleep angle, side height, and general requirements dependent on specific features or materials.

On April 14, 2021, staff participated in a F15.18 Standards Comparison/Performance Infant Sleep Products task group meeting, looking at restraints, side height, and side walls.

On April 22, 2021, staff participated in a subcommittee meeting where the chair presented a redlined version of the standard provided by CPSC to

assist the group with moving forward on the ballot issues. Several subcommittee members voiced support on using the CPSC-provided document as a starting point for revisions.

On May 3, 2021, the subcommittee heard from the Standards Performance Comparison and Title, Introduction, and Scope task groups. In the Standards Performance Comparison task group, there was discussion about starting the standard from scratch and using existing requirements in the standard with a reduced angle of 10 degrees or less. In the Title, Introduction, and Scope task group, task group members decided to ballot the same wording as the CPSC's SNPR, removing the word "inclined," seatback angle of 10 degrees or less, and refer to bassinet standard for all other performance requirements. Discussions within the task groups indicate there is not a consensus as to the path forward within the ASTM subcommittee.

On June 23, 2021, the Commission published a final rule for 16 CFR part 1236 *Safety Standard for Infant Sleep Products*. The rule will become effective on June 23, 2022.

On September 30, 2021, staff emailed comments in the form of a redlined version of the Standard to the subcommittee chair on the proposed draft revisions to ASTM F3118-17a to provide recommendations to the subcommittee during their work on revising the standard.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

## Infant Swings

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**Staff Contact** Torres, Carlos

**Voluntary Standard(s)** **ASTM F2088-21** **Standard Consumer Safety Specification for Infant and Cradle Swings**



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

**Rulemaking**

**Standard(s)** In October 2020, ASTM notified CPSC of the 2020 revision to ASTM F2088. In January 2021, the Commission published a direct final rule in the Federal Register, to update 16 CFR part 1223 *Safety Standard for Infant Swings* to incorporate by reference ASTM F2088-20 (86 4961). In June 2021, ASTM published ASTM F2088-21 *Standard Consumer Safety Specification for Infant and Cradle Swings*. This revision includes changes to the age and developmental information for infant and cradle swings to maintain consistency between the scope, definitions, and warnings sections of the standard. Additionally, the revision harmonizes the age and developmental information with the ASTM F2194 Bassinets and Cradles standard. Also, this revision harmonizes the battery cautionary information for consistency with other juvenile product standards. On August 2, 2021, ASTM provided notification to CPSC of the update to the standard. Staff was developing a draft briefing package for Commission consideration at the end of the reporting period.

**Update**

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

**Activities** In October 2020, ASTM notified CPSC of the 2020 revision to ASTM F2088. In response to the notification, staff prepared a briefing memo to update 16 CFR part 1223, in accordance with Pub. L. No. 112-28. On March 5, 2021, staff sent a letter to inform ASTM that the Commission had accepted the revised voluntary standard published a direct final rule in the *Federal Register*, to update the Safety Standard for Infant Swings, 16 CFR part 1223, to incorporate by reference ASTM F2088-20 (86 Fed. Reg. 4961 (Jan. 19, 2021)).

Staff also participated in the ASTM subcommittee meeting held on November 10, 2020, where staff provided a brief overview about the update to the mandatory rule for infant swings (the Public Law No. 112-28 update). In addition, the task groups provided reports on strangulation, a proposed age-grading change for cradle swings, scope clarification, and stability testing.

On March 12, 2021, ASTM issued an F15 ballot containing three revision items for the swing standard: (1) stability testing, which received two negative votes, (2) ad hoc battery language, which passed, and (3) age/developmental information, which received one negative vote that was withdrawn after some editorial changes.

On April 7, 2021, staff participated in a Strangulation task group meeting. The task group discussed a non-fatal entanglement incident, a staff proposal for testing with the small head probe, and strap definition/terminology and applicability of tethered strap requirement. Task group members expressed concerns about the staff proposal, proposing instead shortening the length requirement. The meeting also discussed staff's concerns with the current definitions of tethered strap, frame, and restraint system.

On May 3, 2021, staff participated in an Infant Swings subcommittee meeting, where the ballot results and task group activity were discussed. One of the negative votes on stability testing was found persuasive, but the other two items moved forward for publication.

On June 15, 2021, staff participated in a Strangulation task group meeting to discuss the definition, requirement, and testing of "tethered strap(s)" on infant swings. Staff presented concerns with current definitions and testing in the standard.

In June 2021, ASTM published ASTM F2088-21 *Standard Consumer Safety Specification for Infant and Cradle Swings*. On August 2, 2021, ASTM provided notification to CPSC of an update to the standard. Staff was developing a draft briefing package for Commission consideration at the end of the reporting period.

**Next Action** Staff will deliver a draft briefing package to the Commission for consideration. Staff will review incident data and report the results to ASTM and will also participate in the next ASTM subcommittee meeting, scheduled for November 2021.

## Infant Walkers

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**Staff Contact** Mordecai, Benjamin

**Voluntary Standard(s)** ASTM F977-18 *Standard Consumer Safety Performance Specification for Infant Walkers* (Note: 16 CFR Part 1216 references the -12 version)

**Relevant Rulemaking** 16 CFR part 1216 *Safety Standard for Infant Walkers*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

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

**Activities** On February 26, 2021, staff participated in a task group meeting to discuss potential new ballot items for the standard. Five major sections from the standard were discussed for balloting:

- Occupant Leaning Outward Over Edge of Walker Test;
- Walker and Dummy Positioning for Step Tests;
- Forward Tip Resistance;
- A new section in the annex detailing the stair test procedure; and
- An update on the specified weight for the Mark II CAMI dummy used for testing.

The task group reviewed the draft ballot prepared by the subcommittee chair and discussed the provisions. Staff raised questions on the history of the “stability index” as it is currently defined, which was discussed by the group.

In March 2021, ASTM issued an F15 ballot with five items relating to the infant walker standard. These ballot items pertain to the five sections

discussed at the last task group meeting. The item on the new annex sections related to the stair test procedure was removed from the ballot and the other items are unresolved. The ballot results were then discussed in a May 3, 2021 subcommittee meeting.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

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

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**Staff Contact** Lee, Simon

**Voluntary** UL 5500, 1<sup>st</sup> Edition *Remote Software Updates*

**Standard(s)**

UL 2900-1, 1<sup>st</sup> Edition *Software Cybersecurity for Network-Connectable Devices*

**ASTM F3463-21** *Standard Guide for Ensuring the Safety of Connected Consumer Products*

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** In October 2020, ASTM published ASTM F3463-20, the new *Standard Guide for Ensuring the Safety of Connected Consumer Products*. In September 2021, ASTM approved the revised ASTM F3463-21, which will be published next fiscal year.

**Purpose** To work with UL, ASTM, and other stakeholders to revise existing voluntary standards and develop new voluntary standards to address hazards associated with connected consumer products

**Activities** Staff participated in two subcommittee meetings on January 22, 2021, and on March 5, 2021. The subcommittee reviewed previous comments and discussed potential future revisions to F3463. Staff proposed that F3463 should reference ANSI/CTA-2088, *Baseline Cybersecurity Standard for Devices and Device Systems*, the subcommittee agreed to list the ANSI/CTA-2088 in the appendix. The subcommittee, with staff input, also agreed to: change the definition of a “consumer product” to align with the Consumer Product Safety Act (CPSA); clarify the conformity assessment; and include other or updated cybersecurity references in the document’s appendix.

On February 2, 2021, staff participated in a meeting with AHAM, reviewing a variety of topics of interest to AHAM and its members. During the meeting, AHAM indicated that UL 5500 will gradually get integrated in specific end-product voluntary standards, but UL 2900 will not be referenced in individual end-product voluntary standards. Compliance with UL 2900, and UL 5500 for the time being, are assured through a certification requirement decision (CRD) where the testing laboratory can add additional product requirements not in the applicable standard for certification.

Staff participated in two more subcommittee meetings, on April 9, 2021 and May 14, 2021, where the subcommittee discussed action items from previous ballot comments with active participation from staff. Terms such as “risks,” “hazardization,” “failure mode and effects analysis,” “fault tree analysis,” and “vulnerable sub-population” were updated throughout the standard guide. Wording was added to ensure existing or future accompanying connected product standards used would be correct, not overreaching, and non-conflicting. The subcommittee balloted the revision in July 2021, which passed. As of the end of the reporting period, the next revision to the guide has been approved, but not yet published.

**Next Action** Staff will continue to work with the ASTM F15.75 subcommittee to monitor ASTM F346 and update as needed. Staff will work with UL 5500 STP and UL 2900 STP with any future revisions to those standards needed.

## Liquid Laundry Packets

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**Staff Contact** Hurley, Jill

**Voluntary Standard(s)** ASTM F3159-15 *Standard Safety Specification for Liquid Laundry Packets*

**Relevant Rulemaking** N/A

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

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

**Activities** Staff attended a scope task group meeting on October 5, 2020, with the goal of determining whether the scope of the ASTM voluntary standard should be expanded to include other populations, mainly seniors. The American Cleaning Institute reviewed data for populations 50 years or older. Staff was asked to provide comparable NEISS data for the next task group meeting.

On October 6, 2020, the subcommittee members met to review laundry packet exposures for the year 2019, involving children under the age of 6 years. Data were presented by the Rocky Mountain Poison and Drug Center on behalf of the American Cleaning Institute, and by epidemiology staff from CPSC. Incidents were compared to the baseline year of 2012, and to post-implementation periods of 2017 through 2019. Next, the Scope Task Chair summarized the task group's last meeting, and the incident data regarding unintentional liquid laundry packet exposures in populations 50 years and older were reviewed. Review of CPSC data for this adult population is pending submission. The Subcommittee task chair requested all task

groups meet to discuss the data presented at this meeting, to determine if proposals should be put forward to ballot revisions to the ASTM F3159 standard.

On December 3, 2020, the scope task group met again, and the NEISS data results for senior exposures were reviewed.

On January 5, 2021, staff sent a letter and attached report to ASTM, the fifth in a series of reports, regarding ER visits associated with liquid laundry packets in the post-implementation phase of the standard.

On January 19, 2021, and March 8, 2021, staff participated in the Additional Measures task group meetings to determine the “how and why” child exposures are continuing to happen.

On April 21, 2021, staff participated in a subcommittee meeting to discuss task group activities. The meeting included a presentation by a physician from The Children’s Hospital of Philadelphia, focused on exposures and injury prevention in relation to what is a reasonable level of risk. Task groups reported on recent Scope and Additional Measures task group activities. Both task groups determined a more in-depth review of data in regard to injuries per year, per age, per severity, and deaths per units sold is needed in addition to a snap-shot of incidents involving other household cleaning agents. A call for re-establishment of the Data Task Group was made for members to join. Staff mentioned the CPSC report “Effect of Novel Coronavirus Pandemic on 2020 Preliminary NEISS Estimates” would soon be available. Members requested a more detailed analysis of soaps and detergents when the report becomes available. Two new business items were discussed regarding new products potentially in scope and review of ACI’s previous contract with Rocky Mountain Poison Control. The contract will enable Rocky Mountain to report LLP exposures including 2020 data, like it has in the past.

On August 31, 2021, staff participated in a Data task group meeting, where one of the chairs summarized the two main sources for incident data: Rocky Mountain Poison Control data and CPSC’s NEISS data. CPSC plans to provide further details on what constitutes “Soaps and Detergents” in the CPSC report, “Effect of Novel Coronavirus Pandemic on 2020 Preliminary NEISS Estimates,” as requested in the subcommittee meeting. Other potential data sources were discussed along with their potential issues.

**Next Action** Staff will participate in the next subcommittee meeting, scheduled for October 2021.

## LP Gas Appliances

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**Staff Contact** Kim, Yeon Souk

**Voluntary Standard(s)** ANSI Z21.97-2017/ *Outdoor Decorative Gas Appliances*  
CSA 2.41-2017

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

NFPA 58, 2020 *Liquefied Petroleum Gas Code*  
Edition

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** The voluntary standards listed above were not updated during the reporting period.

**Purpose** To work with CSA, NFPA, and other stakeholders to revise the voluntary standards to strengthen safety provisions and to ensure that the voluntary standards address hazards associated with LP-gas appliances, such as gas grills and fire pits

**Activities** On February 25, 2021, staff participated in a task force meeting to discuss adding a requirement to ANSI Z21.97 to prevent debris from clogging the venturi in outdoor gas appliances. Staff supported adding a requirement to use a screen. However, other task force members suggested the screen could lead to inconsistent fuel and air flows, adding that this is inconsistent with other international standards. The task force agreed to propose adding labeling and consumer instructions to check the venturi for debris. The task



force prepared a draft proposal incorporating staff comments. The task force chair will submit the draft proposal and the rationale to the TSC.

**Next Action** Staff will participate in the next TSC meeting scheduled for October 2021, and staff will support venturi requirements. Staff will continue to monitor NFPA 58.

## Magnet Sets

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**Staff Contact** Harsanyi, Stephen

**Voluntary Standard(s)** **ASTM F3458 – 21** ***Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index  $\geq 50 \text{ kG}^2 \text{ mm}^2$ )***

**Relevant Rulemaking** Petition CP 17-1 Requesting Rulemaking for Magnet Sets (withdrawn on April 22, 2020). Note: Despite the withdrawal, in response to petition CP 17-1, staff submitted an informational briefing package on magnet sets to the Commission on June 3, 2020, and staff plans to submit a draft NPR briefing package to the Commission at the start of FY 2022.

**Standard(s) Update** In March 2021, ASTM published ASTM F3458 – 21, the new *Standard Specification for Marketing, Packaging, and Labeling Adult Magnet Sets Containing Small, Loose, Powerful Magnets (with a Flux Index  $\geq 50 \text{ kG}^2 \text{ mm}^2$ )*.

**Purpose** To work with ASTM to revise the voluntary standard to adequately address the hazard associated with ingestion of magnets from magnet sets

**Activities** In late FY 2020, ASTM issued an F15 ballot containing four items, all to resolve negative votes from a previous ballot on magnet sets. Staff voted

on these four items. In October 2020, ASTM published the ballot results showing that all four negatives were found to be not persuasive.

The new standard, ASTM F3458 – 21, was approved in February 2021 and was published in March 2021.

In May 2021, staff provided data to the subcommittee. On May 27, 2021, staff participated in a subcommittee meeting where these data were discussed along with other topics, such as an addition of performance requirements to the standard, continued instances of marketing to children at point-of-sale and through various social media sites, instances of hazardous uses of magnet sets on social media, communication with Acting Chairman Adler regarding enforcement of F3458 – 21, CPSC enforcement activities, and CPSC FY 2021 operating plan activities pertaining to magnets, including outreach efforts. Two task groups were formed, one for performance requirements for Adult Magnet Sets, and the other task group will consider efforts in education, marketing, enforcement, and regulation. Staff joined the former task group.

On June 17, 2021, staff participated in a Performance Requirements task group meeting. The task group discussed magnet set performance requirements, potential alignment with ASTM F963 requirements for magnets in toys, other test methods, potential consequences on product utility, and the effectiveness of safety messaging.

On June 29, 2021, staff participated in a Performance Requirements task group meeting. The task group discussed the title and scope of the standard, the definition of a magnet set, and the role of safety messaging and packaging requirements.

On July 12, 2021, staff participated in a Performance Requirements task group meeting. The task group continued discussions regarding the title of the standard and product scope, such as whether to include magnets sold individually for use with or as a magnet set, and whether certain magnet shapes, compositions, and purposes should exclude them from the performance requirements.

On September 9, 2021, staff participated in a Performance Requirements task group meeting. The task group continued discussions regarding the product scope, as well as statistical sampling of magnets and the roles of warning statements and packaging requirements.

On September 13, 2021, staff participated in a subcommittee meeting, where the task groups reported on their work. Topics included marketing and education opportunities, such as webpages and outreach, and specific performance requirements. The performance requirements raised included

sampling requirements, maximum attractive force, and safety information and packaging. Additionally, staff provided an update on ongoing rulemaking activities.

**Next Action** At the beginning of October 2021, staff will deliver a draft NPR briefing package for Commission consideration. Staff will participate in the next ASTM subcommittee and task group meetings, when scheduled. Staff anticipates a ballot in the near term, which is likely to include new performance and labeling requirements.

## Mowers

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**Staff Contact** Newens, Andrew

**Voluntary Standard(s)** ANSI/OPEI B71.1-2017 *Standard for Consumer Turf Care Equipment – Pedestrian-Controlled Mower and Ride-On Mowers – Safety Specification*

**ANSI/OPEI 60335-2-107-2020** *Particular Requirements for Robotic Battery Powered Electrical Lawnmowers*

**Relevant Rulemaking** 16 CFR part 1205, *Safety Standard for Walk-Behind Power Lawn Mowers* and Petition CP 19-1 on *Walk-Behind Power Lawn Mowers* (withdrawn May 2020)

**Standard(s) Update** In December 2020, OPEI published ANSI/OPEI 60335-2-107-2020, the latest revision to *Particular Requirements for Robotic Battery Powered Electrical Lawnmowers*. This revision includes editorial changes and a technical change to the foot probe diagram.

- Purpose** To work with OPEI to revise their voluntary standards to address hazards associated with walk-behind and riding power lawn mowers
- Activities** On September 29, 2021, staff sent the OPEI committee a letter expressing concern with hazards related to runover, backover, and rollover of riding mowers. Staff provided OPEI with information on CPSC’s latest incident data search tools that are available on CPSC’s website, and encouraged OPEI to use the tools to evaluate riding mower hazards.
- Next Action** Staff will share redacted incident data with OPEI and continue engaging OPEI on the runover, backover, and rollover hazards associated with riding mowers.

## Nanotechnology

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**Staff Contact** Matheson, Joanna

<b>Voluntary Standard(s)</b>	ASTM E3025-16	<i>Standard Guide for Tiered Approach to Detection and Characterization of Manufactured Silver Nanomaterials in Textiles</i>
	ASTM E2525-08 (2013)	<i>Standard Test Method for Evaluation of the Effect of Nanoparticulate Materials on the Formation of Mouse Granulocyte-Macrophage Colonies</i>
	ASTM E2526-08(2013)	<i>Standard Test Method for Evaluation of Cytotoxicity of Nanoparticulate Materials in Porcine Kidney Cells and Human Hepatocarcinoma Cells</i>

ASTM WK48313	Potential new guide for collection and generation of environment, health, and safety information for nanomaterials and nano-enabled products
ASTM WK52417	Potential new standard to determine total silver in textiles by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) or Inductively Coupled Plasma Mass Spectrometry (ICP-MS) analysis
ASTM E3238-20	<i>Standard Test Method for Quantitative Measurement of the Chemoattractant Capacity of a Nanoparticulate Material in vitro</i>
ASTM WK60553	Potential new voluntary standard for evaluation of nanoparticulate material internalization by phagocytic cells in vitro
ASTM WK60554	Potential new voluntary standard for detection of nitric oxide production
ISO/TS 13830:2013	<i>Nanotechnologies — Guidance on voluntary labelling for consumer products containing manufactured nano-objects</i>
<b>ISO/TS 21356-1:2021</b>	<b><i>Structural characterization of graphene Part 1: Graphene from powders and dispersions</i></b>
<b>ISO/TR 22293:2021</b>	<b><i>Evaluation of methods for assessing the release of nanomaterials form commercial, nanomaterial-containing polymer composites</i></b>

**ISO/TS 21975:2020** *Polymeric nanocomposite films for food packaging with barrier properties - Specification of characteristics and measurement methods*

**Relevant** N/A

**Rulemaking**

**Standard(s)** In October 2020, ISO published ISO TS 21975:2020, new international standard for *Polymeric nanocomposite films for food packaging with barrier properties - Specification of characteristics and measurement methods*.

**Update**

In February 2021, ISO published ISO TS 21356:2021, the new international standard for *Structural characterization of graphene Part 1: Graphene from powders and dispersions*.

In July 2021, ISO published ISO/TR 22293:2021, the new international standard *Evaluation method for assessing the release of nanomaterials from commercial, nanomaterial containing polymer composites*.

**Purpose** To work with ASTM and ISO technical committees to develop and revise voluntary standards to strengthen safety provisions addressing hazards associated with nanotechnology

**Activities** ISO Technical Committee 229 (ISO TC/229) focuses on standardization in the field of nanotechnologies, understanding and control of matter and processes at the nano scale, where the onset of size-dependent phenomena usually enables novel applications, as well as use of nanoscale materials to create improved materials, devices, and systems that exploit these new properties. Specific working groups address the development of standards and guides for terminology and nomenclature; metrology and instrumentation; test methodologies; modelling and simulations; and science-based health, safety, and environmental practices.

On October 14-15, 2020, staff participated in working group meetings of the U.S. TAG to ISO TC/229. The meetings were held to continue developing various ISO TC/229 projects.

On October 27-28, 2020, the ISO TC/229 working group 3 (Health, Safety and Environmental Aspects of Nanotechnologies) met for ballot resolution to

resolve comments received regarding various nanotechnology ISO work items. Staff participated in the discussion, and the comments were resolved during the meetings.

The ISO TC/229 working group 3 (Health, Safety and Environmental Aspects of Nanotechnologies) and 5 (Products and Applications) met on November 2-13, 2020, to discuss high-priority projects and new project proposals. Staff participated in both working groups, discussing projects and proposals.

On November 30, 2020, and on December 1, 2020, staff participated in the ASTM E56 subcommittee meetings for Physical and Chemical characterization (E56.02), Environmental, Health and Safety (E56.03), Nano-Enabled Consumer Products (E56.06), Workforce Education and Development (E56.07), and Nano-Enabled Medical Products (E56.08). The meeting participants discussed projects focusing on the characterization and quantification of nanomaterials and best analytical methods.

