

COMMENTS SUBMITTED TO THE CONSUMER PRODUCT SAFETY COMMISSION

Per- and Polyfluoroalkyl Substances(PFAS) in Consumer Products

Docket No. CPSC–2023–0033

November 18, 2023

[Submitted electronically through www.regulations.gov]

Safer States and the following organizations submit these comments responsive to the Consumer Product Safety Commission’s (CPSC) notice of availability and request for information: Per- and Polyfluoroalkyl Substances (PFAS) in Consumer Products, 88 Fed. Reg. 64,890 (Sept. 20, 2023) (“request for information”): Breast Cancer Prevention Partners, Center for Environmental Health, Clean Water Action Minnesota, Consumer Reports, Earthjustice, Environmental Working Group, Green Science Policy Institute, Merrimack Citizens for Clean Water, National Wildlife Federation, Natural Resources Defense Council, Public Employees for Environmental Responsibility, Toxic-Free Future.

Introduction

Pollution from PFAS is now a national and global crisis. Toxic and persistent PFAS “forever” chemicals are present in the blood, breastmilk, organs, and tissues of humans worldwide, including in the bodies of 98% of Americans.¹ PFAS are widespread drinking water pollutants and are also contaminating rivers, lakes, air, soil, and wildlife across the US and around the world.² Concentrations of PFAS in rainwater now exceed proposed US drinking

¹ Judy S. LaKind, Josh Naiman, Marc-Andre Verner, Laura Lévéque, Suzanne Fenton, Per- and polyfluoroalkyl substances (PFAS) in breast milk and infant formula: A global issue, *Environmental Research*, Volume 219, 2023, 115042, ISSN 0013-9351, <https://doi.org/10.1016/j.envres.2022.115042>; Agency for Toxic Substances and Disease Registry. (2020, June 24). *PFAS chemicals overview* | ATSDR. <https://www.atsdr.cdc.gov/pfas/health-effects/overview.html>; Linn Salto Mamsen, Richelle D. Björvang, Daniel Mucs, Marie-Therese Vinnars, Nikos Papadogiannakis, Christian H. Lindh, Claus Yding Andersen, Pauliina Damdimopoulou, Concentrations of perfluoroalkyl substances (PFASs) in human embryonic and fetal organs from first, second, and third trimester pregnancies, *Environment International*, Volume 124, 2019, Pages 482-492, ISSN 0160-4120, <https://doi.org/10.1016/j.envint.2019.01.010>; Calafat, A. M., Kato, K., Hubbard, K., Jia, T., Botelho, J. C., & Wong, L.-Y. (2019). Legacy and alternative per- and polyfluoroalkyl substances in the U.S. general population: Paired serum-urine data from the 2013–2014 National Health and Nutrition Examination Survey. *Environment International*, 131, 105048. <https://doi.org/10.1016/j.envint.2019.105048>.

² Environmental Working Group. (n.d.). *Wildlife warning: More than 330 species contaminated with “forever chemicals”* | *Environmental Working Group*. <https://www.ewg.org/news-insights/news/2023/02/wildlife-warning-more-330-species-contaminated-forever-chemicals>; Kurwadkar, S., Dane, J., Kanel, S. R., Nadagouda, M. N., Cawdrey, R. W., Ambade, B., Struckhoff, G. C., & Wilkin, R. (2022). Per- and polyfluoroalkyl substances in water

water standards, leading scientists to declare that the planetary boundaries for PFAS chemicals have been exceeded.³

In the US, several states have issued advisories warning against eating local fish, turkey and deer because the concentrations of PFAS are too high to be consumed safely.⁴ So many farmers in the state of Maine have lost their livelihoods due to pervasive PFAS soil contamination that millions of government dollars have been set aside to help provide relief.⁵ More than 200 million Americans are estimated to be drinking PFAS contaminated drinking water, and the US federal government recently pledged \$10 billion over five years to begin to address the widespread PFAS and emerging contaminant pollution problem.⁶ PFAS manufacturers also recently proposed to settle litigation by promising more than \$11 billion to

and wastewater: A critical review of their global occurrence and distribution. *Science of the Total Environment*, 809, 151003. <https://doi.org/10.1016/j.scitotenv.2021.151003>; Maya E. Morales-McDevitt, Jitka Becanova, Arlene Blum, Thomas A. Bruton, Simon Vojta, Melissa Woodward, and Rainer Lohmann. The Air That We Breathe: Neutral and Volatile PFAS in Indoor Air. *Environmental Science & Technology Letters* 2021 8 (10), 897-902. <https://pubs.acs.org/doi/10.1021/acs.estlett.1c00481>.