Staff also participated in the December 10, 2020 meeting of the U.S. TAG to ISO TC/229, where actions taken during the ISO/TC 229 Plenary and Subgroup Meetings, held in November, were discussed. In addition, staff summarized the recommendations provided by TC/229 working group 3 attendees on the CPSC proposed method for characterizing and quantifying nanomaterials released from wood products. Additional U.S. TAG members volunteered to participate in the proposed project.

On February 2, 2021, staff participated in another ISO U.S. TAG meeting for TC/229. Before the new project proposal presentations, it was noted that six working group items were recently published or submitted for publication. These items included the CPSC co-sponsored technical report 22293, "Evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial containing polymer composites." Additional standards published of interest were "*Structural characterization of graphene Part 1: Graphene from powders and dispersions*," "*Assessment of protein secondary structure during an interaction with nanomaterials using ultraviolet circular dichroism*" and "*Polymeric nanocomposite films for food packaging with barrier properties-Specification of characteristics and measurement methods*."

On April 14-15, 2021, staff participated in the ISO/TC 229 Nanotechnologies Working Group and U.S. TAG General Meetings to discuss current projects and potential new work item proposals (NWIPs). Presentations were given on three proposed projects. The US TAG approved unanimously for all proposals to be raised at the working group general meetings in May 2021. The first proposal was to revise ISO/TR 13329, Material safety data sheets,

the second proposal was for a new work item proposal on a graphene material specification, and the third proposal was for a method that removes impurities from carbon nanotubes.

On May 10-11, 2021, staff participated in the ASTM E56 Nanotechnology committee meetings for Terminology and Informatics (E56.01), Physical and Chemical characterization (E56.02), Nano-enabled Consumer Products (E56.06), and Nano-enabled Medical Products (E56.08).

During May 10-21, 2021, staff participated in ISO/TC 229 Nanotechnologies Working Group meetings to discuss current projects and potential NWIPs. On Monday May 10, 2021, the general meeting of Working Group 3 (WG3, Health Safety and the Environment) was held during which project leaders provided brief verbal updates on their respective work and their goals for the targeted project meetings. From Tuesday May 11, 2021 through Friday, May 21, 2021, staff participated primarily in WG3 meetings, and participated in other working group meetings, when possible. CPSC presented the draft strawman for PWI 5265 *Method for characterizing and quantifying nanomaterials released from wood products*. The draft document was reviewed and comments provided, including consideration of including aspects of surface properties since they may change during material handling or release. Development of a survey is the next step; the survey will ask questions to help determine the project's scope and whether the final product is a TR or TS. Some experts would like to see a broader scope, particularly if the project product is a TR. A broader scope could include different surfaces, products intended for indoors and outdoors, aging, and populations of interest (e.g., workers and consumers). Several experts expressed interest in helping with the survey.

**Next Action** Staff will continue to be active in the ASTM E56 subcommittees and will participate in the next ASTM E56 subcommittee meetings and for ISO TC 229 meetings, both scheduled for November 2021. Staff will continue to develop a CPSC-proposed method for characterizing and quantifying nanomaterials released from wood products.

## National Electrical Code

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**Staff Contact** Miller, Einstein

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

**Relevant Rulemaking** N/A

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with the NFPA to revise the code, 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 is a member of two of the 18 NFPA 70 CMPs responsible for the requirements within the code.

Staff participated in many meetings as part of the first draft phase of the next edition to NFPA 70.

Staff participated in six CMP 2 task group meetings, on November 4, 2020, November 10, 2020, November 17, 2020, November 24, 2020, December 15, 2020, and December 16, 2020. The task group focused on public input related to ground-fault circuit interrupters (GFCIs) to mitigate electrocution and shock hazards. The widespread use of GFCIs has been effective to mitigate shock and electrocution hazards. Staff supported the continued use of GFCIs. Staff also provided updated incident data on burn injuries involving countertop appliances.

Staff participated in the full CMP 2 committee meeting held from January 11-16, 2021, to prepare the first draft of the CMP 2 articles for the next edition of NFPA 70. The initial ballots during the meeting favored expansion of both GFCI and arc-fault circuit interrupters (AFCIs) to most other

remaining branch circuits for new residential construction. Staff supported the use of GFCI and AFCI technologies as an effective means to mitigate electrical shock and fire incidents in dwellings.

Staff participated in 11 CMP 17 task group meetings, on November 5, 2020, November 10, 2020, November 12, 2020, November 17, 2020, November 19, 2020, November 24, 2020, December 1, 2020, December 3, 2020, December 8, 2020, December 10, 2020, and December 17, 2020. The task group focused on grounding, bonding, and GFCIs to mitigate electrocution and shock hazards in swimming pools and similar installations. Staff actively supported proposals to add requirements for a GFCI receptacle for equipment rooms, vaults, or pits for a spa, hot tub, fountains and similar installations.

Staff participated in the full CMP 17 committee meeting held from January 4 to 8, 2021 to prepare the first draft of the articles for the next edition of NFPA 70. Staff actively participated in discussions on numerous proposals including removing some of the text in the requirements for immersion protection for handheld hair dryers, which the CMP accepted. Staff also supported proposals to add requirements for a GFCI-protected receptacle for: equipment rooms, vaults, or pits for all swimming, wading, therapeutic, and decorative pools; fountains; hot tubs; spas; hydromassage bathtubs and similar installations, which the CMPs accepted.

After release of the first draft of the next (2023) edition of NFPA 70, staff submitted a public comment and CPSC burn data to NFPA 70 on August 3, 2021. This comment supported a previous public input recommending the removal for the allowance of receptacle outlets located below countertops or work surfaces. Staff pointed out that the use of receptacles below the countertop to supply cord-and-plug-connected cooking appliances, such as deep fryers and sous vide cookers, exposes the appliance cord to being pulled, which can cause the appliance to tip and spill hot contents, resulting in severe burns and death.

Staff participated in three meetings as part of the first draft phase of the next edition to NFPA 70:

- Staff participated in a CMP 2 task group meeting on September 30, 2021, where staff supported the public comments for installation and use of GFCIs and AFCIs to mitigate shock and fire hazards. Staff also advocated for removing the allowance for receptacle outlets located below countertops, reiterating the position detailed in the public comment. These task group meetings continued into October 2021.

- Staff participated in two CMP 17 task group meetings, on September 28, 2021, and September 30, 2021, where staff supported proposals to clarify GFCI and Special-Purpose GFCI requirements for receptacles, lighting outlets, and luminaires near pools, fountains, and similar locations.

Staff also participated in four meetings with a flammable refrigerant working group focused on requirements in NFPA 70 that affect residential HVAC appliances, on May 21, 2021, May 25, 2021, June 4, 2021, and June 8, 2021. The working group concluded, and staff supported, that residential HVAC equipment should be subjected to greater scrutiny and more stringent requirements for available touch currents than what was proposed in the draft 2023 edition of NPFA 70. To address the issue, the working group prepared a proposal, which was submitted by AHRI to the NEC during the public comments period and the working group proposed a change to UL 60335-2-40: *Standard for Household and Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers*.

**Next Action** Staff will continue to participate in the development of the 2023 edition of NFPA 70, including participating in additional CMP 2 task group meetings and the second draft meeting both scheduled for October 2021.

## Non-Full-Sized Cribs and Play Yards

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**Staff Contact** Nesteruk, Hope

<b>Voluntary Standard(s)</b>	ASTM F406-19	<i>Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards</i>
	ASTM F2933-21	<i>Standard Consumer Safety Specification for Crib Mattresses</i>

<b>Relevant</b>	16 CFR part 1220, Safety Standard for Non-Full-Size Baby Cribs
<b>Rulemaking</b>	16 CFR part 1221, Safety Standard for Play Yards
<b>Standard(s) Update</b>	<p>In July 2021, ASTM published ASTM F2933-21 <i>Standard Consumer Safety Specification for Crib Mattresses</i>. This revision includes requirements affecting after-market mattresses for non-full-size cribs and play yards.</p> <p>In September 2021, staff sent a draft final rule to the Commission for consideration (see <i>Crib Mattresses</i> section for more information).</p>
<b>Purpose</b>	To work with ASTM to revise the voluntary standards to strengthen safety provisions and to ensure that the voluntary standards and the corresponding federal mandatory standards maintain adequate safety levels addressing hazards associated with non-full-size cribs and play yards
<b>Activities</b>	<p>In September 2020, ASTM issued a ballot with four items pertaining to the non-full-size crib and play yard voluntary standard. The ballot items were for revisions to the instructions, the accessories requirement, a figure in the stability requirement, and ad hoc language. All of the balloted items received negatives and/or comments. Two other ballots were issued by ASTM F15 during the reporting period, containing a total of three items for this standard. In December 2020, there were two ballot items issued: revision to the definition of an “accessory,” and a change to the stability test fixture diagram. In March 2021, the ad hoc warnings language was re-balloted, after considering the negative votes and comments from the September 2020 ballot.</p> <p>On November 9, 2020, staff participated in the ASTM subcommittee meeting during which the ballot results were reviewed. In addition, task groups provided reports. The stability task group discussed inconsistencies between test laboratories test devices that might lead to discrepancies in testing results. The task group proposed changes to the test fixture diagram in the standard. The subcommittee voted to send this out to ballot. The mattress fit and thickness task group, led by staff, provided an update report and advised members that the NPR for crib mattresses was still open for comments. On December 17, 2020, staff participated in a Mattress Fit and Thickness task group meeting to discuss proposals for measuring the gap between the mattress and the play yard side wall.</p>

On January 6, 2021, staff participated in a Play Yard Ad Hoc Task Group meeting to resolve the negative votes from the September 2020 ballot.

On January 21, 2021, staff participated in a Mattress Fit and Thickness Task Group meeting, where staff stepped down as task group chair, and the new chair reviewed the proposed test method that had been developed.

On February 15, 2021, staff participated in a Mattress Floor Definition Task Group meeting to discuss a product with a mattress pad sewn into the floor, leaving no possible gaps on the side. The task group agreed that the definition of a “mattress” (or “mattress pad”) should specify that it is removable from the unit. The task group chair drafted language for balloting.

On March 4, 2021, staff participated in a Crib Mattresses Standard Language Review Task Group meeting to discuss warning language.

On April 20, 2021, staff participated in a Mattress Fit and Thickness Task Group meeting to continue discussion on how to measure gaps between a mattress and play yard sidewall with mention of a new gauge and review of potential new language for the standard.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

## Playground Equipment (Home)

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**Staff Contact** Lee, Kevin

**Voluntary Standard(s)** ASTM F1148-21 **Standard Consumer Safety Performance Specification for Home Playground Equipment**

**Relevant Rulemaking** N/A

**Standard(s) Update** In May 2021, ASTM published ASTM F1148-21 *Standard Consumer Safety Performance Specification for Home Playground Equipment*. This revision includes a clarification that a continuous slide surface may be comprised of multiple components.

**Purpose** To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with home playground equipment

**Activities** Staff participated in the subcommittee meeting held on November 16, 2020. During this meeting, incident data, supplied by staff pertaining to entrapments and lateral slide ejections, were discussed. The subcommittee formed a task group to review the data in more detail. The task group met on December 9, 2020, and staff participated in the meeting. The task group agreed to categorize the home slide incident data for further review at the next meeting. On January 6, 2021, the task group met again; and after a review of the data, the task group concluded that the standard adequately addresses slide fall hazards. The task group suggested future work to strengthen the warning language to help address the strangulation deaths on home slides.

In December 2020, ASTM issued an F15 main committee ballot containing one item for F1148 regarding slide surfacing. Three negative votes were cast on the ballot item that were subsequently found to be not persuasive. In May 2021, ASTM published the new standard.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021.

## Playground Equipment (Public)

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**Staff Contact** Lee, Kevin

**Voluntary Standard(s)**      **ASTM F1487-21**      **Standard Consumer Safety Performance Specification for Public Playground Equipment**

**Relevant Rulemaking**      N/A

**Standard(s) Update**      In May 2021, ASTM published ASTM F1487-21, the latest revision to *Standard Consumer Safety Performance Specification for Public Playground Equipment*. This revision includes updating the handrail requirements to align with the *2010 Americans with Disabilities Act (ADA) Standards for Accessible Design*, adding references to ASTM F3313 and F3351, adding performance requirements for trolley rides, clarifying the definition of an “elevated play surface,” updating the “placement of equipment” figure, and adding a hazard identification and risk assessment section in the appendix.

**Purpose**      To work with ASTM to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with public playground equipment

**Activities**      During the reporting period, ASTM issued four F15 main committee ballots containing 16 different revision items for the standard and 13 items to resolve previous negative votes. In November and December 2020, staff cast negative votes and commented on two of the ballot items pertaining to bannister rails/gliders. Staff voted negative for various reasons, including concerns that the requirements outlined in the standard and ballot items would allow for glider designs similar to ones recalled in the past, to be considered compliant with the standard. Both negative votes were subsequently found to be non-persuasive. Other ballot items pertained to trolley rides, seesaws, horizontal rotating equipment, and other issues. The updated revised standard was published in May 2021.

On February 16, 2021, ASTM issued an F15.29 subcommittee ballot containing an administrative ballot item dealing with harmonizing the CPSC Public Playground Handbook and the ASTM standard. The ballot asked the subcommittee to approve sending a letter to CPSC with recommendations to update the CPSC Public Playground Handbook. That ballot item passed. On April 1, 2021, ASTM wrote to CPSC on behalf of subcommittee F15.29

with a proposal for harmonizing the U.S. Consumer Product Safety Public Playground Safety Handbook with ASTM F1487 Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.

Staff participated in the subcommittee meetings held on November 17, 2020, January 28, 2021, and March 1, 2021. During the November 2020 meeting, staff provided the subcommittee with incident data pertaining to gliders. Ballot results were discussed during the subcommittee meetings on January 28 and March 1, 2021.

Staff also participated in various task group meetings during the reporting period, including an ASTM F14.10 fencing meeting on December 17, 2020, fully enclosed play structures on February 10 and 25, 2021, a F15.29 Glider task group meeting on June 14, 2021, and the handbook harmonization task group meeting on November 10, 2020. The purpose of the November meeting was to continue to review the handbook for changes that could improve harmonization of the Handbook with ASTM F1487.

**Next Action** Staff will participate in next subcommittee meeting.

## Playground Surfacing

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**Staff Contact** Lee, Kevin

<b>Voluntary Standard(s)</b>	ASTM F1292-18e1	<i>Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment</i>
	ASTM F1951-14	<i>Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment</i>



ASTM F3012-14	<i>Standard Specification for Loose-Fill Rubber for Use as a Playground Safety Surface Under and Around Playground Equipment</i>
ASTM F2223-19a	<i>Standard Guide for ASTM Standards on Playground Surfacing</i>
<b>ASTM F3313-20</b>	<b><i>Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field</i></b>
ASTM F3351-19	<i>Standard Test Method for Playground Surface Impact Testing in Laboratory at Specified Test Heights</i>

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** In November 2020, ASTM published ASTM F3313-20, the latest revision of the *Standard Test Method for Determining Attenuation of Playground Surfaces*. The revision includes minor changes to the reporting requirement section of the standard.

**Purpose** To work with ASTM to revise the voluntary standards to address the hazard patterns associated with playground surfacing

**Activities** Staff participated at the ASTM F08.63 subcommittee meeting on playground surfacing held on November 19, 2019, during which staff discussed sharp surface and fall incident data supplied by staff to ASTM earlier that month. On May 20, 2021, staff participated in an F08.63 subcommittee meeting for playground surfacing, where the status of standards and task group activities in the subcommittee were discussed.

During the reporting period, ASTM issued several F08 main committee ballots containing items for the playground surfacing standards. In October 2020, ASTM balloted F3012-14 for reapproval (without changes) and balloted a revision to the instrumentational check section of F3313-20. Both of these ballot items received negative votes; thus, they were not approved. In December, ASTM F08 issued two other ballot items: another revision to the instrumentation check section of F3313-20, and an update with revisions to F1951-14. Both of these ballot items also received negative votes; and thus, they were not approved. In March, ASTM F08 issued a ballot item regarding the revision of F3313-2020 *Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field*. This ballot item received multiple negative votes that remained unresolved at the end of the reporting period

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

## Pools, Portable Unprotected (Child Drowning)

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**Staff Contact** Bathalon, Susan

<b>Voluntary Standard(s)</b>	ASTM F2666-16	<i>Standard Specification for Aboveground Portable Pools for Residential Use</i>
	ANSI/APSP/ICC-4a-2013	<i>American National Standard for Above-Ground/On-Ground Residential Pools</i>
	ANSI/APSP/ICC-8 2005 (R2013)	<i>American National Standard Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs</i>
	ASTM WK76767	Potential new standard for computerized vision for drowning detection in residential swimming pools

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** The voluntary standards listed above were not updated during the reporting period.

**Purpose** To work with ASTM and PHTA (formerly APSP) to revise the voluntary standards to strengthen safety provisions addressing hazards associated with residential drowning in pool products

**Activities** Between October 13, 2020, and August 10, 2021, staff participated in ten separate ASTM task group meetings to review and discuss proposed requirements for computer-based pool drowning detection systems. The task group commenced in FY 2020, and it is in the process of drafting proposed requirements for new safety technology, such as an electronic computer vision that can add notification features to alert caregivers that a drowning event is occurring.

The task group researched three areas, including marketed technology, the scientific process of drowning and time frame to rescue, and consumer expectations for a computer vision system. During a meeting of the ASTM F15.49 subcommittee, participants agreed that the need to standardize the performance of this technology is urgent. The proposed new standard activity is considered under the jurisdiction of F15.49.

On September 2, 2021, staff provided a spreadsheet of above-ground pool incidents to the ASTM F15.49 subcommittee and PHTA above-ground pool committee. These data are expected to be reviewed in a future meeting.

**Next Action** Staff will participate in the next ASTM task group meeting on pool drowning detection systems, scheduled for January 2022. An ANSI above-ground pool subcommittee meeting is being organized with a meeting expected in December 2020.

## Portable Bed Rails (Children's)

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**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** ASTM F2085-19 *Standard Consumer Safety Specification for Portable Bed Rails*

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

**Standard(s) Update** To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with portable bedrails and provided the findings via email to the subcommittee in July 2021. Staff did not identify any new hazard patterns since the last review.

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

**Activities** In July 2021, staff reviewed incidents associated with portable bed rails and identified two incidents occurring in the past year, with neither representing a new hazard pattern. Staff shared the results with the subcommittee via email.

**Next Action** Staff will conduct the annual review of incident data and will participate in the next subcommittee or task group meeting, when scheduled.

## Portable Generators

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**Staff Contact** Buyer, Janet

**Voluntary Standard(s)** ANSI/PGMA G300-2018 (Errata Update) *Safety and Performance of Portable Generators*

UL 2201, 2<sup>nd</sup> Edition *Carbon Monoxide (CO) Emission Rate of Portable Generators*

**Relevant Rulemaking** NPR published on November 21, 2016 (81 FR 83556)

**Standard(s) Update** The voluntary standards and the NPR listed above were not updated during the reporting period.

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

**Activities** Staff continues to work with NIST staff to execute the simulation plan, as proposed in NIST Technical Note 2048 and revised in staff memorandum dated August 12, 2020 so staff can evaluate the effectiveness of the CO hazard mitigation requirements for portable generators in two voluntary standards, PGMA G300 and UL 2201. Staff focus has been on this foundational research during the entirety of this reporting period.

On September 9, 2021, staff emailed manufacturers of portable generators two questions regarding compliance to either PGMA G300 and UL 2200. Staff may use responses in future recommendations to the voluntary standards committees.

On September 28, 2021, staff participated in a meeting with PGMA members, discussing the NIST simulation plan. PGMA members prepared a number of questions in advance of the meeting, which staff answered to the extent possible.

**Next Action** Staff will continue to participate in voluntary standards meetings related to portable generators, including on PGMA G300 and UL 2201. Staff will notify the voluntary standard bodies once the effectiveness analysis is completed and the report is published.

### Portable Hook-On Chairs

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**Staff Contact** Nesteruk, Hope

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

**Relevant Rulemaking** 16 CFR part 1233, *Safety Standard for Hook-On Chairs*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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** To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data

associated with hook-on chairs in November 2020, and shared the results with ASTM via email. Staff did not identify any new incidents or hazard patterns for this product since the last review.

**Next Action** Staff will participate in the next subcommittee meeting, when scheduled.

## Pressure Cookers

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**Staff Contact** Snyder, Duncan Scott

**Voluntary Standard(s)** UL 136, 8<sup>th</sup> Edition *Pressure Cookers*

**Relevant Rulemaking** N/A

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with UL to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with pressure cookers

**Activities** On August 10, 2021, staff provided pressure cooker incident data to the UL STP via email and requested an STP meeting be scheduled to discuss the data. The UL STP chair requested that staff provide a summary analysis of the data provided to be discussed at a future meeting.

**Next Action** Staff will provide UL with an analysis of incident data relating to pressure cooker locking mechanisms and hazards related to premature lid disengagement. Staff will work with UL STP 136 to determine whether the current voluntary standard adequately addresses all potential hazards.

## Recreational Off-Highway Vehicles (ROVs)

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**Staff Contact** Lim, Han

**Voluntary Standard(s)** ANSI/ROHVA 1-2016 *Recreational Off-Highway Vehicles*

ANSI/OPEI B71.9-2016 *American National Standard for Multipurpose Off-Highway Utility Vehicles*

**Relevant** NPR *Recreational Off-Road Vehicles* (79 FR 68964)

**Rulemaking** The Commission published an advance notice of proposed rulemaking (ANPR) *Off-Highway Vehicle Fire and Debris Penetration Hazards* (86 FR 25817), May 11, 2021.

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**Purpose** To work with ROHVA and OPEI to develop requirements to address fire hazards and debris penetration hazards in off-highway vehicles

**Activities** On March 26, 2021, ROHVA informed CPSC that ANSI/ROHVA 1-2016 is open for revision.

In the FY 2021 Operating Plan, the Commission approved an ANPR on fire and debris penetration. In May 2021, the Commission published the ANPR and staff subsequently notified the SDOs and encouraged comments.