³ Cousins, I. T., Johansson, J. H., Salter, M. E., Sha, B., & Scheringer, M. (2022). Outside the Safe Operating Space of a New Planetary Boundary for Per- and Polyfluoroalkyl Substances (PFAS). *Environmental Science & Technology*. <https://doi.org/10.1021/acs.est.2c02765>

⁴ Maine Department of Inland Fisheries & Wildlife. (n.d.) *PFAS Do Not Eat Advisory in Portions of Fairfield and Skowhegan*. Retrieved September 7, 2023, from <https://www.maine.gov/ifw/hunting-trapping/hunting/laws-rules/pfas-related-consumption-advisory.html>; North Carolina Department of Health and Human Services. (n.d) *NCDHHS Recommends Limiting Fish Consumption from the Middle and Lower Cape Fear River Due to Contamination With “Forever Chemicals.”* Retrieved September 7, 2023, from <https://www.ncdhhs.gov/news/press-releases/2023/07/13/ncdhhs-recommends-limiting-fish-consumption-middle-and-lower-cape-fear-river-due-contamination>; Michigan PFAS Action Response Team. (n.d.) *PFAS in Fish.* Retrieved September 7, 2023, from <https://www.michigan.gov/pfasresponse/fishandwildlife/fish>; Maine Department of Health and Human Services. (2023, April 27). *Maine CDC Issues Additional Advisories on Eating Freshwater Fish Due to PFAS Contamination*. Maine <https://www.maine.gov/dhhs/news/maine-cdc-issues-additional-advisories-eating-freshwater-fish-due-pfas-contamination-thu-04272023-1200>; Michigan PFAS Action Response Team. (2023, November 6). *State of Michigan reminds hunters of ‘Do Not Eat Health’ advisories for Clark’s Marsh*. <https://www.michigan.gov/pfasresponse/about/news/2023/11/06/do-not-eat-clarks-marsh>

⁵ *Plan for Administration of the Fund to Address PFAS Contamination*. (2023). Maine Department of Agriculture Conservation and Forestry. <https://www.maine.gov/dacf/about/commissioners/pfasfund/docs/draft-all-plan-admin-of-pfasfund-final.pdf>.

⁶ Andrews, D. & Naidenko, O. (2020). Population-Wide Exposure to Per- and Polyfluoroalkyl Substances from Drinking Water in the United States. *Environmental Science & Technology Letters*, 7(12). <https://doi.org/10.1021/acs.estlett.0c00713>; US EPA. (2023). White House. (2022, June 15). *Fact Sheet: Biden-Harris Administration Combatting PFAS Pollution to Safeguard Clean Drinking Water for All Americans*. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/15/fact-sheet-biden-harris-administration-combatting-pfas-pollution-to-safeguard-clean-drinking-water-for-all-americans/>

drinking water systems to help address PFAS contamination.⁷ The PFAS crisis is extremely expensive, both in terms of financial costs and the toll on human health and livelihoods.

Despite these mounting issues, PFAS continue to be used in numerous products ranging from construction materials to firefighting foam. These “forever chemicals” are also ubiquitous in consumer products, being found in many products including but not limited to clothing, upholstery, carpets, food packaging, cookware, cosmetics, electronics, ski wax, and air conditioners.⁸ The use of PFAS in consumer products can present hazards to consumers, as well as to communities near sites where they are manufactured and disposed of.

The serious human health and environmental impacts from widespread PFAS use has spurred unprecedented attention from governments. Today, significant action is being taken at the local, state and federal levels to restrict the production and use of PFAS “forever chemicals” in consumer products, and clean up the contamination these compounds have caused. At the same time, there is still much more that needs to be done.

For all of these reasons, the undersigned organizations want to express our appreciation for the CPSC’s attention to the PFAS crisis. The agency has a valuable role to play in addressing PFAS. We also want to ensure that any CPSC action will complement ongoing local, state and federal efforts and seek to fill key gaps without creating duplication that could lead to confusion. We believe that we can help identify the most appropriate and useful role for the Commission to play in the complex PFAS landscape that leverages its unique expertise and authority. The following comments are intended to provide context for any potential CPSC action on PFAS as well as to offer specific recommendations on measures that would be most productive. In response to the CPSC’s request for data on the presence of PFAS in consumer products, human exposures and potential health effects, we have also included information on several PFAS data compilations in Appendix B.

⁷ Scully, M. & Ledger, B. (2023, August 31). PFAS settlements: Future of PFAS litigation landscape to be determined by upcoming decision. *Reuters*. <https://www.reuters.com/legal/legalindustry/pfas-settlements-future-pfas-litigation-landscape-be-determined-by-upcoming-2023-08-31>.

⁸ European Chemicals Agency | ECHA. (2023, March 22). Annex XV Restriction Report Proposal for a Restriction Substance Names(s): Per-and polyfluoroalkyl substances (PFASs). <https://echa.europa.eu/documents/10162/6f4a2076-7221-67a3-64f7-c67cc307f59c>

I. CPSC should review ongoing efforts by state governments, the federal government and the European Union to address PFAS in consumer products as it considers what complementary activities to pursue.

While more efforts are needed, the amount of action on PFAS at the state and federal levels is remarkable. As detailed below, twelve states have adopted legislation phasing out PFAS from products ranging from carpets to dental floss and two states (Maine and Minnesota) have passed laws phasing out *all uses* of PFAS in products, with narrow exemptions given to uses determined to be “currently unavoidable.” In addition, the Biden Administration has proposed a whole of government approach to tackling PFAS which includes addressing PFAS in certain consumer products and changing government procurement to avoid PFAS containing products.⁹

It is important, therefore, for the CPSC to consider where the agency could take complementary action and avoid duplicative or conflicting efforts that could result in confusion by consumers and regulated stakeholders. Below is an overview of just some of the actions that state governments and the federal government are taking to address PFAS in consumer products. Given the reality that US consumer products are part of a global marketplace, we have also included a key pending restriction in the European Union that covers all uses of PFAS chemicals.

A. States are taking bold and extensive action on PFAS in consumer products

- Two states have passed legislation that requires PFAS to be phased out in *all products*, unless those uses are determined to be currently essential. Maine requires such a phase out to be completed by 2030, while Minnesota has a phase out deadline of 2032. The state of Washington is also working to phase out PFAS in all products through administrative action through its authority under the Safer Products for Washington Act.
- At least twelve US states have adopted legislation to phase out PFAS in a wide range of consumer products including apparel, carpets and rugs, cleaning products, cooking, dental floss, fabric treatments, food packaging, textile articles, juvenile products, menstrual products, personal care products, and ski wax. The

⁹ White House Council on Environmental Quality. (March 2023). *Biden-Harris Administration Progress on Per-and Polyfluoroalkyl Substances: Steps Taken and Ongoing Actions*. <https://www.whitehouse.gov/wp-content/uploads/2023/03/CEQ-PFAS-Report-March-2023.pdf>

states that have taken such action include California, Colorado, Connecticut, Hawaii, Maine, Maryland, Minnesota, New York, Oregon, Rhode Island, Vermont and Washington. (See Appendix A for more details.) In addition, there is legislation addressing PFAS in consumer products currently pending in Massachusetts, Michigan and Pennsylvania.

- More than half of US State Attorneys General (AGs) have now taken action against PFAS manufacturers and users, including the AGs in Alaska, Arizona, Arkansas, California, Colorado, Delaware, Illinois, Maine, Maryland, Michigan, Minnesota, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Washington and Wisconsin, as well as the District of Columbia.¹⁰ These are other private lawsuits were a significant factor in the major chemical manufacturer 3M’s decision to cease production of all PFAS.¹¹

B. Federal agencies are taking action on PFAS in consumer products

- The White House Council on Environmental Quality is working with the Office of Federal Procurement Policy, the General Services Administration (GSA), the Environmental Protection Agency (EPA), and the Department of Defense to implement policies and processes for agencies to avoid procurement of products containing PFAS. To help agencies identify PFAS-free products, the EPA is identifying product ecolabels that prohibit intentionally added PFAS.¹²
- President Biden’s 2021 Executive Order “Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability” directs federal agencies to prioritize alternatives for products that contain PFAS.

¹⁰ Safer States. (November 2, 2023). *More than half of US State Attorneys General have taken action against PFAS manufacturers and key users*. <https://www.saferstates.org/news/more-than-half-of-us-state-attorneys-general-have-taken-action-against-pfas-manufacturers-and-key-users/>

¹¹ Calma, J. (2022, December 20). *Facing mounting legal battles, 3M quits forever chemicals*. The Verge. <https://www.theverge.com/2022/12/20/23518630/3m-forever-chemicals-pfas-phase-out>

¹² White House Council on Environmental Quality. (March 2023). *Biden-Harris Administration Progress on Per- and Polyfluoroalkyl Substances*. <https://www.whitehouse.gov/wp-content/uploads/2023/03/CEQ-PFAS-Report-March-2023.pdf>

- The EPA updated its Safer Choice program in 2022 such that no certified product may contain intentionally added PFAS.¹³ Safer Choice helps consumers, businesses, and purchasers find products that perform and contain ingredients that are safer for human health and the environment.¹⁴

C. The European Union is taking action on PFAS in consumer products

- In February 2023, the European Commission proposed a phase out of *all uses of PFAS*, including home textiles, consumer apparel, leather, home fabric treatments, cookware, all forms of packaging, waxes and polishes, cleaning products, wiper fluid, cosmetics, ski wax, electronics, heat pumps, and air conditioners.¹⁵ Most product categories are given only an eighteen month transition period to remove PFAS, with certain specific sectors given longer transition periods. Final regulations are expected in 2025.

II. CPSC has a key role to play in educating and protecting consumers from PFAS in consumer products and should take the following actions which are complementary to ongoing state and federal activities.

As detailed above, there has been a remarkable mobilization on the part of federal and state governments to address PFAS in consumer products, yet there are still important gaps to fill. The task before the CPSC is to identify how the agency can expeditiously and meaningfully contribute to protecting consumers from harmful PFAS chemicals in products using its existing authorities while avoiding any duplicative efforts and related preemption risks.

Outlined below are a set of strategies that we believe meet these criteria and would help carve out a unique role for the CPSC as part of government response to the PFAS crisis. The proposed actions would address important shortfalls in the current state of PFAS response, are complementary to the extensive work on PFAS already taking place, and could be accomplished

¹³ Food Packaging Forum. (2022, April 1). *US EPA removes PFAS from Safer Choice Program*. <https://www.foodpackagingforum.org/news/us-epa-removes-pfas-from-safer-choice-program>

¹⁴ US EPA. (2013, August 9). *Safer Choice*. <https://www.epa.gov/saferchoice>

¹⁵ European Chemicals Agency | ECHA. (2023, March 22). *Registry of restriction intentions until outcome: Per- and polyfluoroalkyl substances (PFAS)*. <https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18663449b>

relatively easily and quickly under existing CPSC authority, without a time- and resource-intensive rulemaking process:

A. CPSC should issue a guidance document on PFAS in consumer products.

In 2017, CPSC published in the Federal Register a statement to provide guidance to manufacturers, importers, distributors, retailers, and users of consumer products that contain any organohalogen flame retardants (“OFRs”) in additive form.¹⁶ This guidance document has been influential in persuading retailers and others to avoid use of OFRs. It has also been influential in spurring state legislation of flame retardants. We urge CPSC to publish a similar guidance document with respect to PFAS in consumer products.