Comments to the ANPR will also be reviewed for potential recommendations to revise the voluntary standards.

Staff sent a letter to OPEI, SVIA, and ROHVA on July 21, 2021, asking for a meeting to discuss fire and debris penetration hazards.

**Next Action** Staff will review comments to the ANPR for potential recommendations to revise the voluntary standards. At the end of the reporting period, staff scheduled a meeting with SVIA, OPEI, and ROHVA in November 2021 to discuss requirements to address fire hazards and debris penetration hazards.

## Safety Locks and Other Household Child-Inaccessibility Devices

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**Staff Contact** Lee, Kevin

**Voluntary Standard(s)** ASTM F3492-21 *Standard Consumer Safety Specification for Child Safety Locks and Latches for Use with Cabinet Doors and Drawers*

**Relevant Rulemaking** N/A

**Standard(s) Update** In February 2021, ASTM published F3492-21, the new *Standard Consumer Safety Specification for Child Safety Locks and Latches for Use with Cabinet Doors and Drawers*.

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

**Activities** In November 2020, CSPC staff provided the ASTM subcommittee with an incident data summary spreadsheet pertaining to safety locks and latches.

In December 2020, ASTM issued a ballot containing the draft standard. Staff participated in a subcommittee meeting on February 2, 2021, during which the ballot results from the December 2020 ballot item were reviewed. The standard was approved, and it includes requirements pertaining to small parts, sharp edges, paint and surface coatings, openings from holes and slots, loose magnets, effective strength, and warning labeling. During the subcommittee meeting, staff recommended adding a test procedure to measure the gap from an opening in a drawer/cabinet while the latch/lock is installed. The subcommittee formed a new task group to develop this requirement, and staff will participate in the task group.

**Next Action** Staff will participate in the next subcommittee and task group meetings, when scheduled.

## Self-Balancing Scooters and Light Electric Vehicles

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**Staff Contact** Mella, Lawrence

<b>Voluntary Standard(s)</b>	ASTM F2614-15	<i>Recreational Powered Scooters and Pocket Bikes</i>
	ASTM F2642-08 (2015)	<i>Standard Consumer Safety Specification for Safety Instructions and Labeling for Recreational Powered Scooters and Pocket Bikes</i>
	ASTM WK57360	Potential new voluntary standard for self-balancing scooters and hoverboards
	ASTM WK70724	Potential new voluntary standard for commercial electric-powered scooters for adults

**Relevant** N/A

**Rulemaking**

**Standard(s) Update** The voluntary standards listed above were not updated during the reporting period.

**Purpose** To work with ASTM to develop a new voluntary standard or revise the existing standard to strengthen the safety provisions addressing hazards associated with self-balancing scooters and electric-powered scooters for adults

**Activities** During the reporting period, staff participated in three main task group meetings for the potential new standard on commercial eScooters. These meetings took place on October 21, 2020, November 19, 2020, January 11, 2021, March 23, 2021, June 9, 2021, and July 17, 2021. The task group and subcommittee members discussed the two potential standards being developed in the F15.58 subcommittee and also created sub-task groups to work on specific requirements for the commercial eScooter standard. The task group started a drafting committee to integrate the work from all sub task groups into one draft standard. Staff joined each of the sub-task groups. On May 17, 2021, staff participated in the ASTM F15.58 Powered Scooters & Skateboards subcommittee meeting, where the status of task groups, hoverboard ballot, and scope were discussed.

Following the creation of the sub-task groups, staff participated in several of the task group meetings on the following dates:

- Electrical: November 4, 2020, November 18, 2020, December 2, 2020, April 26, 2021, and July 8, 2021.
- Latching: November 4, 2020, November 12, 2020 and December 3, 2020.
- Hazardous Substances: November 23, 2020 and December 7, 2020.
- Brakes: December 2, 2020, January 29, 2021, February 12, 2021, March 5, 2021, March 18, 2021, April 8, 2021, April 29, 2021, May 12, 2021, and May 27, 2021

- Turn Signals: March 1, 2021 and April 20, 2021.
- Curb Impacts: February 8, 2021, April 19, 2021, June 16, 2021, June 24, 2021, and July 15, 2021.

**Next Action** Staff will participate in the next ASTM task group meetings for brakes, electrical, curb impact and turn signals, and other subcommittee or task group meetings, when scheduled.

## Sling Carriers (Infant and Toddlers)

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**Staff Contact** Nesteruk, Hope

**Voluntary Standard(s)** ASTM F2907-19 *Consumer Safety Specification for Sling Carriers*

**Relevant Rulemaking** 16 CFR part 1228, *Safety Standard for Sling Carriers*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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

**Activities** Staff participated in the subcommittee meeting on November 9, 2020, during which staff discussed the annual incident data review and the

previously provided incident data spreadsheet. In addition, a test lab representative reported seeing lots of slippage in ring slings during testing. A task group was formed to look into the ring slippage issue and to work on clarifying the test method.

On January 11, 2021 and June 11, 2021, staff participated in ring-slippage task group meetings. The task group is considering adding shoulder caps to the test torso, because ring slings must be tight against the shoulders of the wearer, and the hard angles and lack of a true “shoulder” of the test torso may affect the test. The task group wants to do more testing and validation before finalizing a proposal.

On March 3, 2021, May 25, 2021, and August 11, 2021 staff participated in the Ad Hoc language task group meetings. During these meeting, the task group reviewed and discussed the draft revisions. The task group agreed to some issues such as warning label, but other issues remain and will be discussed in future meetings.

On June 24, 2021 and August 12, 2021 staff participated in the Sling Scope task group meetings. The task group intended to examine and potentially redefine/clarify the scope and definitions as outlined in the F2907. The task group has a working draft renaming the standard to include “apparel carriers, wraps, and similar products” and defining more terms. The task group will need more meetings to resolve issues.

To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with sling carriers and provided the findings via email to the subcommittee in July 2021. Staff did not identify any new hazard patterns since the last review.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, scheduled for November 2021. Staff will continue to participate in the task group meetings.

## Smoke Alarms

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**Staff Contact** Lee, Arthur

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**Voluntary Standard(s)** UL 217, 9<sup>th</sup> Edition *Standard for Single and Multiple Station Smoke Alarms*

**NFPA 72<sup>®</sup>, 2022 Edition<sup>®</sup>** *National Fire Alarm and Signaling Code*

**Relevant Rulemaking** N/A

**Standard(s) Update** In August 2021, NFPA published NFPA 72<sup>®</sup>-2022, the latest edition to the *National Fire Alarm and Signaling Code<sup>®</sup>*.

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

**Activities** Staff continues to work with the contractor on the Smoke and CO Alarm Survey. Biweekly meetings are held between the contractor, staff, and the main sponsors of the survey (NFPA and NIST) to discuss various strategies to continue the survey in 2021 and the progress of the survey. On August 16, 2021, staff sent a letter to the UL 217 and UL 2034 STPs, detailing the status of the CPSC-funded Smoke and CO Alarm Survey. The letter details that the CPSC contractor conducted a successful pilot survey in the metropolitan Washington, DC area, ending in March 2020. The contractor restarted the survey nationally in April 2021, and expects to be completed in the fall of 2022. On August 17, 2021, staff participated in a bi-annual joint UL 217 and UL 2034 STP meeting summarizing the pilot survey and the current status of the survey for the STPs members.

In March 2021, staff inquired with UL on the change of the effective date for the PU smoldering and flaming tests and nuisance resistance test from June 2021 to June 2022. Due to the pandemic, there were delays for manufacturers in getting the needed components to produce their smoke alarms. Currently, there are several model smoke alarms listed to the additional tests, but none available for sale.

**Next Action** Staff will continue working with the contractor in completing the Smoke and CO Alarms Survey and provide the survey to interested stakeholders when available. Staff will work with NPFA, UL, and other stakeholders in possibly developing proposals regarding the audible frequency of smoke alarms.

## Soft Infant and Toddler Carriers

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**Staff Contact** Nesteruk, Hope

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

**Relevant Rulemaking** 16 CFR part 1226, *Safety Standard for Soft Infant and Toddler Carriers*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

**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** On November 2, 2020, staff participated in a task group meeting regarding fasteners on soft infant and toddler carriers. The task group discussed potential changes to the static and dynamic tests in ASTM F2236.

On November 6, 2020, staff participated in a task group meeting to address hazards with leg openings in the carriers. The group discussed the use of the largest truncated cone to perform certain leg opening tests for older

children. The task group also discussed messages in the warning label, including: “Baby must face towards you until he or she can hold head upright.”

Currently, this message is required on the product, but it is not allowed on the warning label. Staff expressed a general concern that the discussion may lead to removing warning messages, which could be viewed as a reduction in safety during the rule update process. The final topic of discussion was the possibility of refining the warning message for carriers intended for children older than 4 months. After discussions, staff suggested that because the focus of this group is on leg openings, the warning label discussions should be moved to a task group for warnings, because there may be others who wish to be involved. The chair agreed.

Staff also participated in the subcommittee meeting on November 9, 2020. There are a number of ballot items that have passed, but they are being held administratively. The chair is planning to publish a revised standard, and will notify CPSC afterward. During the meeting, the following task groups provided reports: leg openings, warnings, and dynamic testing. During the warnings task group report, a new labeling task group was formed, to consider changes to one of the warnings on the product. Staff is participating on the task group. At the end of the reporting period, the ballot items remained unresolved and the standard had not been updated.

To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with soft infant and toddler carriers and provided the findings via email to the subcommittee in July 2021. Staff did not identify any new hazard patterns since the last review.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled.

## Sports/Recreational Headgear Sensors/Helmet and Sensors

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**Staff Contact** Dayal, Vineed



**Voluntary Standard(s)**      **ASTM F1446-20**      ***Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear***

ASTM F1447-18      *Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating*

ASTM F2220-15      *Standard Specification for Headforms*

**Relevant Rulemaking**

**Standard(s) Update**      In November 2020, ASTM published ASTM F1446-20, the latest revision to the *Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear*. This revision contains several editorial changes and a minor update to the definition of an “Impact Test Apparatus.”

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

**Activities**      In February 2021, staff received authorization to serve as the task group chair for the ASTM F08.53 sensors task group.

On June 22, 2021, staff attended in an ASTM F08.53 subcommittee meeting on helmets and headgear. The subcommittee is considering multiple updates to their helmet standard F1447, including possibly lowering the impact acceleration limit, and adding a “low-impact” test. These changes would most likely increase the overall level of safety required, and reflect recent improvements in technology and safety. The new requirements begin to consider less severe types of head injuries that were not previously considered due to prevalence of more severe injuries in the past.

On August 26, 2021, staff met with a University of British Columbia professor to discuss research focused on emulating real-life bicycle

incidents, with a specific focus on oblique and rotational impact methodologies.

**Next Action** Staff will continue to work with the ASTM members to develop the draft voluntary standard for headgear sensors. In addition, staff will chair the sensors task group. Staff intends to participate in the next subcommittee meeting, currently scheduled for May 2022.

### Spray Polyurethane Foam (SPF) Insulation

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**Staff Contact** Bevington, Charles

**Voluntary Standard(s)** ASTM D8142-17e1 *Standard Test Method for Determining Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation using Micro-Scale Environmental Test Chambers*

ASTM WK58354 Potential new voluntary standard practice for measuring chemical emissions from SPF insulation samples in a large-scale ventilated enclosure

ASTM WK58356 Potential new voluntary standard for modeling indoor concentrations of chemical substances from indoor materials

**Relevant Rulemaking** N/A

**Standard(s)** The voluntary standards listed above were not updated during the reporting period.

## **Update**

**Purpose** To work with ASTM to develop new voluntary standards to address hazards associated with chemical emissions from spray polyurethane foam insulation

**Activities** Staff participated in ASTM D22.05 Indoor Air Quality task group meetings on April 16, 2021, April 30, 2021, and May 7, 2021. During the meetings, WK 58354 and WK 58356 work items were discussed. Staff encouraged the subcommittee to lengthen the sampling timeframe to 3 days and to add end-of-experiment sampling from chamber ceiling and floors in WK 58354. The task group sent WK 58354 to subcommittee ballot in the summer and this Standard Practice is expected to go to ballot for the full ASTM D22 committee later in calendar year 2021.

**Next Action** Staff will continue to provide technical support to the subcommittee and the task group in preparing both ASTM WK58354 and ASTM WK58356 for subcommittee and full committee ballot. Staff will participate in the next ASTM D22.05 subcommittee meeting, scheduled for October 13, 2021.

## **Stationary Activity Centers**

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**Staff Contact** Lee, Kevin

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

**Relevant Rulemaking** 16 CFR part 1238, *Standard Consumer Safety Specification for Stationary Activity Centers*

<b>Standard(s) Update</b>	The voluntary and mandatory standards listed above were not updated during the reporting period.
<b>Purpose</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 stationary activity centers
<b>Activities</b>	<p>On October 14, 2020, staff sent a letter to the subcommittee chair, asking him to set up a meeting to address the strap integrity issues that remain unresolved. On February 8, 2021, ASTM held a strap integrity task group meeting in response to the October letter. The task group drafted a set of performance and test requirements to address the failure of suspension straps. The draft proposal requires either a separate redundant suspension strap, or life cycle testing. The task group reviewed the proposed performance and test requirements that were previously drafted.</p> <p>On March 12, 2021, ASTM issued an F15 ballot with an item containing performance and test requirements to address suspension strap failures in stationary activity centers. On May 3, 2021 the ASTM F15.17 subcommittee met to discuss the negative comments to that ballot. The subcommittee formed a task group to review comments made by some test labs regarding the feasibility of the life cycle test.</p> <p>On July 13, 2021 staff participated in a task group meeting discussing the test lab ballot comments. During the meeting, staff provided suggestions on how to test, which the task group agreed would be acceptable and would not be design restrictive. Also, to address the clarification on determining if a child's foot can touch the floor, the task group suggested using a foot probe from the high chair standard. Based on this meeting, the task group chair will develop a ballot item.</p>
<b>Next Action</b>	Staff will participate at the next subcommittee meeting and will review any ballot items related to this standard. Staff will supply incident data to the subcommittee.

## Swimming Pools/Spas, Drain Entrapment

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**Staff Contact** Eilbert, Mark

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

**Relevant Rulemaking** 16 CFR part 1450, *Virginia Graeme Baker Pool and Spa Safety Act*

**Standard(s) Update** The Commission postponed the effective date for the updated mandatory drain cover standard in section 1404(b) of the *Virginia Graeme Baker Pool and Spa Act* (VGBA) from November 24, 2020, to May 24, 2021.

**Purpose** To work with PHTA (formerly APSP) to ensure that the incorporated voluntary standard and the corresponding federal mandatory standard maintain adequate safety levels addressing entrapment hazards associated with pool drain cover products intended for swimming pools, wading pools, spas, and hot tubs, as well as installation of those products in public pools

**Activities** PHTA notified staff on February 21, 2021, of their intent to develop a provisional amendment to ANSI/APSP/ICC 16-2017. The amendment was subsequently developed, adding requirements for storable pools, and provided to staff. On September 21, 2021, staff wrote to PHTA to recommend further work take place on the amendment.

**Next Action** Staff is scheduled to meet with PHTA on November 30, 2021, to discuss the amendment.

## Swimming Pools/Spas Safety, Vacuum Relief System

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**Staff Contact** Eilbert, Mark

**Voluntary Standard(s)** PHTA-17 Potential new voluntary standard for safety vacuum release systems, automatic pump shut-off systems, shut-off systems, and vacuum limiting systems for swimming pools, spas, wading pools, hot tubs, and catch pools

ANSI/APSP/ICC-7-2013 *Suction Entrapment Avoidance*

**ASTM F2387-21** ***Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs***

**Relevant Rulemaking** N/A

**Standard(s) Update** On May 1, 2021, ASTM published ASTM F2387-21, the latest revision to the *Standard Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs*.

**Purpose** To work with PHTA (formally APSP) and ASTM to ensure the voluntary standards and the corresponding federal mandatory standard maintain adequate backup safety levels addressing entrapment hazards associated with pool drains in swimming pools, spas, and hot tubs

**Activities** In late FY 2020, ASTM issued a ballot with an item associated with ASTM F2387. In October 2020, staff reviewed the ballot item and submitted an editorial comment regarding a change to a test criteria requirement. The

ballot received a negative vote, which remained unresolved at the end of the reporting period.

In December 2020, ASTM balloted another revision to their standard F2387-2004(12) that updates the scope of the standard. The ballot item received a negative vote that was found to be not persuasive in March 2021. The standard was published in May 2021.

**Next Action** Staff will continue to attend PHTA and ASTM meetings, when scheduled, and will participate in the future development of the voluntary standards.

## Table Saws

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**Staff Contact** Paul, Caroleene

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

**Relevant Rulemaking** NPR *Safety Standard Addressing Blade-Contact Injuries on Table Saws* (82 FR 22190)

**Standard(s) Update** The voluntary standard and NPR listed above were not updated during the reporting period.

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

**Activities** On September 20, 2021, staff sent a letter to UL staff encouraging UL to analyze the table saw incident data to evaluate the effectiveness of the latest revisions to the voluntary standard for table saws in reducing blade-contact injuries and take steps to reduce the risk. Staff provided a summary of their analysis based on NEISS data. Their analysis suggested little change in the hazard data since the 2010 inclusion of requirements for blade guards in the previous UL standard, which is included in the new standard.

**Next Action** Staff will continue encouraging UL to address blade contact hazards in the voluntary standard.

## Tents

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**Staff Contact** Tenney, Allyson

**Voluntary Standard(s)** **ASTM F3431-21** ***Standard Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards***

**Relevant Rulemaking** N/A

**Standard(s) Update** In February 2021, ASTM published ASTM F3431-21, the latest revision to the *Standard Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards*. This revision includes scope exemptions for products that meet the requirements of NFPA and ICC codes.



**Purpose** To work with ASTM on developing a voluntary standard to address the hazards associated with tent flammability

**Activities** In February, staff renewed permission to vote on the voluntary standard.  
 On August 26, 2021, staff participated in an ASTM F08.22 subcommittee meeting, where the subcommittee discussed negative ballots on ASTM F3431. The negative ballots disagreed with the proposed option eliminating the test requirement for products labeled to not be used with camping appliances. Staff actively participated in a subcommittee discussion on this issue. The subcommittee created a new task group to study available technical data on tentage materials and available methods for a potential screening test or testing exemptions or exceptions related to the weight or construction of a recreational camping tent.

**Next Action** Staff will participate in the task group established in August and any future subcommittee meetings.

**Toddler Beds**

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**Staff Contact** Kish, Celestine

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

**Relevant Rulemaking** 16 CFR part 1217, *Safety Standard for Toddler Beds*

**Standard(s) Update** The voluntary and mandatory standards listed above were not updated during the reporting period.

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

**Activities** To monitor the adequacy of the mandatory standard and its referenced voluntary standard, staff conducted the annual review of incident data associated with toddler beds and provided the findings via email to the subcommittee in August 2021. Staff did not identify any new hazard patterns since the last review.

**Next Action** Staff will participate in the next ASTM subcommittee meeting, when scheduled, and also will review incident data to ensure the continued adequacy of the voluntary standard.

## Torch Fuel and Lamp Oil

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**Staff Contact** White, Sharon

<b>Voluntary Standard(s)</b>	ASTM F3304-21	<b>Standard Specification for Lamp Fuel and Torch Fuel Packaging</b>
	ASTM WK76994	Potential new voluntary standard for lamp and torch fuel scent and color

**Relevant Rulemaking** N/A

**Standard(s) Update** In September 2021, ASTM published the new standard specification, ASTM F3304-21 *Standard Specification for Lamp Fuel and Torch Fuel Packaging*.

**Purpose**

To work with ASTM on the development of voluntary standards addressing the hazards associated with the color and design of torch fuel and lamp oil packaging, the color and odor of torch fuel and lamp oil, and the use and design of devices principally intended to house torch fuel and lamp oil

**Activities**

ASTM appointed a new F15.72 subcommittee chair in December 2020. Staff participated in two ASTM F15.72 subcommittee meetings, on December 17, 2020 and February 17, 2021. During the December meeting, the subcommittee discussed three negative votes on a recent torch and lamp fuel ballot item (ASTM F15-06, item 21). Staff participated in the discussion and agreed that changes were needed to the draft packaging standard. The subcommittee found the negatives persuasive and the subcommittee chair scheduled a task group meeting to discuss changes to the draft standard. During the February meeting, the subcommittee discussed the scope of the subcommittee, the current standards, and the draft packaging standard. The subcommittee was initially formed to develop requirements related to the ingestion of torch fuel and lamp oil. However, over time, portable fireplaces and flame mitigation devices were added to the subcommittee activities. The subcommittee members in the meeting discussed broadening the scope of the subcommittee, but not changing the scope of the current standards and draft packaging standard. On March 11, 2021, the ASTM balloted a name change for the subcommittee, which passed. The new subcommittee name is, "prefilled flammable and combustible liquid containers."

Staff participated in a task group meeting on January 21, 2021 to discuss the persuasive negatives and comments from the ballot. With staff support, the task group agreed to revise the scope of the draft standard to indicate that it is not intended to address flammable or extremely flammable liquids. Staff also engaged with the task group via email after this meeting on addressing the negatives and comments from the ballot.

On July 15, 2021, staff participated in a subcommittee meeting where the task group found the negative vote on the potential new torch fuel and lamp oil packaging standard non-persuasive. The main committee was balloted in March 2021 and also found the comment non-persuasive. The new standard, F3304 was published by ASTM in September 2021.