The 2017 OFR guidance document, which was based on evidence that had been submitted in connection with a citizen’s petition, stated:

based on the overwhelming scientific evidence presented to the Commission to date, the Commission has serious concerns regarding the potential toxicity of OFRs, and the risks of exposure, particularly to vulnerable populations, to OFRs, from the four categories of products listed in the petition. Accordingly, the Commission requests that manufacturers of [the four product categories covered by the petition] eliminate the use of such chemicals in these products. The Commission also recommends that, before purchasing such products for resale, importers, distributors, and retailers obtain assurances from manufacturers that such products do not contain OFRs. Finally, the Commission recommends that consumers, especially those who are pregnant or with young children, inquire and obtain assurances from retailers that such products do not contain OFRs.¹⁷

¹⁶ CPSC, Guidance Document on Hazardous Additive, Non-polymeric Organohalogen Flame Retardants in Certain Consumer Products, 82 Fed. Reg. 45,268 (Sept. 28, 2017).

¹⁷ *Id.* at 45268.

The information that CPSC’s consultants at RTI International have developed on PFAS (which has been posted in this request for information docket) is extensive, and this request for information will generate additional data.¹⁸ Based on all of this information, we believe that CPSC will have sufficient evidence of the hazards, exposures and potential human health risks related to PFAS as a class for it to confidently issue a guidance document asserting, as it did for OFRs, that PFAS “as a class of chemicals, present a serious public health issue,” and that the use of PFAS in consumer products is “ill-advised.”¹⁹

- B. CPSC should create and maintain a database on state PFAS laws and regulations.** It would be immensely helpful for CPSC to create a comprehensive database of all state laws and regulations related to PFAS in consumer products, including laws that require disclosure about the presence of PFAS in products. The agency should post such information on its website and update the database as new laws or regulations are passed. Currently, no federal agency has amassed such a database or made such information publicly available. By creating this resource, CPSC would be filling an important need and make it easier for both consumers, manufacturers and retailers to track the current status of restricting and/or disclosing the use of PFAS in different consumer products across the country.
- C. CPSC should spur the creation of critical guidance to consumers on which water filters are effective in removing PFAS from drinking water.** EPA has estimated that from 70 to 94 million Americans are served by drinking water systems contaminated with PFAS in excess of the agency’s proposed drinking water standards for just six out of the many thousand PFAS.²⁰ Given that PFAS

¹⁸ RTI International (2023, June 20). Characterizing PFAS Chemistries, Sources, Uses, and Regulatory Trends in U.S. and International Markets Final White Paper. Prepared for the Consumer Product Safety Commission. CPSC RFP No. CPS-2115-22-0009. https://www.cpsc.gov/s3fs-public/CPSC-PFAS-WhitePaper.pdf?VersionId=HYcrhWL_cSeA61QrR5bzoVOHRV0nw9_f.

¹⁹ *Id.*

²⁰ EPA. PFAS National Primary Drinking Water Regulation Rulemaking, 88 Fed. Reg. 18638, 18680 (March 29, 2023).

cleanup will take time, there is an urgent need for reliable and comprehensive information provided to consumers about how they can remove PFAS from their water. Recently the non-profit organization Environmental Working Group tested ten different water filters and found that these products were able to reduce the levels of 25 individual PFAS by between 22 and 100 percent, demonstrating significant variations in filter efficacy.²¹ (Notably, some of the most effective water filters were also some of the least expensive.)

Under the California Residential Water Treatment Device program, consumers are able to access a government-verified database of water filters that are independently certified to remove specific contaminants of concern including arsenic, chromium, lead and nitrate. Under this program:

Manufacturers that wish to have their devices registered for sale in California must provide proof of the independent certification and other information on each device model. The California Registration program is designed to verify this certification and ensure that literature provided with each model adequately informs the customer. The Registration program monitors the marketplace for illegal sales of devices as well as misleading advertisement for ANY water treatment device.²²

There are 93 registered water filters certified to remove arsenic and 102 registered filters certified to remove chromium.²³ However, the program does not cover PFAS chemicals.

We are aware that NSF International has developed NSF/ANSI 53 or 58 standards for PFAS (PFOA and PFOS) reduction.²⁴ They have promised that as

²¹ Environmental Working Group. (2023, July 11). *Getting “forever chemicals” out of drinking water: EWG’s guide to PFAS water filters*. <https://www.ewg.org/research/getting-forever-chemicals-out-drinking-water-ewgs-guide-pfas-water-filters>

²² California State Water Resources Control Board. (2023, August). *Residential Water Treatment Devices*. https://www.waterboards.ca.gov/drinking_water/certlic/device/watertreatmentdevices.html

²³ Ibid.