On March 8, 2021, staff sent a letter to the subcommittee chair requesting that the ASTM F15.72 subcommittee form a new task to address the hazards associated with the color and odor of torch and lamp fuel. ASTM

formed a task group and staff participated in four task group meetings on April 15, 2021, May 20, 2021, July 27, 2021, and September 21, 2021. At the task group meetings, staff mentioned that the injury data suggests that children access torch and lamp fuel mostly from the oil lamp rather than the original container. The task group agreed:

- To canvass industry to address the color and odor of torch and lamp fuel.
- To duplicate much of the language on scope from F3304;
- To expand on container shapes from F3304, reducing the risk of appealing to children under 3;
- That if the torch and lamp fuel was colored, that containers must meet other requirements such as restrictive flow of the product, to limit exposure to the product to children under 3;
- That wicks from devices can be constructed in a way to limit flow. Therefore, there is more flexibility on the lamp and torch device side to restrict flow; and
- That the aroma is produced when the product was burning, and not given off from the packaging.

**Next Action** Staff will continue to work with ASTM and the task group to publish a new voluntary standard on the color and odor of torch fuel and lamp oil. Staff will also participate in all future meetings.

## Toys

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**Staff Contact** Mordecai, Benjamin

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

ASTM D8133-21 *Standard Test Method for Determination of Low-Level Phthalates in Poly(Vinyl Chloride) Plastics by Solvent Extraction-Gas Chromatography/Mass Spectrometry*

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**Relevant** 16 CFR part 1250, *Safety Standard for Toys*

**Rulemaking**

**Standard(s)** Staff was not involved with the latest revision to ASTM D8133-21.

**Update**

**Purpose** To work with ASTM on revising the voluntary 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** On October 12, 2020, staff participated in an ISO TAG 181 meeting, during which members discussed changes intended to align ASTM F963, EN-71 and ISO 8124-1. Mechanical requirements, phthalates, and age determinations were the primary topics of the meeting.

On October 23, 2020, ASTM issued a F15 ballot containing nine items pertaining to the toy standard. The topics balloted for revision were as follows: reference documents; tracking labels; definitions; requirements for water-filled toys; XRF alternatives; toy substrates; phthalates; acoustics; and paper and paperboard.

Staff participated in an ASTM subcommittee meeting on November 30, 2020, during which the ballot results were discussed. Several of the items received negative votes, and therefore, ballot items for acoustics and toy substrates are being revised. Other items had administrative negatives, in effect, tabling them to allow for additional comments to be included. Staff agreed to respond to ASTM on language for phthalate requirements and staff's stance on "paper" and "paperboard" definitions. On February 5, 2021, staff sent a letter to ASTM suggesting non-substantive changes for phthalates and toy substrate materials. Additionally, staff cited no issues pertaining to "paper" and "paperboard."

On April 9, 2021 staff participated in an ASTM D20.70 phthalate task group teleconference. The task group is administering an Inter-laboratory Study (ILS) of two phthalate test methods. CPSC is participating in the ILS for one test method, ASTM D8133. D8133 is similar to an internal CPSC method, except the CPSC method allows acetonitrile as an option for solvent, and

allows the addition or removal of certain phthalates to reflect the regulation changes. The task group decided to follow ASTM D8133 as written in order to minimize variability, but the CPSC differences may be added to the annex of ASTM D8133 in the future. The ILS target start date is in January 2022.

On August 4, 2021 staff sent a letter to the ASTM F15.22 subcommittee chair and toy safety working group chair asking that the subcommittee review provided data on infant bathers and work to develop adequate safety performance requirements. Staff believes that the infant bathers identified in the incident data are actually “aquatic toys” and therefore within scope of F963. On August 23, 2021 staff participated in an ASTM toy safety working group teleconference where the working group discussed the staff letter. The working group agreed that the products were considered toys and discussed ideas on how to address the issues. Based on the discussion, the working group chair will put together a draft revision.

On September 14, 2021, ASTM issued a F15 ballot containing nine items pertaining to the toy standard. The topics balloted for revision were as follows: expanding materials, acoustics, phthalates, toy substrate materials, requirements for alternative methods, definition of paper, tracking label requirements, component accessibility, and stroller and carriage toys. The ballot closed after the reporting period.

**Next Action** Staff will participate in upcoming ASTM task group meetings or subcommittee meetings, when scheduled. Staff expects to complete their ILS ASTM D8133 in January 2022, then share their results with the task group afterwards.

## Upholstered Furniture

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**Staff Contact** Lock, Andrew

<b>Voluntary Standard(s)</b>	<b>ASTM E1353-21</b>	<b>Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture</b>
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NFPA 260, 2019 Edition      *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*

**Relevant Rulemaking**      DFR, *Standard for the Flammability of Furniture* (86 FR 18440) and Proposed FR, *Standard for the Flammability of Furniture* (86 FR 18491)

**Standard(s) Update**      In June 2021, ASTM published ASTM E1353-21, the latest revision to the *Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture*. This revision includes editorial changes and minor technical adjustments.

**Purpose**      To work with ASTM, NFPA, and other stakeholders to revise voluntary standards to strengthen safety provisions addressing hazards associated with fires involving upholstered furniture

**Activities**      In December 2020, Congress enacted the COVID-19 Regulatory Relief and Work From Home Safety Act, which among other actions requires the CPSC to adopt TB 117-2013 as a consumer product safety rule. On March 30, 2021 the Commission voted to issue a direct final rule incorporating TB 117-2013 as consumer product safety rule.

Staff participated in three meetings on upholstered furniture during the reporting period. Staff participated in an ASTM E05.15 teleconference on December 7, 2020 where the subcommittee discussed minor edits to various standards. Staff commented on the status of work items that had been retired or taken up by other standards developers, such as NFPA.

Staff participated in NFPA Fire Tests Committee teleconferences held between March 1 and March 8, 2021. The NFPA 260 task group reported on potential changes to the NFPA 260 standard. The committee also discussed the status of NFPA 260 in the context of the upcoming federal adoption of California Technical Bulletin 117-2013 (TB 117-2013). Staff provided the committee with the publicly available information on Commission activity in regard to TB 117.

Staff also participated in an ASTM E05.15 teleconference on June 9, 2021, where staff provided the subcommittee an overview of the new rule. The subcommittee discussed creating an ASTM standard to match the new rule.

**Next Action** Staff will continue to participate in ASTM E05.15 subcommittee meetings and will participate in the development of an ASTM voluntary standard matching TB 117, should the subcommittee choose to do so. The three-year revision cycle for NFPA 260 began at the end of FY 2021, staff will participate in the process in FY2022.

## Washing Machines

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**Staff Contact** Kim, Yeon Souk

**Voluntary Standard(s)** UL 2157, 4<sup>th</sup> Edition *Electric Clothes Washing Machines and Extractors*

**Relevant Rulemaking** N/A

**Standard(s) Update** The voluntary standard listed above was not updated during the reporting period.

**Purpose** To work with UL to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with an unbalanced load condition of top loading washing machines

**Activities** On July 29, 2021, staff provided a redacted IDI to the UL 2157 STP. The redacted IDI detailed an incident where the drum detached from the motor



similar to previous incidents that initiated the clothes washer recall and the development of the new test method. The UL workgroup will use this information to establish the pass/fail criteria for the testing

AHAM contracted a third party testing lab to evaluate two proposed test methods to evaluate the unbalanced load conditions of the top loading washer. AHAM shared preliminary testing results with staff via email in June and September. AHAM will share final testing results with staff in next fiscal year.

**Next Action** Staff will continue to work with UL and AHAM on improving the safety related requirements in UL 2157. Staff will provide AHAM with comments to testing results. Staff expects AHAM to host a meeting in FY 2022 that staff will attend where a proposal to UL 2157 will be discussed.

## Wearables

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**Staff Contact** Thomas, Treye

**Voluntary Standard(s)** UL 8400 Potential new voluntary standard for safety for virtual reality (VR), augmented reality (AR) and mixed reality (MR) technology equipment

**Relevant Rulemaking** N/A

**Standard(s) Update** The potential new voluntary standard listed above was not completed during the reporting period.

**Purpose** To work with UL, ASTM, and any other SDOs to develop voluntary standards for wearable technologies to keep consumers safe

**Activities**

Staff participated in six UL 8400 Task Group meetings on October 1, 2020, October 7, 2020, October 15, 2020, October 22, 2020, October 27, 2020, and December 1, 2020. These task group meetings focused on developing recommendations, requirements, or both, pertaining to (1) enhancing the spatial perception afforded by Virtual Reality, Augmented Reality, and Mixed Reality head-mounted devices (HMDs), and (2) Allergic Contact Dermatitis sections of the proposed UL 8400 standard. During these task group meetings, staff actively participated in various discussions, including changing section titles, the scope of the testing, and including requirements focused on the release of chemicals from VR components.

Staff also participated in three UL 8400 STP meetings on October 27, 2020, January 6, 2021, and January 12, 2021. Each STP meeting included task group reports. The meeting on October 27, 2020, included debate on the duration of VR games and discussions on the ambient temperature. The meeting on January 6, 2021, included a discussion on additional requirements concerning adverse health outcomes, such as motion sickness and eyestrain, which could be included in the draft standard. The meeting on January 12, 2021, included discussions on judder, jitter, and flicker, and other potential concerns, such as seizures.

On September 15, and 30, the UL 8400 STP began to review comments from members on the draft standard. Staff commented on several areas including age restrictions, dizziness, and skin irritation. Given the wide range of potential hazards associated with the VR devices, the STP discussed the importance of risk assessment and the determination of a maximum threshold above which a risk is unacceptable.

**Next Action**

Staff will continue to engage with a range of stakeholders to develop voluntary standards for wearable technologies to identify, address, and mitigate consumer hazards. Staff will continue to work with the UL 8400 STP and the task groups to develop a new voluntary standard for virtual reality, augmented reality, and mixed reality technology equipment.

## Window Coverings

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**Staff Contact** Balci-Sinha, Rana

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

**Relevant Rulemaking** ANPR published in January 2015 (80 FR 2327) and staff plans to submit a draft NPR briefing package to the Commission at the start of FY 2022.

**Standard(s) Update** The voluntary standard and ANPR listed above were not updated during the reporting period.

**Purpose** To work with WCMA to revise the voluntary standard to strengthen its safety provisions addressing hazards associated with window covering cords

**Activities** On September 2, 2021, staff sent a letter to the WCMA executive director encouraging reopening the standard. Staff requested that the standard apply stock product requirements to custom window coverings and that the rigid cord shroud language developed and agreed upon by the technical working group previously be included in the standard. Staff previously made these requests in a letter to the executive director sent in February 2020.

**Next Action** In October 2021, staff will deliver a draft NPR briefing package for Commission consideration. Staff will participate in upcoming committee meetings as they are scheduled, and will review and comment on any ballots issued by WCMA.



This document has been electronically approved and signed.

## Memorandum

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

**THROUGH:** Mary T. Boyle, Executive Director

DeWane Ray, Deputy Executive Director for Safety Operations

**FROM:** Stephen Hanway, Associate Executive Director  
Directorate for Epidemiology

**SUBJECT:** Reviewing SaferProducts.gov Patterns and Trends Through FY 2021

**DATE:** December 15, 2021

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### Introduction

This memorandum is intended to update the Commission on the SaferProducts.gov reports received in FY 2021. When compared with FY 2020, nearly 1,200 more potentially eligible reports were submitted to SaferProducts.gov and a higher proportion were published, an increase from 31 percent to 39 percent of potentially eligible reports submitted between FY 2020 and FY 2021.

Section 6A of the Consumer Product Safety Act (CPSA) required the U.S. Consumer Product Safety Commission (CPSC or Commission), in accordance with certain requirements, to establish and maintain a publicly available and searchable online database on the safety of consumer products, and other products or substances regulated by the Commission. 15 U.S.C. § 2055a. The Commission issued regulations setting forth the Commission's interpretation, policy, and procedures for establishing and maintaining that database. 16 CFR part 1102.

To comply with this statutory directive, the CPSC launched SaferProducts.gov on March 11, 2011 as a site where the public can report incidents that resulted in injury, illness, or death, or a risk of injury, illness, or death (Reports of Harm or Reports). Section 6A of the CPSA requires Reports of Harm to include certain information to publish the report in the database. Part 1102 provides additional details about this required information. CPSC transmits Reports of Harm that contain the required information to manufacturers for review and comment, and CPSC posts such reports and manufacturer comments to SaferProducts.gov. Staff in the Data Intake branch



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of the Directorate of Epidemiology reviews required fields for each Report of Harm, and determines, in consultation with CPSC's Office of the General Counsel and subject matter experts in CPSC's Office of Hazard Identification and Reduction, whether the Report is eligible to be included in the database.

Whether a report is eligible to publish in the database depends on whether it meets certain criteria under Section 6A of the CPSA and 16 CFR part 1102. These criteria include: Submitter Affiliation, Attestation to Accuracy, Consent to Publish, Manufacturer/Importer/Private Labeler Identification, Incident Date, Contact Information, Consumer Product Description, and Risk of Harm Description. These are described in Appendix A. In addition, to be eligible for publication in the database, Reports of Harm must describe products that fall within CPSC's jurisdiction. Staff screens each Report for these criteria. If any required information is missing, CPSC does not post the Report of Harm to SaferProducts.gov. Staff also screens out some reports for other miscellaneous reasons, such as the report was submitted by a child.

In September 2020, SaferProducts.gov was redesigned to make it easier to submit reports to CPSC and to encourage submitters to consent to publishing and attest to the accuracy of their report, elements that staff had determined to be likely barriers to submission and publication. After these changes were implemented, , staff found that the number of submissions to Saferproducts.gov increased in FY 2021 by 12 percent from FY 2020, after 5 years of declines. The number of reports published grew by 43 percent between FY 2020 and FY 2021, the largest number published since 2017. In FY 2021, 61 percent of all submissions failed to meet the statutory and regulatory criteria for including a Report of Harm in the public database. This represents a decline from FY 2020, when 69 percent of reports were not publishable. This change may be attributable to the redesign of Saferproducts.gov.

Even with the improved website design, approximately 73 percent of the submissions that failed to meet the criteria in FY 2021 for inclusion failed because submitters did not attest to the Report's accuracy, did not consent to publishing, or did not provide contact information. Sixty-one percent of these were reports from Medical Examiners. These reports are potentially eligible for publication, but seldom include all the required elements for publication in SaferProducts.gov. Although these reports do not meet the statutory requirements for publication in SaferProducts.gov, the reports are included in incident report publications at the National Injury Information Clearinghouse ([Clearinghouse Online Query Tool | CPSC.gov](#)).



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Additionally, about 14 percent of unpublished reports in FY 2021 failed to meet the requirements for stating a risk of harm. This memorandum briefly describes the criteria for publishing reports in Saferproducts.gov and staff's findings regarding distribution of reports published and unpublished based on these criteria.

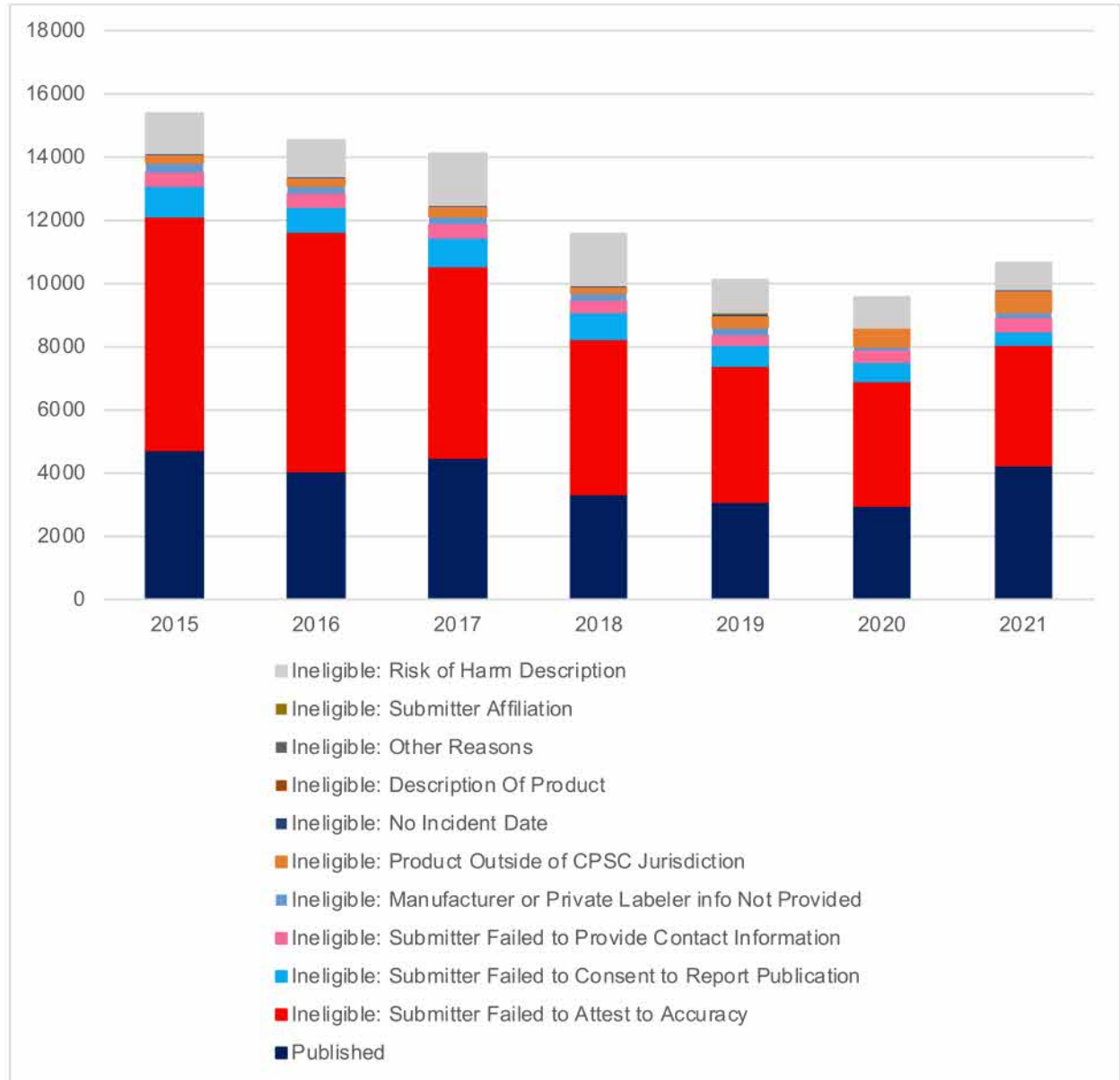
### **Distribution of Eligibility Determinations**

In reviewing the data on Reports that staff deemed ineligible to include in the database, several trends and patterns are notable. First, overall reporting had steadily declined from approximately 15,400 submitted Reports in FY 2015 to approximately 9,600 reports published in FY 2020 (See Figure 1), before increasing to approximately 10,700 submitted reports in FY 2021.



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**Figure 1: Distribution of Eligibility Determinations FY 2015- FY 2021, by Year**



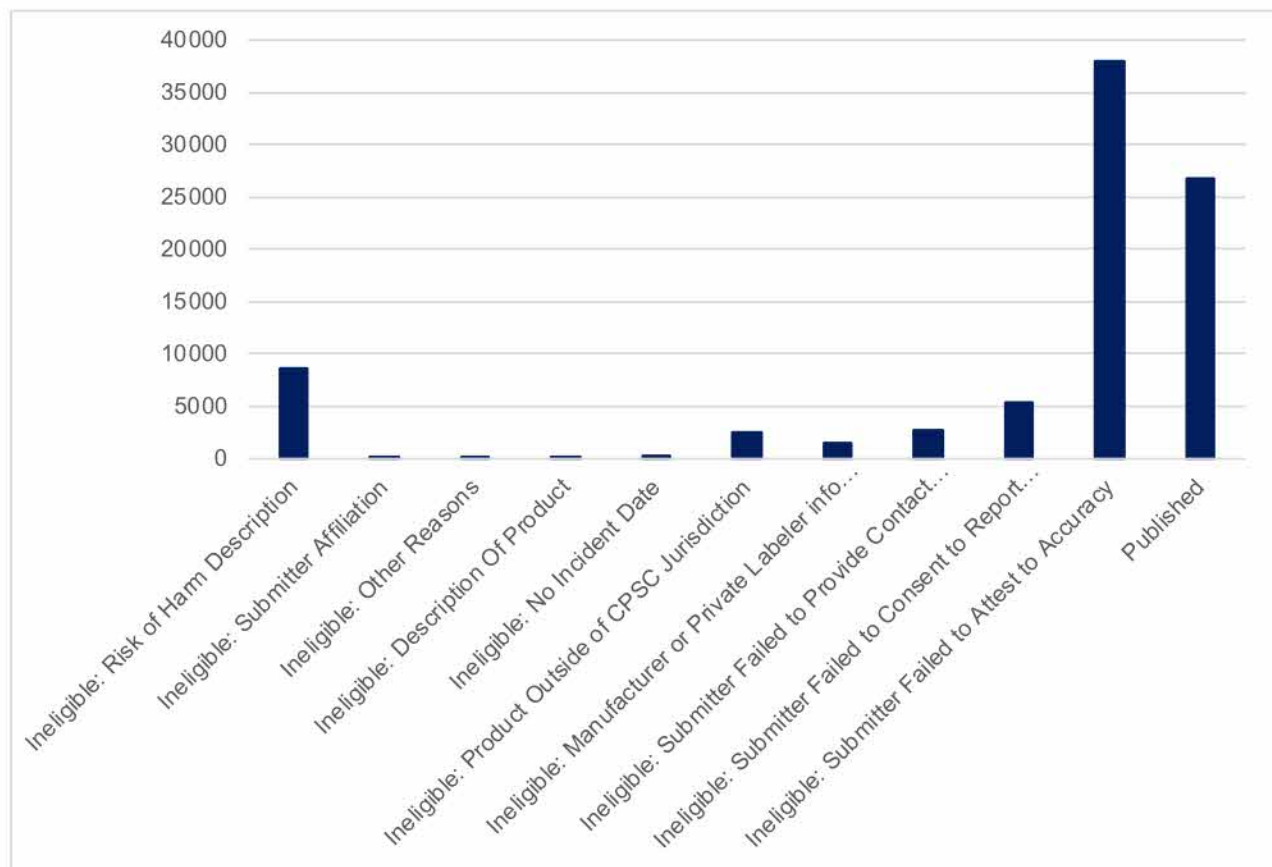
As Figure 1 shows, the number of reports submitted had declined by about 1,200 reports per year between 2015 and 2020, before they increased by nearly 1,200, between 2020 and 2021.