²⁴ NSF International. (September 2022). *Forever Chemicals and the Advancement of Filtration Standards*. <https://www.nsf.org/knowledge-library/forever-chemicals-advancement-filtration-standards>.

additional information becomes available and more toxicological data is published, NSF and its Joint Committee will be “improving the water treatment standards NSF/ANSI 53 and NSF/ANSI 58 to include updated values for PFOA and PFOS, plus new reduction claims for total PFAS as well as new individual claims for PFNA, PFHxS and PFHpA.”²⁵ We are concerned, however, that the NSF/ANSI process is dominated by the water filter manufacturers and that certification of compliance with these standards is proprietary and essentially a black box to the public. We would urge CPSC to initiate an independent and transparent process for development of standards for broad spectrum PFAS removal and for transparent and independent third-party certification and ongoing monitoring of the effectiveness of point of use filters as meeting these standards.

III. CPSC should focus its attention on PFAS as a class

The Commission’s request for information requests “information about which specific PFAS the CPSC should prioritize.”²⁶ We strongly urge CPSC not to focus on individual members of this enormous chemical class. Rather, we think it is critical that whatever actions CPSC take with respect to PFAS should cover the entire class.

Chemical regulation has a long history of regrettable substitution. If one harmful chemical is restricted, industry selects a similar chemical from the same class to be used in its place – with regulators only recognizing when it is too late that this substitute compound is also problematic.²⁷ This cycle has already been demonstrated with PFAS: When highly toxic and persistent PFOA and PFOS were phased out as processing aids in fluoropolymer production, new toxic and persistent chemicals known as Gen-X were used in their place.²⁸ When the industry

²⁵ Ibid.

²⁶ 88 Fed. Reg. at 64,892.

²⁷ Maertens, A., Golden, E., & Hartung, T. (2021). Avoiding Regrettable Substitutions: Green Toxicology for Sustainable Chemistry. *ACS Sustainable Chemistry & Engineering*, 9(23), 7749–7758. <https://doi.org/10.1021/acssuschemeng.0c09435>

²⁸ Brandsma, S.H., Koekkoek, J.C., van Velzen, M.J.M., and de Boer, J. (2019). The PFOA substitute GenX detected in the environment near a fluoropolymer manufacturing plant in the Netherlands. *Chemosphere*. 220, 493-500. <https://www.sciencedirect.com/science/article/pii/S0045653518324706>

could no longer deny that long-chain PFAS were harmful, they moved to short-chain PFAS and falsely claimed that they were safe.²⁹

Decades of industry regrettable substitution combined with a regulatory approach focused on restricting one chemical at a time has led to global PFAS contamination. Focusing on individual PFAS chemicals can also mislead and confuse consumers. For example, some manufacturers of non-stick cookware have marketed their products as “PFOA-free” even when they contained other toxic PFAS chemicals.³⁰ (PFOA was the first toxic and persistent PFAS compound to draw regulatory and public attention.) While this practice is now banned in the state of California under a law that took effect earlier this year³¹, it demonstrates how focusing on a single chemical that is part of a larger class of toxic chemicals can be problematic.

State governments, as well as the scientific and business communities, have been embracing the class-based approach to PFAS. Of the twelve US states that have adopted laws and regulations restricting PFAS in consumer products, all of them have addressed the entire class of PFAS (see Appendix A).³² Similarly, the European Union’s pending proposal to phase out of all uses of PFAS covers the entire class of PFAS.³³ The Global PFAS Science Panel has been outspoken on the need to ban all uses of all PFAS chemicals.³⁴ Many global companies including Lacoste, Fjälraven, Levi Strauss, Starbucks, and McDonalds have taken action to phase

²⁹ Environmental Working Group. (2019). *Study: Newer PFAS Chemicals “May Pose More Risks” Than Those They Replaced* | Environmental Working Group. [www.ewg.org. https://www.ewg.org/news-insights/news-release/study-newer-pfas-chemicals-may-pose-more-risks-those-they-replaced](https://www.ewg.org/news-insights/news-release/study-newer-pfas-chemicals-may-pose-more-risks-those-they-replaced)

³⁰ Consumer Reports. (2022, October 26). *You Can’t Always Trust Claims on “Non-Toxic” Cookware*. <https://www.consumerreports.org/toxic-chemicals-substances/you-cant-always-trust-claims-on-non-toxic-cookware-a4849321487>

³¹ Plant-based food packaging: cookware: hazardous chemicals, California Assembly, AB-1200, Chapter 503, 2021. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1200

³² An additional ten states have also passed class-based restrictions on non-consumer products such as firefighting foam.

³³ European Chemicals Agency | ECHA. (2023). *Registry of restriction intentions until outcome: Per- and polyfluoroalkyl substances*.

³⁴ Global PFAS Science Panel. (n.d.) *Towards a Global Phase-out of PFAS Project*. Global PFAS Science Panel. Retrieved September 7, 2023, from <https://www.pfassciencepanel.org/global-phase-out>

out the entire class of PFAS from their products.³⁵ Recently, almost all of the major global third party textile certifiers including OEKO-TEX, Bluesign, ZDHC and GOTS have also updated their standards to phase out the use of the entire class of PFAS chemicals.³⁶

In order to protect communities, avoid regrettable substitution and follow adopted law, the CPSC must focus on the entire class of PFAS in any action that the agency takes. In particular, as with adopted state laws, it is critical that fluoropolymers or fluorinated gases (F-gases) are not exempted from CPSC action, guidance or consumer education. Both of these PFAS subgroups pose threats to human health and the environment. In fact, PFAS pollution first came to light from DuPont's manufacture of the fluoropolymer Teflon® which led to massive contamination still causing harm today.³⁷ We should learn from this history and ensure that action, guides and education on PFAS in consumer products is inclusive of the entire chemical class.

Moreover, the CPSC has clear authority to consider products containing broad groups of products and/or classes of chemicals in products and has on multiple instances chosen to do so. For example, in *Toy Manufacturers of America, Inc. v. CPSC*, a trade association of toy manufacturers challenged a rule issued under the Federal Hazardous Substances Act (FHSA), which banned toys intended for use by young children that present hazards because of small parts. The toy industry argued that the FHSA was intended to deal only with specific, individual articles, and “not with a broad range of products at the same time.”³⁸ The court soundly rejected

³⁵ Natural Resources Defense Council. *New PFAS Scorecard for Popular Apparel Brands: Levi Strauss Earns an 'A+', Outdoor Brands Fail*. (2022). <https://www.nrdc.org/press-releases/new-pfas-scorecard-popular-apparel-brands-levi-strauss-earns-outdoor-brands-fail>; Bienkowski, B. (2022). *Starbucks will eliminate all PFAS in its packaging*. EHN. <https://www.ehn.org/starbucks-pfas-2657072518.html>; ChemSec. *PFAS Movement*. www.chemsec.org/pfas.

³⁶ Glover, S. (2022, April 29). *Bluesign, ZDHC, Oeko-Tex to phase out PFAS*. Ecotextile News. <https://www.ecotextile.com/2022042929293/dyes-chemicals-news/bluesign-zdhc-oeko-tex-to-phase-out-pfas.html>; *GOTS Version 7.0 released: Major leap forward for the sustainable all-inclusive solution for organic fibre processing*. Global Organic Textiles Standard. (n.d.) Global-Standard.org. Retrieved September 7, 2023, from <https://global-standard.org/news/gots-annual-pr-2023>

³⁷ DiStefano, J. (2015, Aug 13). *DuPont's toxic Teflon problem (Updated): Scientists knew the danger; managers kept it quiet*. *Philadelphia Inquirer*. https://www.inquirer.com/philly/blogs/inq_phillydeals/321772182.html; House Committee on Oversight and Reform. (Oct 21, 2020). *Chairman Rouda Seeks Information on Continued Detection of Cancer Causing PFAS Chemicals at DuPont and Chemours Facilities*. <https://oversightdemocrats.house.gov/news/press-releases/chairman-rouda-seeks-information-on-continued-detection-of-cancer-causing-pfas>

³⁸ 630 F.2d 70, 74 (2d Cir. 1980).

this argument, noting that “[t]he legislative history appears clear in favoring general prescriptive regulations of *the broadest, most comprehensive type* and would favor case-by-case proceedings only where such general prescriptive regulations prove impossible.”³⁹

In addition, in the context of a petition under the FHSA to ban sulfuric acid drain openers, a request the CPSC had received and rejected several times before, Commissioner Thomas H. Moore wrote separately to explain why the CPSC was again denying the request. Commissioner Moore stated:

Each time the Commission has dealt with this issue it has expressed unease and concern about the severity of the injuries that can be caused by drain openers. What has stymied the Commission each time, I think, is that *the remedy proposed by the petitioners—the banning of one particular type of chemical drain opener, those made with sulfuric acid—is not expected to solve the problem because of the likelihood that consumers will simply switch to other chemical drain openers, either acid or alkaline, which can be just as dangerous as the sulfuric acid drain openers they would be replacing.* The Commission is not limited to taking the narrow action proposed by the petitioners. Instead of continuing to express concern, but dismissing the issue because of the limitations of the proposed remedy, *perhaps we should be examining the entire class of chemical drain openers to see what can be done to make them **all** safer.*⁴⁰

More recently, the CPSC granted Petition HP 15-1 to initiate rulemaking, and direct staff to convene a Chronic Hazard Advisory Panel, to assess and issue a report on the risks to consumers' health and safety from the use of additive, non-polymeric organohalogen flame retardants ("OFRs"), *as a class of chemicals*, in four categories of consumer products.⁴¹

In sum, there is ample precedent for CPSC to take actions with respect to PFAS as a class of chemicals.

³⁹ *Id.* (citation omitted) (emphasis added).

⁴⁰ U.S. Consumer Product Safety Commission (2006). *Statement of the Honorable Thomas H. Moore on petition HP 04-2 request to ban sulfuric acid drain openers for consumer use.* Retrieved November 9, 2023, from https://www.cpsc.gov/s3fs-public/pdfs/foia_AcidBan.pdf.