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Most reports of harm were ineligible for publication because submitters failed to attest to accuracy (approximately 59% of ineligible reports in FY 2021), failed to consent to publish (approximately 7% of ineligible reports in FY 2021), or failed to provide contact information (approximately 6% of all reports in FY 2021). Overall, of the reports that did not meet publication criteria, 73 percent were for one of these three reasons in FY 2021.

**Figure 2: Distribution of Eligibility Determinations FY 2015-FY 2021**



A failure to describe the risk of harm accounted for approximately 10 percent of all reports and 15 percent of unpublished reports. Figure 2 shows the reasons reports were ineligible for publication, when combined for FY 2015-FY 2021. The corresponding numbers for FY 2021 were 8 percent of all reports and 14 percent of unpublished reports.





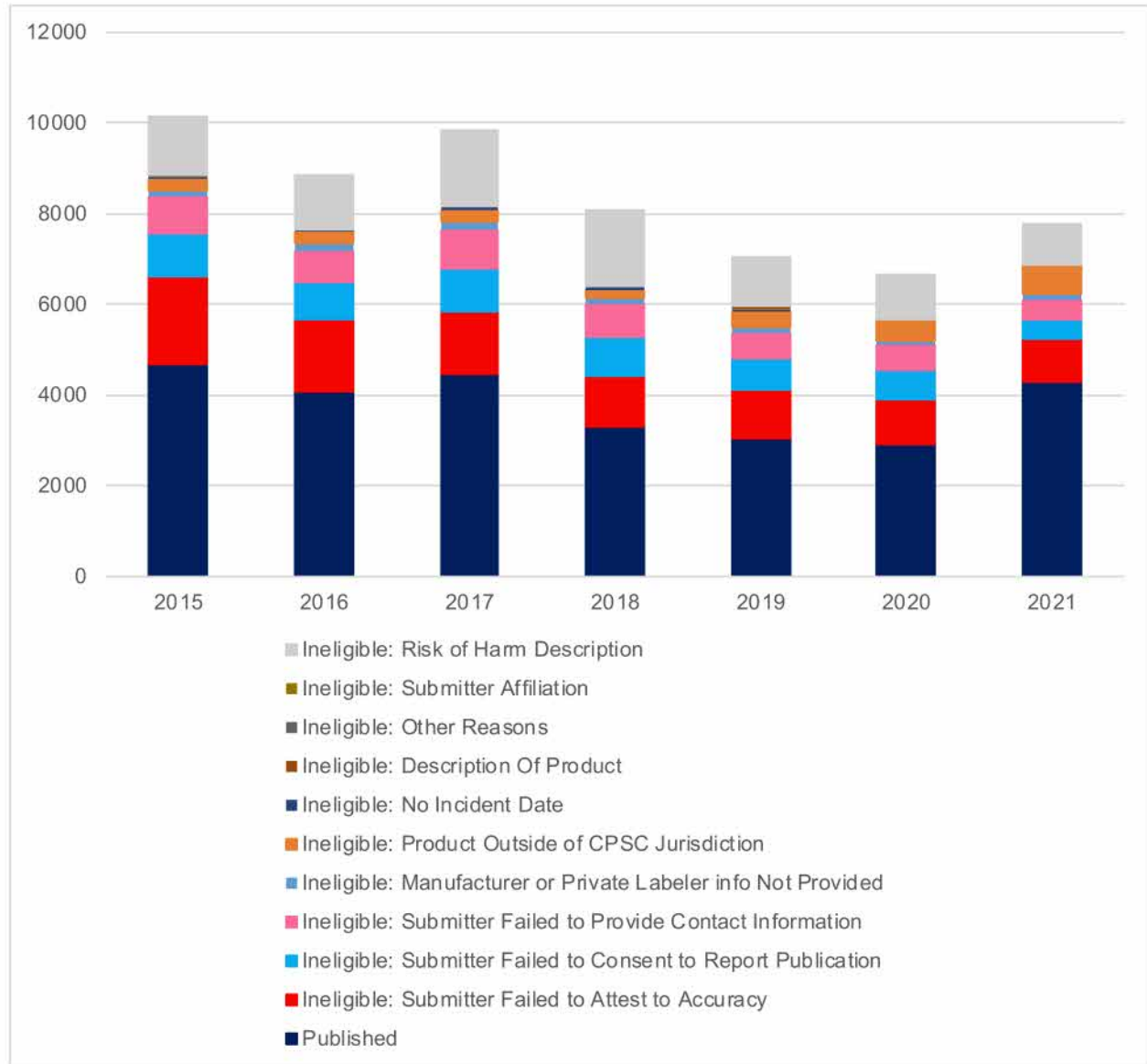
## Memorandum

Figures 3 and 4 exclude the reports from medical examiners to illustrate their impact. As can be seen by comparing these with Figures 1 and 2, removing the medical examiner reports does not affect the number of reports published (dark blue), but does affect the reports not published. As stated previously, these medical examiner reports are included in agency publications at the National Injury Information Clearinghouse at [Clearinghouse Online Query Tool | CPSC.gov](#), albeit in a redacted form.



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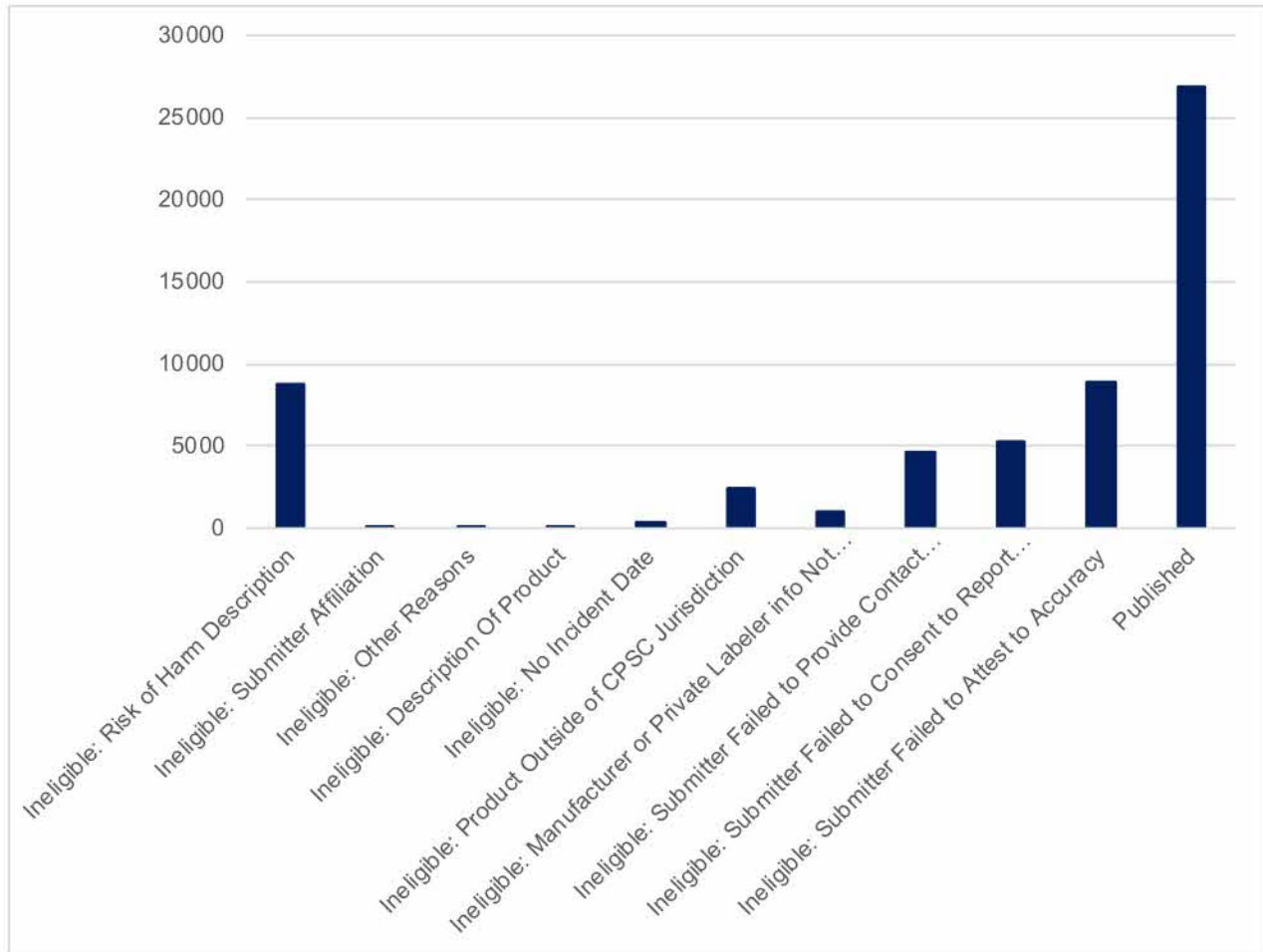
**Figure 3: Distribution of Eligibility Determinations FY 2015-FY 2021 Excluding Medical Examiners, by Year**





# Memorandum

**Figure 4: Distribution of Eligibility Determinations FY 2015-FY 2021 Excluding Medical Examiners**



The major reason that reports from medical examiners are ineligible for publication is the lack of attestation, which is, in part, because the attestations are not solicited. Reports from medical examiners also tend to lack identification of the manufacturer, an additional statutory element for publication that these reports generally fail to meet. For example, in FY 2021, 96 percent of the unpublished reports from medical examiners did not identify a manufacturer.



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## Conclusion

This memorandum describes the criteria for publishing reports in Saferproducts.gov and the various dispositions observed for reports received from FY 2015-FY 2021. The number of incoming reports had declined over the years before an increase in FY 2021, perhaps attributable to the changes in the design of SaferProducts.gov. Most of the reports are determined to be ineligible for publication after review, primarily due to the failure of the submitter to attest to the accuracy of the report and to the substantial number of reports from Medical Examiners, reports that typically do not include such attestations or manufacturer information.



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## Appendix A

### **Criteria for Eligibility for Inclusion in the Public Database**

#### Submitter Affiliation

For a Report to be eligible for publication in the database, it must come from one of the eligible sources set forth in (15 U.S.C. § 2055a(B)(1)(A); 16 CFR § 1102.10(a)(2)):

- consumers
- local government agencies
- state government agencies
- federal government agencies
- health care professionals (e.g., medical examiners, coroners)
- child service providers
- public safety entities.

#### Attestation to Accuracy

For Reports to be eligible for publication in the database, the submitters must attest that the Report submitted is true and accurate to the best of their knowledge, information, and belief (15 U.S.C. § 2055a(b)(2)(B)(v); 16 CFR § 1102.10(d)(7)). If a submitter does not make this attestation, the Report of Harm is not eligible for publication in the database.

#### Consent to Publish

For a Report of Harm to be eligible for publication in the database, submitters must provide their consent to publish the report (15 U.S.C. § 2055a(b)(2)(B)(v); 16 CFR § 1102.10(d)(8)). If the submitter does not provide consent, the Report of Harm is not eligible for publication in the database.

#### Manufacturer/Importer/Private Labeler Identification

Submitters must identify the manufacturer, importer, or private labeler of a product for CPSC to publish a Report (15 U.S.C. § 2055a(b)(2)(B)(ii); 16 CFR § 1102.10(d)(2)). CPSC cannot publish Reports that lack this information.



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## Incident Date

Submissions must identify the date, or approximate date, on which an incident occurred, for CPSC to publish a Report (16 CFR § 1102.10(d)(4)). CPSC cannot publish Reports lacking this information.

## Contact Information

For a Report to be eligible for publication in the database, submitters must provide their contact information (first name, last name, and complete mailing address) (15 U.S.C. § 2055a(b)(2)(B)(iv); 16 CFR § 1102.10(d)(6)). CPSC cannot publish Reports lacking this information.

## Consumer Product Description

For a Report to be eligible to publish in the database, it must describe the consumer product (15 U.S.C. § 2055a(b)(2)(B)(i); 16 CFR § 1102.10(d)(1)). The regulations explain: "The description of the consumer product must, at a minimum, include a word or phrase sufficient to distinguish the product as a consumer product, a component part of a consumer product, or a product or substance regulated by the Commission." (16 CFR § 1103.10(d)(1)). CPSC cannot publish Reports lacking this information.

## Risk of Harm Description

For a Report to be eligible for publication in the database, it must include: "A brief narrative description of illness, injury, or death; or risk of illness, injury, or death related to use of the consumer product." (16 CFR § 1102.10(d)(3); see *also* 15 U.S.C. § 2055a(b)(2)(B)(iii)).

## **Additional General Requirements for Publication**

### Jurisdiction

In addition to the criteria listed in the statutory and regulatory provisions regarding eligibility for publication in the database, CPSC can only publish Reports of Harm that describe a product that



## Memorandum

falls under CPSC's jurisdiction. When Data Intake analysts are unsure of whether a product falls under CPSC's jurisdiction, analysts consult the Office of the General Counsel for a jurisdictional determination.

### Other Reasons

Occasionally, CPSC staff determines that a Report is not eligible for publication because staff concludes the report to be materially inaccurate, such as when the date of incident precedes the date of purchase, or the report cites the failure of a component that is not a part of the product. In addition, a report cannot be published if it is submitted by a minor without the consent of the minor's parent or guardian.

**From:** Springs, Pamela  
**Sent:** Mon, 21 Nov 2022 21:09:42 +0000  
**To:** Midgett, Jonathan; Davis, Patty  
**Cc:** Summitt, Monica  
**Subject:** RE: Gas stove advocacy coalition request for public education from CPSC

Thanks, Jonathan –

(b)(5)

PRS

**From:** Midgett, (b)(6) <Midgett@cpsc.gov>  
**Sent:** Monday, November 21, 2022 3:41 PM  
**To:** Springs, (b)(6) <Springs@cpsc.gov>; Davis, Patty <PDavis@cpsc.gov>  
**Cc:** Summitt, Monica <MSummitt@cpsc.gov>  
**Subject:** RE: Gas stove advocacy coalition request for public education from CPSC

(b)(5)

---

**From:** Midgett, Jonathan  
**Sent:** Monday, November 14, 2022 10:54 AM  
**To:** Springs, (b)(6) <Springs@cpsc.gov>; Davis, Patty <PDavis@cpsc.gov>  
**Cc:** Summitt, Monica <MSummitt@cpsc.gov>  
**Subject:** Gas stove advocacy coalition request for public education from CPSC

(b)(5)

Their point of contact is Matt Casale at PIRG: [mcasale@pirg.org](mailto:mcasale@pirg.org), PIRG Environment Campaigns Director, Cell: 609-610-8002; Twitter: @mattcasale\_PIRG.



Regards,  
jonathan

**Jonathan Midgett, PhD**

Consumer Ombudsman

[U.S. Consumer Product Safety Commission](#) | Office of the Executive Director  
4330 East West Highway | Bethesda, MD 20814

Mobile:

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**From:** Recht, Joel  
**Sent:** Wed, 10 Aug 2022 12:41:16 +0000  
**To:** Little, Barbara; Levine, Jason; McGarvey, Carla; Austin Schlick; Ray, DeWane  
**Cc:** Boniface, Duane; Kelleher, Mary; Babich, Michael  
**Subject:** RE: letter  
**Attachments:** House Oversight Krishnamoorthi 8.9.22 - 1108 am (002) ael ahs (003) - JL+AS-JL (002).docx

(b)(5)

Thanks.

Joel

---

**From:** Little, Barbara <BLittle@cpsc.gov>  
**Sent:** Wednesday, August 10, 2022 8:32 AM  
**To:** Recht, Joel <jrecht@cpsc.gov>; Levine (b)(6) <levine@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin (b)(6) <Schlick@cpsc.gov>; Ray, DeWane <jray@cpsc.gov>  
**Cc:** Boniface, Duane <DBoniface@cpsc.gov>; Kelleher, Mary <MKelleher@cpsc.gov>; Babich, Michael <MBabich@cpsc.gov>  
**Subject:** RE: letter

(b)(5)

---

**From:** Recht, Joel <jrecht@cpsc.gov>  
**Sent:** Wednesday, August 10, 2022 8:12 AM  
**To:** Levine (b)(6) <levine@cpsc.gov>; Little, Barbara <BLittle@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin (b)(6) <Schlick@cpsc.gov>; Ray, DeWane <jray@cpsc.gov>  
**Cc:** Boniface, Duane <DBoniface@cpsc.gov>; Kelleher, Mary <MKelleher@cpsc.gov>; Babich, Michael <MBabich@cpsc.gov>  
**Subject:** RE: letter

(b)(5)

(b)(5)

---

**From:** Levine (b)(6) Levine@cpsc.gov  
**Sent:** Wednesday, August 10, 2022 8:05 AM  
**To:** Little, Barbara <BLittle@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin Schlick (b)(6) @cpsc.gov; Ray, DeWane <jray@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>  
**Subject:** Re: letter

Thanks Barb. Joel - (b)(5)

(b)(5)

**Jason Levine**  
**Executive Director**  
U.S. Consumer Product Safety Commission  
4330 East West Highway | Bethesda, MD 20814  
301-504-7882 (Direct)  
(b)(6) Cell)

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---

**From:** Little, Barbara <BLittle@cpsc.gov>  
**Sent:** Wednesday, August 10, 2022 7:30:30 AM  
**To:** Levine (b)(6) Levine@cpsc.gov; McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin Schlick (b)(6) @cpsc.gov; Ray, DeWane <jray@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>  
**Subject:** RE: letter

(b)(5)

---

**From:** Levine (b)(6) Levine@cpsc.gov

**Sent:** Tuesday, August 9, 2022 10:47 PM

**To:** McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin (b)(6) Schlick@cpsc.gov; Ray, DeWane <jray@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>; Little, Barbara <BLittle@cpsc.gov>

**Subject:** letter

(b)(5)

**Jason Levine**

**Executive Director**

U.S. Consumer Product Safety Commission |

4330 East West Highway | Bethesda, MD 20814

301-504-7882 (Direct)

(b)(6) (Cell)

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(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

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of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

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of the Freedom of Information Act



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of the Freedom of Information Act

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(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

**From:** Recht, Joel  
**Sent:** Wed, 10 Aug 2022 12:41:16 +0000  
**To:** Little, Barbara; Levine, Jason; McGarvey, Carla; Austin Schlick; Ray, DeWane  
**Cc:** Boniface, Duane; Kelleher, Mary; Babich, Michael  
**Subject:** RE: letter  
**Attachments:** House Oversight Krishnamoorthi 8.9.22 - 1108 am (002) ael ahs (003) - JL+AS-JL (002).docx

(b)(5)

Thanks.  
Joel

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**From:** Little, Barbara <BLittle@cpsec.gov>  
**Sent:** Wednesday, August 10, 2022 8:32 AM  
**To:** Recht, Joel <jrecht@cpsec.gov>; Levine (b)(6) <levine@cpsec.gov>; McGarvey, Carla <CMcGarvey@cpsec.gov>; Austin (b)(6) <Schlick@cpsec.gov>; Ray, DeWane <jray@cpsec.gov>  
**Cc:** Boniface, Duane <DBoniface@cpsec.gov>; Kelleher, Mary <MKelleher@cpsec.gov>; Babich, Michael <MBabich@cpsec.gov>  
**Subject:** RE: letter

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**From:** Recht, Joel <jrecht@cpsec.gov>  
**Sent:** Wednesday, August 10, 2022 8:12 AM  
**To:** Levine (b)(6) <levine@cpsec.gov>; Little, Barbara <BLittle@cpsec.gov>; McGarvey, Carla <CMcGarvey@cpsec.gov>; Austin (b)(6) <Schlick@cpsec.gov>; Ray, DeWane <jray@cpsec.gov>  
**Cc:** Boniface, Duane <DBoniface@cpsec.gov>; Kelleher, Mary <MKelleher@cpsec.gov>; Babich, Michael <MBabich@cpsec.gov>  
**Subject:** RE: letter

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**From:** Levine (b)(6) <Levine@cpsc.gov>  
**Sent:** Wednesday, August 10, 2022 8:05 AM  
**To:** Little, Barbara <BLittle@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin Schlick (b)(6) <@cpsc.gov>; Ray, DeWane <jray@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>  
**Subject:** Re: letter

(b)(5)

**Jason Levine**  
**Executive Director**  
U.S. Consumer Product Safety Commission  
4330 East West Highway | Bethesda, MD 20814  
301-504-7882 (Direct)  
(b)(6) (Cell)

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**From:** Little, Barbara <BLittle@cpsc.gov>  
**Sent:** Wednesday, August 10, 2022 7:30:30 AM  
**To:** Levine (b)(6) <Levine@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin Schlick (b)(6) <@cpsc.gov>; Ray, DeWane <jray@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>  
**Subject:** RE: letter

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**From:** Levine (b)(6) <levine@cpsc.gov>

**Sent:** Tuesday, August 9, 2022 10:47 PM

**To:** McGarvey, Carla <CMcGarvey@cpsc.gov>; Austin (b)(6) <Schlick@cpsc.gov>; Ray, DeWane <jray@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>; Little, Barbara <BLittle@cpsc.gov>

**Subject:** letter

(b)(5)

**Jason Levine**

**Executive Director**

U.S. Consumer Product Safety Commission |

4330 East West Highway | Bethesda, MD 20814

301-504-7882 (Direct)

(b)(6) (Cell)

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**From:** Kirshner, Amy  
**Sent:** Thu, 18 Aug 2022 15:15:48 +0000  
**To:** Kirshner, Amy; (b)(6) Chairman Hoehn-Saric's Office; (b)(6) Comm Feldman Office; (b)(6) Comm Trumka's Office; (b)(6) Comm Baiocco's Office; (b)(6) Comm Boyle's Office; McGoogan, Stephen; Ray, DeWane; Yaung, Michelle; Crockett, David; Summitt, Monica; Recht, Joel; Stadnik, Andrew; Kelleher, Mary; Adair, Patricia; Boniface, Duane; Hanway, Stephen; Kumagai, Mark; Taylor, Nevin; Kassekert, Anthony; Sultan, Jennifer; McGarvey, Carla; Austin Schlick; Stone, Pamela; Vice, Daniel; Springs, Pamela; Levine, Jason  
**Subject:** EXHR Activities Report 08-22-22\_FINAL.pdf  
**Attachments:** EXHR Activities Report 08-22-22\_FINAL.pdf



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**From:** Kirshner, Amy  
**Sent:** Fri, 26 Aug 2022 15:37:07 +0000  
**To:** Kirshner, Amy; (b)(6) Chairman Hoehn-Saric's Office; (b)(6) Comm Feldman Office; (b)(6) Comm Trumka's Office; (b)(6) Comm Baiocco's Office; (b)(6) Comm Boyle's Office; McGoogan, Stephen; Ray, DeWane; Yaung, Michelle; Crockett, David; Summitt, Monica; Recht, Joel; Stadnik, Andrew; Kelleher, Mary; Adair, Patricia; Boniface, Duane; Hanway, Stephen; Kumagai, Mark; Taylor, Nevin; Kassekert, Anthony; Sultan, Jennifer; McGarvey, Carla; Austin Schlick; Stone, Pamela; Vice, Daniel; Springs, Pamela; Levine, Jason  
**Subject:** EXHR Activities Report 08-31-22\_FINAL.pdf  
**Attachments:** EXHR Activities Report 08-31-22\_FINAL.pdf

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**From:** Kirshner, Amy  
**Sent:** Mon, 12 Sep 2022 12:48:09 +0000  
**To:** Kirshner, Amy; (b)(6)- Chairman Hoehn-Saric's Office; (b)(6)- Comm Feldman Office; (b)(6)- Comm Trumka's Office; (b)(6)- Comm Baiocco's Office; (b)(6)- Comm Boyle's Office; McGoogan, Stephen; Ray, DeWane; Yaung, Michelle; Crockett, David; Summitt, Monica; Recht, Joel; Stadnik, Andrew; Kelleher, Mary; Adair, Patricia; Boniface, Duane; Hanway, Stephen; Kumagai, Mark; Taylor, Nevin; Kassekert, Anthony; Sultan, Jennifer; McGarvey, Carla; Austin Schlick; Stone, Pamela; Vice, Daniel; Springs, Pamela; Levine, Jason  
**Subject:** EXHR Activities Report 09\_14\_2022\_Final.pdf  
**Attachments:** EXHR Activities Report 09\_14\_2022\_Final.pdf

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**From:** Kirshner, Amy  
**Sent:** Tue, 27 Sep 2022 13:27:08 +0000  
**To:** Kirshner, Amy; (b)(6) Chairman Hoehn-Saric's Office; (b)(6) Comm Feldman Office; (b)(6) Comm Trumka's Office; (b)(6) Comm Baiocco's Office; (b)(6) Comm Boyle's Office; McGoogan, Stephen; Ray, DeWane; Yaung, Michelle; Crockett, David; Summitt, Monica; Recht, Joel; Stadnik, Andrew; Kelleher, Mary; Adair, Patricia; Boniface, Duane; Hanway, Stephen; Kumagai, Mark; Taylor, Nevin; Sultan, Jennifer; McGarvey, Carla; Austin Schlick; Stone, Pamela; Vice, Daniel; Springs, Pamela; Levine, Jason  
**Subject:** EXHR\_biweekly\_9\_28 final.pdf  
**Attachments:** EXHR\_biweekly\_9\_28 final.pdf

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**From:** Kirshner, Amy  
**Sent:** Thu, 22 Dec 2022 13:40:06 +0000  
**To:** (b)(6) Chairman Hoehn-Saric's Office; (b)(6) Comm Feldman Office; (b)(6) Comm Trumka's Office; (b)(6) Comm Boyle's Office; McGoogan, Stephen; Ray, DeWane; Yaung, Michelle; Crockett, David; Summitt, Monica; Recht, Joel; Stadnik, Andrew; Kelleher, Mary; Adair, Patricia; Boniface, Duane; Hanway, Stephen; Kumagai, Mark; Sultan, Jennifer; Austin Schlick; Stone, Pamela; Vice, Daniel; Springs, Pamela; Levine, Jason  
**Subject:** EXHR\_biweekly\_12\_21\_22\_FINAL.pdf  
**Attachments:** EXHR\_biweekly\_12\_21\_22\_FINAL.pdf

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**From:** Ray, DeWane  
**Sent:** Tue, 2 Aug 2022 13:10:21 +0000  
**To:** Boniface, Duane; Recht, Joel  
**Cc:** Levine, Jason; McGarvey, Carla  
**Subject:** FW: Letter for Mr. Alexander Hoehn-Saric, Chairman, Consumer Product Safety Commission  
**Attachments:** 2022-08-01.RK to Hoehn-Saric-CPSC re Gas Stoves.pdf  
**Importance:** High

Duane and Joel

(b)(5)

Thank you  
DeWane

---

**From:** Levine (b)(6) <levine@cpsc.gov>  
**Sent:** Monday, August 1, 2022 1:50 PM  
**To:** Ray, DeWane <jray@cpsc.gov>  
**Subject:** FW: Letter for Mr. Alexander Hoehn-Saric, Chairman, Consumer Product Safety Commission

FYI. Haven't read yet.

### Jason Levine

Executive Director

[U.S. Consumer Product Safety Commission](#) |  
4330 East West Highway | Bethesda, MD 20814  
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(b)(6) Cell

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**From:** McGarvey, Carla <CMcGarvey@cpsc.gov>  
**Sent:** Monday, August 1, 2022 12:19 PM  
**To:** Hoehn-Saric (b)(6) <Hoehnsaric@cpsc.gov>; Fong-Swamidoss, Jana <JFSwamidoss@cpsc.gov>; Laitin, Anna <ALaitin@cpsc.gov>; Springs (b)(6) <Springs@cpsc.gov>; Sandlin, Erin

<[ESandlin@cpsc.gov](mailto:ESandlin@cpsc.gov)>; Levine (b)(6) [evine@cpsc.gov](mailto:evine@cpsc.gov)>

**Cc:** Ginsburg, Andrew <[AGinsburg@cpsc.gov](mailto:AGinsburg@cpsc.gov)>; Crockett, David <[DCrockett@cpsc.gov](mailto:DCrockett@cpsc.gov)>

**Subject:** FW: Letter for Mr. Alexander Hoehn-Saric, Chairman, Consumer Product Safety Commission

Here is the letter from House Oversight on gas stoves—it's long and I'm reading it now.

---

**From:** Mpanju, Melanie <[Melanie.Mpanju@mail.house.gov](mailto:Melanie.Mpanju@mail.house.gov)>

**Sent:** Monday, August 1, 2022 12:09 PM

**To:** McGarvey, Carla <[CMcGarvey@cpsc.gov](mailto:CMcGarvey@cpsc.gov)>; CPSC Legislative Affairs (b)(6) <[\(b\)\(6\)@cpsc.gov](mailto:(b)(6)@cpsc.gov)>

**Cc:** Misk, Jonathan <[Jonathan.Misk@mail.house.gov](mailto:Jonathan.Misk@mail.house.gov)>; Vruwink, Jonathan <[Jonathan.Vruwink@mail.house.gov](mailto:Jonathan.Vruwink@mail.house.gov)>; Baldwin, Wilson <[Wilson.Baldwin@mail.house.gov](mailto:Wilson.Baldwin@mail.house.gov)>; Kilvington, John <[John.Kilvington@mail.house.gov](mailto:John.Kilvington@mail.house.gov)>; LaNier, Elisa <[Elisa.LaNier@mail.house.gov](mailto:Elisa.LaNier@mail.house.gov)>; Stratton, Amy <[Amy.Stratton@mail.house.gov](mailto:Amy.Stratton@mail.house.gov)>; Solomon, Morgan <[Morgan.Solomon@mail.house.gov](mailto:Morgan.Solomon@mail.house.gov)>; Miller, Aidan <[Aidan.Miller@mail.house.gov](mailto:Aidan.Miller@mail.house.gov)>; Stopek, Emma <[Emma.Stopek@mail.house.gov](mailto:Emma.Stopek@mail.house.gov)>

**Subject:** Letter for Mr. Alexander Hoehn-Saric, Chairman, Consumer Product Safety Commission

Hello—

Please see the attached letter from Chairman Raja Krishnamoorthi, Subcommittee on Economic and Consumer Policy, for Mr. Alexander Hoehn-Saric, Chairman, Consumer Product Safety Commission.

Please acknowledge receipt of the letter. Thank you.

Best regards,

**Melanie Mpanju**

Staff Assistant | Committee on Oversight & Reform

Chairwoman Carolyn B. Maloney

[melanie.mpanju@mail.house.gov](mailto:melanie.mpanju@mail.house.gov)

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**Congress of the United States**  
**House of Representatives**

COMMITTEE ON OVERSIGHT AND REFORM

2157 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6143

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Minority (202) 225-5074  
<https://oversight.house.gov>

August 1, 2022

Mr. Alexander Hoehn-Saric  
Chairman  
Consumer Product Safety Commission  
4330 East-West Highway  
Bethesda, MD 20814

Dear Chairman Hoehn-Saric:

In 1986, the Environmental Protection Agency (EPA) issued a report pressing the Consumer Product Safety Commission (CPSC) to focus on the dangers of gas stove emissions.<sup>1</sup> Five years later, in 1991, CPSC and EPA—in conjunction with the American Lung Association—published a short pamphlet discussing the dangers of indoor air pollution and combustion appliances and warning that possible health effects could include headaches, breathing difficulties, or even death.<sup>2</sup> And just last fall, CPSC began holding meetings with industry stakeholders to discuss the establishment of an independent task force to address indoor air pollution from gas stove emissions.<sup>3</sup> Yet today, more than 35 years after first learning of the potential risks associated with indoor gas stove emissions, CPSC still has issued no regulations or guidelines limiting indoor emissions of harmful pollutants such as nitrogen dioxide, which commonly exceed even the outdoor pollution standards established by EPA.<sup>4</sup> I write to request documents and information about the CPSC's failure to establish safety standards and provide adequate warnings to consumers addressing the significant health risks posed by indoor air pollution from gas stoves.

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<sup>1</sup> Environmental Protection Agency, *Report of the Clean Air Scientific Advisory Committee: A Review of the Consumer Product Safety Commission's Health Effects and Exposure Assessment Documents on Nitrogen Dioxide* (May 1986) (online at <https://tinyurl.com/7va67ays>).

<sup>2</sup> Consumer Product Safety Commission, Environmental Protection Agency, American Lung Association, *What You Should Know About Combustible Appliances and Indoor Air Pollution* (1991) (online at <https://tinyurl.com/3cvz729x>). It is not clear how or to whom the CPSC, EPA, and ALA distributed this pamphlet.

<sup>3</sup> Consumer Product Safety Commission, *Gas Range and Indoor Air Quality Meeting with Stakeholders* (Sept. 1, 2021) (online at [www.cpsc.gov/s3fs-public/2021-09-01-Gas-Range-and-IAQ-Log-of-Meeting.pdf?VersionId=P.JkImnSuyAeOqm6yphxuDkhzW7zizqMw](http://www.cpsc.gov/s3fs-public/2021-09-01-Gas-Range-and-IAQ-Log-of-Meeting.pdf?VersionId=P.JkImnSuyAeOqm6yphxuDkhzW7zizqMw)).

<sup>4</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

Gas stoves—used by more than one-third of U.S. households—emit harmful levels of several pollutants, including nitrogen dioxide (NO<sub>2</sub>).<sup>5</sup> Homes with gas stoves have average NO<sub>2</sub> levels ranging from roughly 50% to 400% higher than homes with electric stoves.<sup>6</sup> When using gas ranges, basic cooking activities, such as baking a cake or roasting meat, can produce indoor NO<sub>2</sub> emissions two to three times greater than both the World Health Organization’s indoor NO<sub>2</sub> guideline of 106 parts per billion (ppb) and EPA’s outdoor NO<sub>2</sub> standard of 100 ppb.<sup>7</sup> Indoor gas stove emissions can exceed EPA’s outdoor NO<sub>2</sub> standard after only a few minutes of stove usage.<sup>8</sup>

Measured NO <sub>2</sub> Emissions from Gas Stoves	Peak (ppb)
Baking cake in oven	230
Roasting meat in oven	296
Frying bacon	104
Boiling water	184
Gas cooktop - no food	82–300
Gas oven - no food	130–546

Source: Rocky Mountain Institute<sup>9</sup>

NO<sub>2</sub> is not the only harmful pollutant about which families living in homes with gas stoves have to worry. A recent study of homes in the Boston area conducted by researchers from the Harvard T.H. Chan School of Public Health concluded that, even when combustion appliances were not in use, “natural gas used in homes ... contains varying levels of volatile organic chemicals that when leaked are known to be toxic, linked to cancer, and can form secondary health-damaging pollutants such as particulate matter and ozone.”<sup>10</sup> More

<sup>5</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)).

<sup>6</sup> Environmental Protection Agency, *Integrated Science Assessment for Oxides of Nitrogen—Health Criteria 2-38* (July 2008) (online at <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=194645>).

<sup>7</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>8</sup> Eric Lebel et al., *Methane and NO<sub>x</sub> Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes*, *Environmental Science & Technology* (Jan. 27, 2022) (online at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c04707>).

<sup>9</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>10</sup> Harvard Chan C-Change, *Natural Gas Used in Homes Contains Hazardous Air Pollutants* (June 28, 2022) (online at [www.hsph.harvard.edu/c-change/news/natural-gas-used-in-homes/](http://www.hsph.harvard.edu/c-change/news/natural-gas-used-in-homes/)).

specifically, the study found worrying levels of benzene, hexane, toluene, heptane, and cyclohexane.<sup>11</sup>

The high levels of indoor pollution from gas stoves present significant health risks, particularly to children. Studies have shown that children living in homes with gas stoves have a 42% greater risk of experiencing asthma symptoms and a 24% greater risk of being diagnosed with asthma.<sup>12</sup> In other words, living in a home with a gas stove presents a similar asthma risk to children as does second-hand cigarette smoke.<sup>13</sup>

Proper stove ventilation (*e.g.*, using an exhaust hood) has the potential to reduce indoor pollution from gas stoves to acceptable levels.<sup>14</sup> However, unlike with gas furnaces, water heaters, and dryers, no federal laws or guidelines require that gas stove emissions be vented outdoors. In the absence of any such requirement, many homes lack exhaust hoods altogether, and others have hoods that merely recirculate air, which does not lower the pollution levels inside a home. And even when exhaust hoods are present in a home, many people do not use them.<sup>15</sup> Furthermore, because no federal regulations govern their capture efficiency in homes, the quality of exhaust hoods varies greatly.<sup>16</sup> While some commercially available hoods can capture up to 98% of indoor pollution from a gas stove, other exhaust hoods capture as little as

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<sup>11</sup> Drew R. Michanowicz et al., *Home Is Where the Pipeline Ends: Characterization of Volatile Organic Compounds Present in Natural Gas at the Point of the Residential End User*, Environmental Science & Technology (June 28, 2022) (online at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c08298>).

<sup>12</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)); Weiwei Lin et al., *Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children*, International Journal of Epidemiology (Dec. 2013) (online at <https://academic.oup.com/ije/article/42/6/1724/737113>).

<sup>13</sup> Climate Council, *Kicking the Gas Habit: How Gas Is Harming Our Health* (May 2021) (online at [www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf](http://www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf)).

<sup>14</sup> Wanyu Chan et al., *Simulations of Short-Term Exposure to NO<sub>2</sub> and PM<sub>2.5</sub> to Inform Capture Efficiency Standards*, Lawrence Berkeley National Laboratory (Mar. 30, 2020) (online at <https://escholarship.org/content/qt6tj6k06j/qt6tj6k06j.pdf>). EPA's Air Quality Index has a value range from 0 to 500. Air quality values between 51 and 100 are considered "acceptable," while air quality values between 0 and 50 are considered "satisfactory." Environmental Protection Agency, *Air Quality Index (AQI) Basics* (online at [www.airnow.gov/aqi/aqi-basics/](http://www.airnow.gov/aqi/aqi-basics/)) (accessed July 29, 2022).

<sup>15</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>16</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)); Weiwei Lin et al., *Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children*, International Journal of Epidemiology (Dec. 2013) (online at <https://academic.oup.com/ije/article/42/6/1724/737113>); Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

15%.<sup>17</sup> Research indicates that exhaust hoods must capture at least 70% of pollutants like nitrogen oxide to make the indoor air quality “acceptable” for residents of homes with gas stoves—meaning many exhaust hoods do not provide adequate safety.<sup>18</sup>

CPSC has the authority either to issue mandatory standards and require warning labels or to work with industry to develop voluntary standards and labels that would address indoor air pollution from gas stoves. Despite this authority, the Commission has failed, among other things, to develop standards limiting most types of indoor air pollution from gas stoves, require effective exhaust hoods, or facilitate the introduction of meaningful warning labels to inform consumers about the health risks from gas stoves and the importance of proper ventilation.<sup>19</sup> CPSC’s Safety Education Materials Library offers only a general, high-level guide about indoor air quality that contains a few cursory mentions of gas stoves.<sup>20</sup>

I am deeply concerned by the Commission’s failure to establish safety standards and communicate clearly to the public about this issue, especially given the serious health risks to children. To assist the Subcommittee in its review of this matter, please produce, by August 15, 2022, the following documents in your possession, custody, or control:

1. All documents, including internal memoranda and analyses, regarding indoor emissions or indoor air pollution from gas stoves, including documents related to the EPA’s May 1986 report entitled *Report of the Clean Air Scientific Advisory Committee: A Review of the Consumer Product Safety Commission’s Health Effects and Exposure Assessment Documents on Nitrogen Dioxide*;
2. All documents, including internal memoranda and analyses, regarding CPSC’s regulation or oversight of indoor emissions or indoor air pollution from gas stoves, including but not limited to draft indoor emissions standards or warning labels for gas stoves; and
3. All documents, including internal memoranda and analyses, discussing the creation of an indoor joint task force related to indoor air quality and gas ranges.

To assist the Subcommittee in its review of this matter, please provide answers to the following questions by August 8, 2022:

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<sup>17</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>18</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)).

<sup>19</sup> *Id.* CPSC has only established voluntary standards relating to carbon monoxide poisoning from gas stove emissions.

<sup>20</sup> Consumer Product Safety Commission, *The Inside Story: A Guide to Indoor Air Quality* (online at [www.cpsc.gov/safety-education/safety-guides/home/inside-story-guide-indoor-air-quality](http://www.cpsc.gov/safety-education/safety-guides/home/inside-story-guide-indoor-air-quality)).

1. Has the Commission considered issuing mandatory or recommending voluntary standards or warning labels to address the health risks of indoor air pollution from gas stoves? If it has, please explain the status of the Commission's work and explain why the Commission has not yet issued any such mandatory—or recommended any such voluntary—standards or warning labels? If it has not, will the Commission consider taking such action based on the publicly available evidence of health harms from gas stoves?
2. Please describe the Commission's plans, if any, to issue mandatory standards or to facilitate the adoption of voluntary standards addressing indoor air pollution from gas stoves.
3. Please describe the Commission's plans, if any, to require a mandatory warning label or facilitate the adoption of voluntary warning labels addressing the health risks of indoor air pollution from gas stoves.
4. Please describe the Commission's plans, if any, to publish public educational materials specifically focused on the significant health risks posed by gas stove emissions.
5. Are there any legislative or other measures that the Commission believes are necessary for it to issue regulations concerning indoor gas stove emissions?
6. Are the following substances toxic: (i) nitrogen dioxide; (ii) benzene; (iii) toluene; (iv) heptane; (v) hexane; and (vi) cyclohexane?

The Committee on Oversight and Reform is the principal oversight committee of the House of Representatives and has broad authority to investigate “any matter” at “any time” under House Rule X. An attachment to this letter provides additional instructions for responding to the Subcommittee's request. If you have any questions regarding this request, please contact Subcommittee staff at (202) 225-5051.

Sincerely,



Raja Krishnamoorthi

Chairman

Subcommittee on Economic and Consumer Policy

Enclosure

cc: The Honorable Michael Cloud, Ranking Member  
Subcommittee on Economic and Consumer Policy



## Responding to Oversight Committee Document Requests

1. In complying with this request, produce all responsive documents that are in your possession, custody, or control, whether held by you or your past or present agents, employees, and representatives acting on your behalf. Produce all documents that you have a legal right to obtain, that you have a right to copy, or to which you have access, as well as documents that you have placed in the temporary possession, custody, or control of any third party.
2. Requested documents, and all documents reasonably related to the requested documents, should not be destroyed, altered, removed, transferred, or otherwise made inaccessible to the Committee.
3. In the event that any entity, organization, or individual denoted in this request is or has been known by any name other than that herein denoted, the request shall be read also to include that alternative identification.
4. The Committee's preference is to receive documents in electronic form (i.e., CD, memory stick, thumb drive, or secure file transfer) in lieu of paper productions.
5. Documents produced in electronic format should be organized, identified, and indexed electronically.
6. Electronic document productions should be prepared according to the following standards:
  - a. The production should consist of single page Tagged Image File ("TIF"), files accompanied by a Concordance-format load file, an Opticon reference file, and a file defining the fields and character lengths of the load file.
  - b. Document numbers in the load file should match document Bates numbers and TIF file names.
  - c. If the production is completed through a series of multiple partial productions, field names and file order in all load files should match.
  - d. All electronic documents produced to the Committee should include the following fields of metadata specific to each document, and no modifications should be made to the original metadata:  
  
BEGDOC, ENDDOC, TEXT, BEGATTACH, ENDATTACH, PAGECOUNT, CUSTODIAN, RECORDTYPE, DATE, TIME, SENTDATE, SENTTIME, BEGINDATE, BEGINTIME, ENDDATE, ENDTIME, AUTHOR, FROM, CC, TO, BCC, SUBJECT, TITLE, FILENAME, FILEEXT, FILESIZE, DATECREATED, TIMECREATED, DATELASTMOD, TIMELASTMOD,

INTMSGID, INTMSGHEADER, NATIVELINK, INTFILPATH, EXCEPTION, BEGATTACH.