⁴¹ CPSC. (n.d). *Flame Retardants.* Retrieved November 9, 2023, from <https://www.cpsc.gov/Business--Manufacturing/Business-Education/Business-Guidance/flame-retardants>

IV. CPSC should use the most accurate and widely used definition for PFAS

As CPSC considers the scope of products that contain PFAS, the agency will need to have a scientifically sound definition for this chemical class so it doesn't exclude any consumer products. We urge the agency to use the same definition that has been adopted in at least 22 states including Arkansas, Arizona, California, Colorado, Connecticut, Georgia, Kentucky, Hawaii, Illinois, Indiana, Louisiana, Maryland, Maine, Minnesota, New Hampshire, Nevada, New York, Ohio, Rhode Island, Vermont, Virginia and Washington, defining PFAS as organic chemicals containing “at least one fully fluorinated carbon atom” with no carve outs for any subclasses of PFAS.⁴² Similarly, Congress has often adopted the same broad definition of PFAS, for example in enacting the National Defense Authorization Act (NDAA) over the past several years.⁴³

We urge CPSC not to take the approach utilized by the US Environmental Protection Agency (EPA), which has used several different definitions for PFAS at different times and in different circumstances, creating widespread confusion. Under one flawed PFAS definition, EPA excluded polyvinylidene fluoride (PVDF), the second most highly produced fluoropolymer (after PTFE), at least two PFAS chemicals found in the blood of residents living near a PFAS manufacturing plant, as well as other high production volume PFAS. This “working definition” was widely criticized by scientists, impacted communities, advocates and former federal agency officials.⁴⁴

⁴² *Additional U.S. States Ban PFAS-Containing Products*. (n.d.). UL Solutions. Retrieved September 7, 2023. <https://www.ul.com/news/additional-us-states-ban-pfas-containing-products>

⁴³ See, for example, the NDAA for FY2022, Public Law 117-81 (passed the Senate by a vote of 88-11 & House by 363-70), §345(f)(4)(“The term ‘perfluoroalkyl or polyfluoroalkyl substance’ means any man-made chemical with at least one fully fluorinated carbon atom.”); The NDAA for FY2021, Public Law 116-283 (passed the Senate by a vote of 81-13 & House by 322-87) § 335(e)(2)(“The term ‘PFAS’ means a perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom, including the chemical GenX.”); The NDAA for FY2020, Public Law 116-92 (passed the Senate by a vote of 86-8 and House by 377-48) § 332(c)(3)(“The term ‘PFAS’ means perfluoroalkyl and polyfluoroalkyl substances that are man-made chemicals with at least one fully fluorinated carbon atom.”).

⁴⁴ PEER. (2022, April 28). *EPA Sued Over Failure to Explain Its Narrow PFAS Definition*. PEER.org. <https://peer.org/epa-sued-over-failure-to-explain-its-narrow-pfas-definition>; Perkins, T. (2022, April 5). Scientists sound alarm at US regulator’s new “forever chemicals” definition. *The Guardian*. <https://www.theguardian.com/environment/2022/apr/05/epa-pfas-definition-scientists-forever-chemicals>

Most recently, in August 2023, the US EPA announced that it would not have any single formal definition for PFAS, but would instead take a “case-by-case” approach for what the agency considers a PFAS.⁴⁵ Former EPA scientist and head of the US National Toxicology Program Dr. Linda Birnbaum had this response: “This is not a new definition – it is a lack of definition, and it makes no sense... It is just going to lead to terrible confusion.”⁴⁶ In short, the EPA has been inconsistent and unclear when it comes to the question of what set of chemicals should be considered to be PFAS. The CPSC should avoid making the same mistake and should adopt the definition for PFAS that is consistently used in the laws of 22 states, as detailed above. It should also be noted that this “one fully fluorinated carbon atom” is very similar to the definition developed by OECD and adopted by the European Union.⁴⁷

Conclusion

In summary we believe that the CPSC has an important role to play in addressing the PFAS crisis. Through the recommended actions we describe above, the agency can provide consumers and businesses key guidance and information related to PFAS in consumer products as well as giving them the tools to know how to remove these chemicals from drinking water. These complementary actions will expand consumer education and protections around PFAS and help prompt a transition away from the entire class of PFAS in products towards safer alternatives. In whatever action the CPSC decides to take, it will be important for the agency to harmonize with the definition adopted in laws in 22 states that address PFAS as a class, with no exemptions for subclasses such as F-gases or fluoropolymers.

⁴⁵ Perkins, T. (2023, August 18). EPA’s new definition of PFAS could omit thousands of “forever chemicals.” *The Guardian*. <https://www.theguardian.com/environment/2023/aug/18/epa-new-definition-pfas-forever-chemicals>

⁴⁶ *Id.*

⁴⁷ Wang, Z., Buser, A. M., Cousins, I. T., Demattio, S., Drost, W., Johansson, O., Ohno, K., Patlewicz, G., Richard, A. M., Walker, G. W., White, G. S., & Leinala, E. (2021). A New OECD Definition for Per- and Polyfluoroalkyl Substances. *Environmental Science & Technology*, 55(23), 15575–15578. <https://doi.org/10.1021/acs.est.1c06896>; European Chemicals Agency | ECHA. (2023, March 22). *Registry of restriction intentions until outcome: Per- and polyfluoroalkyl substances (PFAS)*

Appendix A

US State PFAS Restrictions in Key Product Sectors with Year of Implementation														
US State	All Products	Apparel	Carpets / Rugs	Cleaning Products	Cookware	Dental Floss	Fabric Treatments	Food Packaging	Juvenile Products	Menstrual Products	Personal Care Products / Cosmetics	Pesticides	Ski Wax	Textile Articles
CA		2025	X				X	2023	2023		2025			2025
CO			2024				2024	2024	2024		2025			2025
CT								2023						
HI								2024						
ME	2030*		2023				2023	2022				2030		
MD			2024					2024						
MN	2032*		2025	2025	2025	2025	2025	2024	2025	2025	2025		2025	2025
NY		2025	2024					2022						
OR								2025			2025			
RI								2024						
VT			2023				2023	2023					2023	
WA	X		2023				2023	2022			2025			2023

Legend:

*Applies to PFAS in all products except where state regulators have determined that PFAS use is essential for health, safety of the functioning of society and where alternatives are not currently available.