7. Documents produced to the Committee should include an index describing the contents of the production. To the extent more than one CD, hard drive, memory stick, thumb drive, zip file, box, or folder is produced, each should contain an index describing its contents.
8. Documents produced in response to this request shall be produced together with copies of file labels, dividers, or identifying markers with which they were associated when the request was served.
9. When you produce documents, you should identify the paragraph(s) or request(s) in the Committee's letter to which the documents respond.
10. The fact that any other person or entity also possesses non-identical or identical copies of the same documents shall not be a basis to withhold any information.
11. The pendency of or potential for litigation shall not be a basis to withhold any information.
12. In accordance with 5 U.S.C. § 552(d), the Freedom of Information Act (FOIA) and any statutory exemptions to FOIA shall not be a basis for withholding any information.
13. Pursuant to 5 U.S.C. § 552a(b)(9), the Privacy Act shall not be a basis for withholding information.
14. If compliance with the request cannot be made in full by the specified return date, compliance shall be made to the extent possible by that date. An explanation of why full compliance is not possible shall be provided along with any partial production.
15. In the event that a document is withheld on the basis of privilege, provide a privilege log containing the following information concerning any such document: (a) every privilege asserted; (b) the type of document; (c) the general subject matter; (d) the date, author, addressee, and any other recipient(s); (e) the relationship of the author and addressee to each other; and (f) the basis for the privilege(s) asserted.
16. If any document responsive to this request was, but no longer is, in your possession, custody, or control, identify the document (by date, author, subject, and recipients), and explain the circumstances under which the document ceased to be in your possession, custody, or control.
17. If a date or other descriptive detail set forth in this request referring to a document is inaccurate, but the actual date or other descriptive detail is known to you or is otherwise apparent from the context of the request, produce all documents that would be responsive as if the date or other descriptive detail were correct.

18. This request is continuing in nature and applies to any newly-discovered information. Any record, document, compilation of data, or information not produced because it has not been located or discovered by the return date shall be produced immediately upon subsequent location or discovery.
19. All documents shall be Bates-stamped sequentially and produced sequentially.
20. Two sets of each production shall be delivered, one set to the Majority Staff and one set to the Minority Staff. When documents are produced to the Committee, production sets shall be delivered to the Majority Staff in Room 2157 of the Rayburn House Office Building and the Minority Staff in Room 2105 of the Rayburn House Office Building.
21. Upon completion of the production, submit a written certification, signed by you or your counsel, stating that: (1) a diligent search has been completed of all documents in your possession, custody, or control that reasonably could contain responsive documents; and (2) all documents located during the search that are responsive have been produced to the Committee.

### **Definitions**

1. The term “document” means any written, recorded, or graphic matter of any nature whatsoever, regardless of how recorded, and whether original or copy, including, but not limited to, the following: memoranda, reports, expense reports, books, manuals, instructions, financial reports, data, working papers, records, notes, letters, notices, confirmations, telegrams, receipts, appraisals, pamphlets, magazines, newspapers, prospectuses, communications, electronic mail (email), contracts, cables, notations of any type of conversation, telephone call, meeting or other inter-office or intra-office communication, bulletins, printed matter, computer printouts, teletypes, invoices, transcripts, diaries, analyses, returns, summaries, minutes, bills, accounts, estimates, projections, comparisons, messages, correspondence, press releases, circulars, financial statements, reviews, opinions, offers, studies and investigations, questionnaires and surveys, and work sheets (and all drafts, preliminary versions, alterations, modifications, revisions, changes, and amendments of any of the foregoing, as well as any attachments or appendices thereto), and graphic or oral records or representations of any kind (including without limitation, photographs, charts, graphs, microfiche, microfilm, videotape, recordings and motion pictures), and electronic, mechanical, and electric records or representations of any kind (including, without limitation, tapes, cassettes, disks, and recordings) and other written, printed, typed, or other graphic or recorded matter of any kind or nature, however produced or reproduced, and whether preserved in writing, film, tape, disk, videotape, or otherwise. A document bearing any notation not a part of the original text is to be considered a separate document. A draft or non-identical copy is a separate document within the meaning of this term.
2. The term “communication” means each manner or means of disclosure or exchange of information, regardless of means utilized, whether oral, electronic, by document or otherwise, and whether in a meeting, by telephone, facsimile, mail, releases, electronic

message including email (desktop or mobile device), text message, instant message, MMS or SMS message, message application, or otherwise.

3. The terms “and” and “or” shall be construed broadly and either conjunctively or disjunctively to bring within the scope of this request any information that might otherwise be construed to be outside its scope. The singular includes plural number, and vice versa. The masculine includes the feminine and neutral genders.
4. The term “including” shall be construed broadly to mean “including, but not limited to.”
5. The term “Company” means the named legal entity as well as any units, firms, partnerships, associations, corporations, limited liability companies, trusts, subsidiaries, affiliates, divisions, departments, branches, joint ventures, proprietorships, syndicates, or other legal, business or government entities over which the named legal entity exercises control or in which the named entity has any ownership whatsoever.
6. The term “identify,” when used in a question about individuals, means to provide the following information: (a) the individual’s complete name and title; (b) the individual’s business or personal address and phone number; and (c) any and all known aliases.
7. The term “related to” or “referring or relating to,” with respect to any given subject, means anything that constitutes, contains, embodies, reflects, identifies, states, refers to, deals with, or is pertinent to that subject in any manner whatsoever.
8. The term “employee” means any past or present agent, borrowed employee, casual employee, consultant, contractor, de facto employee, detailee, fellow, independent contractor, intern, joint adventurer, loaned employee, officer, part-time employee, permanent employee, provisional employee, special government employee, subcontractor, or any other type of service provider.
9. The term “individual” means all natural persons and all persons or entities acting on their behalf.

**From:** Laitin, Anna  
**Sent:** Fri, 21 Oct 2022 13:49:14 +0000  
**To:** Levine, Jason  
**Subject:** FW: Memo re NPR on Gas Stoves  
**Attachments:** Memo re Regulation of Gas Stoves\_10.20.2022.pdf

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**From:** Lipp, Robin <RLipp@cpsc.gov>  
**Sent:** Thursday, October 20, 2022 2:40 PM  
**To:** Fong-Swamidoss, Jana <JFSwamidoss@cpsc.gov>; Laitin, Anna <ALaitin@cpsc.gov>; Council, Alison <ACouncil@cpsc.gov>; Caldera, Eva <ECaldera@cpsc.gov>  
**Cc:** Niemasik, Kaylee <KNiemasik@cpsc.gov>; Sebold, Meghan <MSebold@cpsc.gov>  
**Subject:** Memo re NPR on Gas Stoves

Hi All,

(b)(5)

Robin

## Robin D. Lipp

Pronouns: he/him/his

Special Counsel/Attorney Advisor to Commissioner Rich Trumka Jr.

[U.S. Consumer Product Safety Commission](#)

4330 East West Highway | Bethesda, Maryland 20814

Phone: (b)(6)

Email: [rlipp@cpsc.gov](mailto:rlipp@cpsc.gov)

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act



Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

**From:** McGarvey, Carla  
**Sent:** Thu, 8 Sep 2022 14:09:33 +0000  
**To:** Austin Schlick; Levine, Jason  
**Subject:** FW: Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification  
**Attachments:** Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification OLA\_08232022.docx, 2022-08-01.RK to Hoehn-Saric-CPSC re Gas Stoves.pdf

(b)(5)

Thanks!  
Carla

---

**From:** Recht, Joel <jrecht@cpsc.gov>  
**Sent:** Tuesday, August 23, 2022 1:19 PM  
**To:** Dennis, Alex <ADennis@cpsc.gov>; McCune, Renee <RMcCune@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>  
**Cc:** Boniface, Duane <DBoniface@cpsc.gov>; Austin (b)(6) Schlick@cpsc.gov>  
**Subject:** RE: Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification

(b)(5)

Joel

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**From:** Dennis, Alex <ADennis@cpsc.gov>  
**Sent:** Tuesday, August 23, 2022 11:30 AM  
**To:** McCune, Renee <RMcCune@cpsc.gov>; McGarvey, Carla <CMcGarvey@cpsc.gov>; Recht, Joel <jrecht@cpsc.gov>  
**Cc:** Boniface, Duane <DBoniface@cpsc.gov>; Austin (b)(6) Schlick@cpsc.gov>  
**Subject:** RE: Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification

(b)(5)

(b)(5)

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**From:** McCune, Renee <[RMcCune@cpsc.gov](mailto:RMcCune@cpsc.gov)>  
**Sent:** Tuesday, August 23, 2022 10:55 AM  
**To:** McGarvey, Carla <[CMcGarvey@cpsc.gov](mailto:CMcGarvey@cpsc.gov)>; Recht, Joel <[jrecht@cpsc.gov](mailto:jrecht@cpsc.gov)>  
**Cc:** Boniface, Duane <[DBoniface@cpsc.gov](mailto:DBoniface@cpsc.gov)>; Dennis, Alex <[ADennis@cpsc.gov](mailto:ADennis@cpsc.gov)>; Austin Schlick  
<[\(b\)\(6\)@cpsc.gov](mailto:(b)(6)@cpsc.gov)>  
**Subject:** RE: Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification

(b)(5)

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**From:** McGarvey, Carla <[CMcGarvey@cpsc.gov](mailto:CMcGarvey@cpsc.gov)>  
**Sent:** Tuesday, August 23, 2022 9:24 AM  
**To:** Recht, Joel <[jrecht@cpsc.gov](mailto:jrecht@cpsc.gov)>; McCune, Renee <[RMcCune@cpsc.gov](mailto:RMcCune@cpsc.gov)>  
**Cc:** Boniface, Duane <[DBoniface@cpsc.gov](mailto:DBoniface@cpsc.gov)>  
**Subject:** RE: Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification

(b)(5)

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**From:** Recht, Joel <[jrecht@cpsc.gov](mailto:jrecht@cpsc.gov)>  
**Sent:** Monday, August 22, 2022 8:40 PM  
**To:** McGarvey, Carla <[CMcGarvey@cpsc.gov](mailto:CMcGarvey@cpsc.gov)>; McCune, Renee <[RMcCune@cpsc.gov](mailto:RMcCune@cpsc.gov)>  
**Cc:** Boniface, Duane <[DBoniface@cpsc.gov](mailto:DBoniface@cpsc.gov)>  
**Subject:** Sucommittee Economic Consumer Policy DRAFT CPSC DOC Certification

(b)(5)

Joel

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

Withheld pursuant to exemption

(b)(5)

of the Freedom of Information Act

**Congress of the United States**  
**House of Representatives**

COMMITTEE ON OVERSIGHT AND REFORM

2157 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6143

Majority (202) 225-5051  
Minority (202) 225-5074  
<https://oversight.house.gov>

August 1, 2022

Mr. Alexander Hoehn-Saric  
Chairman  
Consumer Product Safety Commission  
4330 East-West Highway  
Bethesda, MD 20814

Dear Chairman Hoehn-Saric:

In 1986, the Environmental Protection Agency (EPA) issued a report pressing the Consumer Product Safety Commission (CPSC) to focus on the dangers of gas stove emissions.<sup>1</sup> Five years later, in 1991, CPSC and EPA—in conjunction with the American Lung Association—published a short pamphlet discussing the dangers of indoor air pollution and combustion appliances and warning that possible health effects could include headaches, breathing difficulties, or even death.<sup>2</sup> And just last fall, CPSC began holding meetings with industry stakeholders to discuss the establishment of an independent task force to address indoor air pollution from gas stove emissions.<sup>3</sup> Yet today, more than 35 years after first learning of the potential risks associated with indoor gas stove emissions, CPSC still has issued no regulations or guidelines limiting indoor emissions of harmful pollutants such as nitrogen dioxide, which commonly exceed even the outdoor pollution standards established by EPA.<sup>4</sup> I write to request documents and information about the CPSC's failure to establish safety standards and provide adequate warnings to consumers addressing the significant health risks posed by indoor air pollution from gas stoves.

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<sup>1</sup> Environmental Protection Agency, *Report of the Clean Air Scientific Advisory Committee: A Review of the Consumer Product Safety Commission's Health Effects and Exposure Assessment Documents on Nitrogen Dioxide* (May 1986) (online at <https://tinyurl.com/7va67ays>).

<sup>2</sup> Consumer Product Safety Commission, Environmental Protection Agency, American Lung Association, *What You Should Know About Combustible Appliances and Indoor Air Pollution* (1991) (online at <https://tinyurl.com/3cvz729x>). It is not clear how or to whom the CPSC, EPA, and ALA distributed this pamphlet.

<sup>3</sup> Consumer Product Safety Commission, *Gas Range and Indoor Air Quality Meeting with Stakeholders* (Sept. 1, 2021) (online at [www.cpsc.gov/s3fs-public/2021-09-01-Gas-Range-and-IAQ-Log-of-Meeting.pdf?VersionId=P.JkImnSuyAeOqm6yphxuDkhzW7zizqMw](http://www.cpsc.gov/s3fs-public/2021-09-01-Gas-Range-and-IAQ-Log-of-Meeting.pdf?VersionId=P.JkImnSuyAeOqm6yphxuDkhzW7zizqMw)).

<sup>4</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

Gas stoves—used by more than one-third of U.S. households—emit harmful levels of several pollutants, including nitrogen dioxide (NO<sub>2</sub>).<sup>5</sup> Homes with gas stoves have average NO<sub>2</sub> levels ranging from roughly 50% to 400% higher than homes with electric stoves.<sup>6</sup> When using gas ranges, basic cooking activities, such as baking a cake or roasting meat, can produce indoor NO<sub>2</sub> emissions two to three times greater than both the World Health Organization’s indoor NO<sub>2</sub> guideline of 106 parts per billion (ppb) and EPA’s outdoor NO<sub>2</sub> standard of 100 ppb.<sup>7</sup> Indoor gas stove emissions can exceed EPA’s outdoor NO<sub>2</sub> standard after only a few minutes of stove usage.<sup>8</sup>

Measured NO <sub>2</sub> Emissions from Gas Stoves	Peak (ppb)
Baking cake in oven	230
Roasting meat in oven	296
Frying bacon	104
Boiling water	184
Gas cooktop - no food	82–300
Gas oven - no food	130–546

Source: Rocky Mountain Institute<sup>9</sup>

NO<sub>2</sub> is not the only harmful pollutant about which families living in homes with gas stoves have to worry. A recent study of homes in the Boston area conducted by researchers from the Harvard T.H. Chan School of Public Health concluded that, even when combustion appliances were not in use, “natural gas used in homes ... contains varying levels of volatile organic chemicals that when leaked are known to be toxic, linked to cancer, and can form secondary health-damaging pollutants such as particulate matter and ozone.”<sup>10</sup> More

<sup>5</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)).

<sup>6</sup> Environmental Protection Agency, *Integrated Science Assessment for Oxides of Nitrogen—Health Criteria 2-38* (July 2008) (online at <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=194645>).

<sup>7</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>8</sup> Eric Lebel et al., *Methane and NO<sub>x</sub> Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes*, *Environmental Science & Technology* (Jan. 27, 2022) (online at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c04707>).

<sup>9</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>10</sup> Harvard Chan C-Change, *Natural Gas Used in Homes Contains Hazardous Air Pollutants* (June 28, 2022) (online at [www.hsph.harvard.edu/c-change/news/natural-gas-used-in-homes/](http://www.hsph.harvard.edu/c-change/news/natural-gas-used-in-homes/)).



specifically, the study found worrying levels of benzene, hexane, toluene, heptane, and cyclohexane.<sup>11</sup>

The high levels of indoor pollution from gas stoves present significant health risks, particularly to children. Studies have shown that children living in homes with gas stoves have a 42% greater risk of experiencing asthma symptoms and a 24% greater risk of being diagnosed with asthma.<sup>12</sup> In other words, living in a home with a gas stove presents a similar asthma risk to children as does second-hand cigarette smoke.<sup>13</sup>

Proper stove ventilation (*e.g.*, using an exhaust hood) has the potential to reduce indoor pollution from gas stoves to acceptable levels.<sup>14</sup> However, unlike with gas furnaces, water heaters, and dryers, no federal laws or guidelines require that gas stove emissions be vented outdoors. In the absence of any such requirement, many homes lack exhaust hoods altogether, and others have hoods that merely recirculate air, which does not lower the pollution levels inside a home. And even when exhaust hoods are present in a home, many people do not use them.<sup>15</sup> Furthermore, because no federal regulations govern their capture efficiency in homes, the quality of exhaust hoods varies greatly.<sup>16</sup> While some commercially available hoods can capture up to 98% of indoor pollution from a gas stove, other exhaust hoods capture as little as

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<sup>11</sup> Drew R. Michanowicz et al., *Home Is Where the Pipeline Ends: Characterization of Volatile Organic Compounds Present in Natural Gas at the Point of the Residential End User*, Environmental Science & Technology (June 28, 2022) (online at <https://pubs.acs.org/doi/pdf/10.1021/acs.est.1c08298>).

<sup>12</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)); Weiwei Lin et al., *Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children*, International Journal of Epidemiology (Dec. 2013) (online at <https://academic.oup.com/ije/article/42/6/1724/737113>).

<sup>13</sup> Climate Council, *Kicking the Gas Habit: How Gas Is Harming Our Health* (May 2021) (online at [www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf](http://www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf)).

<sup>14</sup> Wanyu Chan et al., *Simulations of Short-Term Exposure to NO<sub>2</sub> and PM<sub>2.5</sub> to Inform Capture Efficiency Standards*, Lawrence Berkeley National Laboratory (Mar. 30, 2020) (online at <https://escholarship.org/content/qt6tj6k06j/qt6tj6k06j.pdf>). EPA's Air Quality Index has a value range from 0 to 500. Air quality values between 51 and 100 are considered "acceptable," while air quality values between 0 and 50 are considered "satisfactory." Environmental Protection Agency, *Air Quality Index (AQI) Basics* (online at [www.airnow.gov/aqi/aqi-basics/](http://www.airnow.gov/aqi/aqi-basics/)) (accessed July 29, 2022).

<sup>15</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>16</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)); Weiwei Lin et al., *Meta-Analysis of the Effects of Indoor Nitrogen Dioxide and Gas Cooking on Asthma and Wheeze in Children*, International Journal of Epidemiology (Dec. 2013) (online at <https://academic.oup.com/ije/article/42/6/1724/737113>); Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

15%.<sup>17</sup> Research indicates that exhaust hoods must capture at least 70% of pollutants like nitrogen oxide to make the indoor air quality “acceptable” for residents of homes with gas stoves—meaning many exhaust hoods do not provide adequate safety.<sup>18</sup>

CPSC has the authority either to issue mandatory standards and require warning labels or to work with industry to develop voluntary standards and labels that would address indoor air pollution from gas stoves. Despite this authority, the Commission has failed, among other things, to develop standards limiting most types of indoor air pollution from gas stoves, require effective exhaust hoods, or facilitate the introduction of meaningful warning labels to inform consumers about the health risks from gas stoves and the importance of proper ventilation.<sup>19</sup> CPSC’s Safety Education Materials Library offers only a general, high-level guide about indoor air quality that contains a few cursory mentions of gas stoves.<sup>20</sup>

I am deeply concerned by the Commission’s failure to establish safety standards and communicate clearly to the public about this issue, especially given the serious health risks to children. To assist the Subcommittee in its review of this matter, please produce, by August 15, 2022, the following documents in your possession, custody, or control:

1. All documents, including internal memoranda and analyses, regarding indoor emissions or indoor air pollution from gas stoves, including documents related to the EPA’s May 1986 report entitled *Report of the Clean Air Scientific Advisory Committee: A Review of the Consumer Product Safety Commission’s Health Effects and Exposure Assessment Documents on Nitrogen Dioxide*;
2. All documents, including internal memoranda and analyses, regarding CPSC’s regulation or oversight of indoor emissions or indoor air pollution from gas stoves, including but not limited to draft indoor emissions standards or warning labels for gas stoves; and
3. All documents, including internal memoranda and analyses, discussing the creation of an indoor joint task force related to indoor air quality and gas ranges.

To assist the Subcommittee in its review of this matter, please provide answers to the following questions by August 8, 2022:

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<sup>17</sup> Rocky Mountain Institute, *Health Effects of Gas Stove Pollution* (May 2020) (online at <https://rmi.org/insight/gas-stoves-pollution-health/>).

<sup>18</sup> Institute for Policy Integrity, *The Emissions in the Kitchen: How the Consumer Product Safety Commission Can Address the Risks of Indoor Air Pollution from Gas Stoves* (Apr. 2022) (online at [https://policyintegrity.org/files/publications/Emissions\\_in\\_the\\_Kitchen\\_Report\\_v3\\_%281%29.pdf](https://policyintegrity.org/files/publications/Emissions_in_the_Kitchen_Report_v3_%281%29.pdf)).

<sup>19</sup> *Id.* CPSC has only established voluntary standards relating to carbon monoxide poisoning from gas stove emissions.

<sup>20</sup> Consumer Product Safety Commission, *The Inside Story: A Guide to Indoor Air Quality* (online at [www.cpsc.gov/safety-education/safety-guides/home/inside-story-guide-indoor-air-quality](http://www.cpsc.gov/safety-education/safety-guides/home/inside-story-guide-indoor-air-quality)).

1. Has the Commission considered issuing mandatory or recommending voluntary standards or warning labels to address the health risks of indoor air pollution from gas stoves? If it has, please explain the status of the Commission's work and explain why the Commission has not yet issued any such mandatory—or recommended any such voluntary—standards or warning labels? If it has not, will the Commission consider taking such action based on the publicly available evidence of health harms from gas stoves?
2. Please describe the Commission's plans, if any, to issue mandatory standards or to facilitate the adoption of voluntary standards addressing indoor air pollution from gas stoves.
3. Please describe the Commission's plans, if any, to require a mandatory warning label or facilitate the adoption of voluntary warning labels addressing the health risks of indoor air pollution from gas stoves.
4. Please describe the Commission's plans, if any, to publish public educational materials specifically focused on the significant health risks posed by gas stove emissions.
5. Are there any legislative or other measures that the Commission believes are necessary for it to issue regulations concerning indoor gas stove emissions?
6. Are the following substances toxic: (i) nitrogen dioxide; (ii) benzene; (iii) toluene; (iv) heptane; (v) hexane; and (vi) cyclohexane?

The Committee on Oversight and Reform is the principal oversight committee of the House of Representatives and has broad authority to investigate “any matter” at “any time” under House Rule X. An attachment to this letter provides additional instructions for responding to the Subcommittee's request. If you have any questions regarding this request, please contact Subcommittee staff at (202) 225-5051.

Sincerely,



Raja Krishnamoorthi

Chairman

Subcommittee on Economic and Consumer Policy

Enclosure

cc: The Honorable Michael Cloud, Ranking Member  
Subcommittee on Economic and Consumer Policy

## Responding to Oversight Committee Document Requests

1. In complying with this request, produce all responsive documents that are in your possession, custody, or control, whether held by you or your past or present agents, employees, and representatives acting on your behalf. Produce all documents that you have a legal right to obtain, that you have a right to copy, or to which you have access, as well as documents that you have placed in the temporary possession, custody, or control of any third party.
2. Requested documents, and all documents reasonably related to the requested documents, should not be destroyed, altered, removed, transferred, or otherwise made inaccessible to the Committee.
3. In the event that any entity, organization, or individual denoted in this request is or has been known by any name other than that herein denoted, the request shall be read also to include that alternative identification.
4. The Committee's preference is to receive documents in electronic form (i.e., CD, memory stick, thumb drive, or secure file transfer) in lieu of paper productions.
5. Documents produced in electronic format should be organized, identified, and indexed electronically.
6. Electronic document productions should be prepared according to the following standards:
  - a. The production should consist of single page Tagged Image File ("TIF"), files accompanied by a Concordance-format load file, an Opticon reference file, and a file defining the fields and character lengths of the load file.
  - b. Document numbers in the load file should match document Bates numbers and TIF file names.
  - c. If the production is completed through a series of multiple partial productions, field names and file order in all load files should match.
  - d. All electronic documents produced to the Committee should include the following fields of metadata specific to each document, and no modifications should be made to the original metadata:  
  
BEGDOC, ENDDOC, TEXT, BEGATTACH, ENDATTACH, PAGECOUNT, CUSTODIAN, RECORDTYPE, DATE, TIME, SENTDATE, SENTTIME, BEGINDATE, BEGINTIME, ENDDATE, ENDTIME, AUTHOR, FROM, CC, TO, BCC, SUBJECT, TITLE, FILENAME, FILEEXT, FILESIZE, DATECREATED, TIMECREATED, DATELASTMOD, TIMELASTMOD,

INTMSGID, INTMSGHEADER, NATIVELINK, INTFILPATH, EXCEPTION, BEGATTACH.

7. Documents produced to the Committee should include an index describing the contents of the production. To the extent more than one CD, hard drive, memory stick, thumb drive, zip file, box, or folder is produced, each should contain an index describing its contents.
8. Documents produced in response to this request shall be produced together with copies of file labels, dividers, or identifying markers with which they were associated when the request was served.
9. When you produce documents, you should identify the paragraph(s) or request(s) in the Committee's letter to which the documents respond.
10. The fact that any other person or entity also possesses non-identical or identical copies of the same documents shall not be a basis to withhold any information.
11. The pendency of or potential for litigation shall not be a basis to withhold any information.
12. In accordance with 5 U.S.C. § 552(d), the Freedom of Information Act (FOIA) and any statutory exemptions to FOIA shall not be a basis for withholding any information.
13. Pursuant to 5 U.S.C. § 552a(b)(9), the Privacy Act shall not be a basis for withholding information.
14. If compliance with the request cannot be made in full by the specified return date, compliance shall be made to the extent possible by that date. An explanation of why full compliance is not possible shall be provided along with any partial production.
15. In the event that a document is withheld on the basis of privilege, provide a privilege log containing the following information concerning any such document: (a) every privilege asserted; (b) the type of document; (c) the general subject matter; (d) the date, author, addressee, and any other recipient(s); (e) the relationship of the author and addressee to each other; and (f) the basis for the privilege(s) asserted.
16. If any document responsive to this request was, but no longer is, in your possession, custody, or control, identify the document (by date, author, subject, and recipients), and explain the circumstances under which the document ceased to be in your possession, custody, or control.
17. If a date or other descriptive detail set forth in this request referring to a document is inaccurate, but the actual date or other descriptive detail is known to you or is otherwise apparent from the context of the request, produce all documents that would be responsive as if the date or other descriptive detail were correct.

18. This request is continuing in nature and applies to any newly-discovered information. Any record, document, compilation of data, or information not produced because it has not been located or discovered by the return date shall be produced immediately upon subsequent location or discovery.
19. All documents shall be Bates-stamped sequentially and produced sequentially.
20. Two sets of each production shall be delivered, one set to the Majority Staff and one set to the Minority Staff. When documents are produced to the Committee, production sets shall be delivered to the Majority Staff in Room 2157 of the Rayburn House Office Building and the Minority Staff in Room 2105 of the Rayburn House Office Building.
21. Upon completion of the production, submit a written certification, signed by you or your counsel, stating that: (1) a diligent search has been completed of all documents in your possession, custody, or control that reasonably could contain responsive documents; and (2) all documents located during the search that are responsive have been produced to the Committee.

### **Definitions**

1. The term “document” means any written, recorded, or graphic matter of any nature whatsoever, regardless of how recorded, and whether original or copy, including, but not limited to, the following: memoranda, reports, expense reports, books, manuals, instructions, financial reports, data, working papers, records, notes, letters, notices, confirmations, telegrams, receipts, appraisals, pamphlets, magazines, newspapers, prospectuses, communications, electronic mail (email), contracts, cables, notations of any type of conversation, telephone call, meeting or other inter-office or intra-office communication, bulletins, printed matter, computer printouts, teletypes, invoices, transcripts, diaries, analyses, returns, summaries, minutes, bills, accounts, estimates, projections, comparisons, messages, correspondence, press releases, circulars, financial statements, reviews, opinions, offers, studies and investigations, questionnaires and surveys, and work sheets (and all drafts, preliminary versions, alterations, modifications, revisions, changes, and amendments of any of the foregoing, as well as any attachments or appendices thereto), and graphic or oral records or representations of any kind (including without limitation, photographs, charts, graphs, microfiche, microfilm, videotape, recordings and motion pictures), and electronic, mechanical, and electric records or representations of any kind (including, without limitation, tapes, cassettes, disks, and recordings) and other written, printed, typed, or other graphic or recorded matter of any kind or nature, however produced or reproduced, and whether preserved in writing, film, tape, disk, videotape, or otherwise. A document bearing any notation not a part of the original text is to be considered a separate document. A draft or non-identical copy is a separate document within the meaning of this term.
2. The term “communication” means each manner or means of disclosure or exchange of information, regardless of means utilized, whether oral, electronic, by document or otherwise, and whether in a meeting, by telephone, facsimile, mail, releases, electronic

message including email (desktop or mobile device), text message, instant message, MMS or SMS message, message application, or otherwise.

3. The terms “and” and “or” shall be construed broadly and either conjunctively or disjunctively to bring within the scope of this request any information that might otherwise be construed to be outside its scope. The singular includes plural number, and vice versa. The masculine includes the feminine and neutral genders.
4. The term “including” shall be construed broadly to mean “including, but not limited to.”
5. The term “Company” means the named legal entity as well as any units, firms, partnerships, associations, corporations, limited liability companies, trusts, subsidiaries, affiliates, divisions, departments, branches, joint ventures, proprietorships, syndicates, or other legal, business or government entities over which the named legal entity exercises control or in which the named entity has any ownership whatsoever.
6. The term “identify,” when used in a question about individuals, means to provide the following information: (a) the individual’s complete name and title; (b) the individual’s business or personal address and phone number; and (c) any and all known aliases.
7. The term “related to” or “referring or relating to,” with respect to any given subject, means anything that constitutes, contains, embodies, reflects, identifies, states, refers to, deals with, or is pertinent to that subject in any manner whatsoever.
8. The term “employee” means any past or present agent, borrowed employee, casual employee, consultant, contractor, de facto employee, detailee, fellow, independent contractor, intern, joint adventurer, loaned employee, officer, part-time employee, permanent employee, provisional employee, special government employee, subcontractor, or any other type of service provider.
9. The term “individual” means all natural persons and all persons or entities acting on their behalf.

Withheld pursuant to exemption

Not Responsive

of the Freedom of Information Act



Withheld pursuant to exemption

Not Responsive

of the Freedom of Information Act

Withheld pursuant to exemption

Not Responsive

of the Freedom of Information Act

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** ASTM IAQ ASTM D22.05 and F15 joint task group meeting

**DATE OF MEETING:** April 8, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 5/20/2022

**CPSC ATTENDEE(S):** Charles Bevington, Jacqueline Campbell

**NON-CPSC ATTENDEE(S):** Contact ASTM, D22.05: Indoor Air subcommittee for attendee list.

**MEETING SUMMARY:**

CPSC staff provided an overview of work item WK80812 *Defining and categorizing consumer products and consumer articles to support source characterization for indoor exposure assessment* for interested members of D22.05 (Indoor Air) and F15 (Consumer Products).

This was a short meeting to discuss scope and recruit interested task-group members from both subcommittees ahead of the actual kick-off meeting for this task group scheduled for May 31, 2022.

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** July 14, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 8/3/2022

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC is working with stakeholders to form an independent joint task force on IAQ and gas ranges. This task force would focus on making recommendations to various affected voluntary standards and code bodies to improve IAQ in homes from emissions from gas ranges. This meeting was a of a sub-group (Group 3) of the task force focused on defining foreseeable and realistic exposure conditions, measurement methods, and time frames that could be used as the basis of a performance test method.

CPSC staff actively participated in a discussion on the relationship between emissions from gas range stoves and indoor air concentrations of carbon monoxide, nitrogen dioxide, and particulate matter. Workgroup members were engaged in technical discussion about scope and content for potential future voluntary standards. The workgroup discussed the following topics: condition of gas stove, amount of fuel used per test for scalability, type of chamber, type of air sampler, location of air sampler, the seal of the chamber with regard to collection of air samplers, chemicals to sample, duration of sampling, and analytical methods and detection limits of analyzed samples. Workgroup members also discussed and briefly reviewed existing voluntary standards for similar products that may be useful in this effort. The workgroup will continue to meet monthly.

Group 3 will meet monthly, with the next meeting scheduled for Thursday August 11, 2022 at 11am ET.

**U.S. Consumer Product Safety Commission**  
**LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** August 11, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 9/2/2022

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC is working with stakeholders to form an independent joint task force on IAQ and gas ranges. This task force would focus on making recommendations to various affected voluntary standards and code bodies to improve IAQ in homes from emissions from gas ranges. This meeting was a of a sub-group (Group 3) of the task force focused on defining foreseeable and realistic exposure conditions, measurement methods, and time frames that could be used as the basis of a performance test method.

CPSC staff actively participated in a discussion on available standards, test procedures, and test protocols to measure emissions of carbon monoxide, nitrogen dioxide, and particulate matter in chambers from gas-range stoves. The workgroup also discussed gaps in these existing approaches when considering start-to-finish testing. The workgroup discussed how emission results can be used to estimate indoor air concentrations for different scenarios and how those estimates can be compared to shorter and longer term toxicity reference values. The workgroup will continue to meet monthly.

Group 3 will meet monthly, with the next meeting scheduled for Thursday September 8, 2022 at 11am ET.

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** January 12, 2023

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 1/27/2023

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC staff actively participated in a discussion on available standards, test procedures, and test protocols to measure emissions of carbon monoxide, nitrogen dioxide, and particulate matter in chambers from gas ranges.

The group discussed the contents of CSA/ANSI Z21.1 • CSA 1.1, ANSI Z83.4 • CSA 3.7, and ANSI Z83.3-2015 • CSA 3.7 and other international standards with emission limits for gas ranges.

CPSC staff discussed the informal survey of lab capabilities. The group discussed the content of the survey, who to send the survey to, and next steps after receiving survey results. The surveys were sent out on January 19<sup>th</sup> and responses were requested by February 3<sup>rd</sup>.

Group 3 will meet monthly, with the next meeting scheduled for February 9<sup>th</sup> from 11am to 1pm EST.

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** December 8, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 12/13/2022

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC staff actively participated in a discussion on available standards, test procedures, and test protocols to measure emissions of carbon monoxide, nitrogen dioxide, and particulate matter in chambers from gas-range stoves.

The group discussed the contents of CSA/ANSI Z21.1 • CSA 1.1, ANSI Z83.4 • CSA 3.7, and ANSI Z83.3-2015 • CSA 3.7 and other international standards with emission limits for gas ranges.

CPSC staff participated in further discussions for how two types of testing are needed: [1] testing under a combustion hood can be used to derive pass/fail emission criteria consistent with other standards; and, [2] correlation testing using similar conditions needs to be conducted without a combustion hood and in a controlled environmental chamber to derive emission rates and chamber air concentrations that can be used to estimate a range of indoor air concentrations.

The group discussed sending out an informal survey of lab capabilities to better determine potential testing parameters and experimental design. The group discussed funding options for conducting this work and the need for testing protocols and results to be reproducible across multiple labs and made publicly available.

Group 3 will meet monthly, with the next meeting scheduled for Friday December 16<sup>th</sup> from 11am to 1pm EST.

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** October 20, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 12/13/2022

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC staff actively participated in a discussion on available standards, test procedures, and test protocols to measure emissions of carbon monoxide, nitrogen dioxide, and particulate matter in chambers from gas-range stoves.

The group discussed the contents of CSA/ANSI Z21.1 • CSA 1.1, ANSI Z83.4 • CSA 3.7, and ANSI Z83.3-2015 • CSA 3.7 and other international standards with emission limits for gas ranges. The group agreed that setting up a file-sharing site such as Microsoft Teams was needed.

Group 3 will meet monthly, with the next meeting scheduled for Thursday, November 10<sup>th</sup> and Thursday, December 8<sup>th</sup> from 11am to 1pm EST.



**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** November 10, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 12/13/2022

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC staff actively participated in a discussion on available standards, test procedures, and test protocols to measure emissions of carbon monoxide, nitrogen dioxide, and particulate matter in chambers from gas-range stoves.

The group discussed the contents of CSA/ANSI Z21.1 • CSA 1.1, ANSI Z83.4 • CSA 3.7, and ANSI Z83.3-2015 • CSA 3.7 and other international standards with emission limits for gas ranges. A Microsoft Teams site was set-up. CPSC staff uploaded references from the peer-reviewed literature, references from relevant voluntary standards, and initial thoughts on protocols to the Teams' site. The group discussed how testing under a combustion hood can be used to derive pass/fail emission criteria consistent with other standards. The group also discussed how correlation testing using similar conditions needs to be conducted without a combustion hood and in a controlled environmental chamber to derive emission rates and chamber air concentrations that can be used to estimate a range of indoor air concentrations.

Group 3 will meet monthly, with the next meeting scheduled for Thursday December 8<sup>th</sup> from 11am to 1pm EST.

**U.S. Consumer Product Safety Commission**  
**LOG OF MEETING**

**SUBJECT:** Working Group 3 | Gas Range Stoves and Indoor Air Quality (IAQ)

**DATE OF MEETING:** September 8, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 10/17/2022

**CPSC ATTENDEE(S):** Charles Bevington and Scott Ayers

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for full attendee list

**MEETING SUMMARY:**

CPSC is working with stakeholders to form an independent joint task force on IAQ and gas ranges. This task force would focus on making recommendations to various affected voluntary standards and code bodies to improve IAQ in homes from emissions from gas ranges. This meeting was for sub-group three of the task force. This group is focused on defining foreseeable and realistic exposure conditions, measurement methods, and time frames that could be used as the basis of a performance test method.

CPSC staff actively participated in a discussion on available standards, test procedures, and test protocols to measure emissions of carbon monoxide, nitrogen dioxide, and particulate matter in chambers from gas-range stoves.

The group discussed the contents of CSA/ANSI Z21.1 • CSA 1.1, ANSI Z83.4 • CSA 3.7, and ANSI Z83.3-2015 • CSA 3.7 and agreed that there was a need to develop a new test method. Charles Bevington and other non-CPSC members agreed to start developing testing procedures. Points discussed in defining the goal for this working group include:

- Emissions rates over time of NOX, CO and PM2.5 from gas ranges
- scalable emissions by temperature and fuel usage
- decay in emissions over time as the range is turned off (develop a curve that can be scaled up or down as needed based on fuel usage and temperature)
- Existing studies on gas Ranges and indoor air concentrations
- Consideration of range hoods and capture efficiency

Specific conditions for the testing procedure that meet these goals will continue to be discussed. Group 3 will meet monthly, with the next meeting scheduled for Thursday October 20<sup>th</sup> and Thursday November 10<sup>th</sup> from 11 to 1 EST.

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** ASTM Joint task group meeting- Indoor Exposure | Source Characterization

**DATE OF MEETING:** May 31, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 6/1/2022

**CPSC ATTENDEE(S):** Charles Bevington, Mike Babich

**NON-CPSC ATTENDEE(S):** Michele Boylstein, Heinz Huber, Heidi Hubbard, Al Kaufman, Xiaoyu Liu, Dustin Poppendieck, Yosouf Ahmad, Cathy Fehrenbacher

**MEETING SUMMARY:**

CPSC staff provided an overview and scoping discussion for work item WK80812 *Defining and categorizing modeling approaches to support source characterization for indoor exposure assessment of consumer products.*

Workgroup members were engaged in technical discussion about scope and content for this Guide. The workgroup agreed to meet monthly and to continue to collaborate and coordinate between meetings through e-mail and the ASTM collaboration work-area.

Withheld pursuant to exemption

Not Responsive

of the Freedom of Information Act

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** ASTM Joint task group meeting- Indoor Exposure | Source Characterization

**DATE OF MEETING:** October 27, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 12/14/2022

**CPSC ATTENDEE(S):** Charles Bevington, Mike Babich

**NON-CPSC ATTENDEE(S):** Contact Charles Bevington for non-CPSC attendees

**MEETING SUMMARY:**

CPSC staff provided an overview and scoping discussion for work item WK80812 *Defining and categorizing modeling approaches to support source characterization for indoor exposure assessment of consumer products.*

CPSC staff presented draft text for the guide on scope, background, and significance. CPSC staff provided an outline and led discussion on next steps. Workgroup members are comprised of both ASTM and non-ASTM members, so a google doc was chosen for collaboration instead of the ASTM collaboration work-area. Documents will migrate to the work-area as working drafts move into ballot-drafts.

**U.S. Consumer Product Safety Commission  
LOG OF MEETING**

**SUBJECT:** ASTM D22.05 Indoor Air Subcommittee meeting

**DATE OF MEETING:** October 18, 2022

**LOCATION:** Teleconference

**LOG ENTRY SOURCE:** Charles Bevington

**DATE OF LOG ENTRY:** 12/13/2022

**CPSC ATTENDEE(S):** Charles Bevington, Joanna Matheson, Lauren “Carter” Bosse

**NON-CPSC ATTENDEE(S):** Contact ASTM, D22.05: Indoor Air subcommittee for attendee list.

**MEETING SUMMARY:**

CPSC staff participated in discussion of ASTM D22.05 ballot results, standards up for revision, active work items, and proposal of new standards.

CPSC staff participated in the development of standard D8445-22a Standard Practice for Measuring Chemical Emissions from Spray Polyurethane Foam (SPF) Insulation Samples in a Large-scale Ventilated Enclosure, which was published before October 1<sup>st</sup>.

CPSC staff also participated in the development of standard *Standard Guide for Selecting Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs) Emission Testing Methods to Determine Emission Parameters for Modeling of Indoor Environments*, which was recently balloted and adopted.

CPSC staff also led the revision of D5438 – 17 Standard Practice for Collection of Floor Dust for Chemical Analysis. One negative was received during subcommittee ballot, so this standard was revised and reballoted to the subcommittee. Plans are to finish the revision in FY 2023.

CPSC staff presented on the status of the task group for a guide entitled “Defining and categorizing consumer products and consumer articles to support source characterization.” CPSC staff recruited ASTM members and non-ASTM members to participate in the task group for this guide.

There are several other new items that may become new work items in the near future

which were also discussed: Sampling of PFAS in indoor air and dust, sampling of SVOCs (including OFRs) in indoor air and dust, and sampling ultrafine (nano) particles in the air.

CPSC staff participated in development of a PFAS workshop proposal for sampling, sources, and standards of PFAS in air.

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