X = Ongoing regulation requiring phase outs and/or alternative assessments.

Note: This table does not include state level restrictions on PFAS in firefighting foam or products used in the oil and gas industry.

Notes on product categories:

Carpets/Rugs: Ban applies to new carpets and rugs but not to those in the resale market.

Cleaning products: Products used for domestic, commercial, or institutional cleaning purposes.

Cookware: Includes houseware items, not professional cookware.

Fabric Treatments: Includes but not limited to stain resistance or water resistance.

Food Packaging: Some bans include all food packaging (CT, MN, RI, VT), while other bans include only paper-based food packaging (CA, CO, HI, MD); the OR ban covers all foodware containers but not all packaging.

Juvenile Products: Product designed for use by infants and children under 12 years of age; does not include electronic products.

Menstrual Products: MN is the only law to name menstrual products in a ban, but other state laws banning PFAS in textiles also cover menstrual products.

Pesticides: Includes substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pests; use as a plant regulator, or as a spray adjuvant.

Ski Wax: Includes ski and snowboard wax and tuning supplies.

Textile Articles: CA and MN laws includes all textiles used in customarily and ordinarily used in households and businesses; CO's law covers most textile articles, and has a January 2027 implementation date for outdoor uses; WA policy covers indoor textile furnishings and upholstery. Apparel is considered a separate category and is not a “textile article.”

Links to relevant state laws and regulations on PFAS in consumer products

California: AB 652 , AB 1200 , AB 1817 , AB 2771 , SCP1 , SCP2
Colorado: HB 1345
Connecticut: SB 837
Hawaii: HB 1644
Maine: LD 1433 , LD 1505 , LD 2019
Maryland: HB 0275
Minnesota: HF 2310 , SF 20
New York: A 09279 , S 6291 , S 8817 , S1322
Oregon: SB 543 , SB 546
Rhode Island: SB 2044
Vermont: S 20
Washington: HB 1047 , HB 2658 , SPW

Appendix B

CPSC has requested (1) information on PFAS and potential use or presence of PFAS in consumer products; (2) potential human exposures to PFAS associated with consumer product use; (3) information about potentially highly exposed population groups; and (4) potential adverse human health effects informed by toxicological data sources. We suggest that the CPSC review the following PFAS data compilations to better understand the extent and nature of the PFAS crisis as it relates to consumer products.

A. ***European Chemicals Agency (ECHA) PFAS Restriction Proposal.*** In February 2023, the European Commission proposed a phase out of *all uses of PFAS*, and amassed documentation supporting their proposal that is over 2000 pages long.⁴⁸ The amount of information about PFAS uses, exposures, and impacts contained in this material cannot be understated. We have highlighted the most relevant documents pertaining to the CPSC's specific information requests below:

- Annex A: Tonnage of PFAS used in different product sectors and applications of PFAS in consumer products (304 pages).
- Annex B: PFAS emissions and exposure assessment per product sector, adverse human health effects associated with PFAS, impacts of PFAS on vulnerable populations including children, identification of highly exposed population groups (714 pages).
- Annex XV Restriction Report: Human and environmental health impacts of PFAS, emissions and exposure assessment overview, proposed restriction (224 pages).

B. ***PFAS Project Lab Datasets.*** The PFAS Project Lab is a program of Northeastern University's Social Science Environmental Health Research Institute and has been producing rigorous, accessible research about the PFAS contamination crisis since 2015.⁴⁹ We have highlighted the most relevant datasets pertaining to the CPSC's specific information requests below:

⁴⁸ European Chemicals Agency | ECHA, (n.d.), *Registry of restriction intentions until outcome: Per- and polyfluoroalkyl substances (PFAS)*, <https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18663449b>.

⁴⁹ The PFAS Project Lab. (n.d.) <https://pfasproject.com/>

- The PFAS Tox Database is an interactive and publicly available systematic evidence map of over 700 *in vitro*, animal, and human studies that examine health outcomes related to PFAS exposure.⁵⁰ The database is designed to identify and organize the available health and toxicology related literature on a set of twenty-nine individual PFAS chemicals of growing concern.
- PFAS Contamination Site Tracker records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response.⁵¹

⁵⁰ PFAS Project Lab. (n.d.) *PFAS-TOX Database*. <https://pfasproject.com/pfas-toxic-database>

⁵¹ PFAS Project Lab. (n.d.) *PFAS Sites and Community Resources*. <https://pfasproject.com/pfas-sites-and-community-resources/>