PFAS in Textiles

AB 1817 (Ting): Safer Clothing and Textiles Act

AB 1817 prohibits the sale, distribution, or manufacture in California of textile articles that contain perfluoroalkyl and polyfluoroalkyl substances, a class of hazardous and persistent chemicals known as PFAS.

PFAS Are Harmful to our Health and the Environment

PFAS are a class of approximately 9,000 man-made chemicals used for a wide range of purposes, including in clothing and other textiles. These substances are often called “forever” chemicals because they are extremely resistant to breaking down and they persist in the environment, leading to continued exposure and health risks into the future. PFAS are released into the environment when products containing them are manufactured, used, cleaned, and disposed of. Californians are exposed to them when they work with PFAS or PFAS-containing products, use PFAS-containing products in their homes, consume food and beverages stored in PFAS-containing packaging, drink PFAS-contaminated water, and breathe PFAS pollution in the air. They have been linked to severe health problems, including cancer, hormone disruption, kidney and liver damage, thyroid disease, developmental harm, and immune system disruption, including interference with vaccine efficacy.

Past California Action on PFAS in Products

California has already passed laws to phase out all PFAS in firefighting foam, paper-based food packaging, and children’s products. Other California laws prohibit the use of the “chasing arrows” recycling symbol for plastic that contains PFAS, prohibit the use of the terms “biodegradable” or “compostable” for products that contain PFAS over certain levels, and ban several PFAS in cosmetics.

The legislature supported eliminating these uses of PFAS because prevention is the best cure. Remediation and clean-up of PFAS remains very challenging and expensive; however, we can stop adding to the problem and reduce exposures when PFAS need not be used. Textiles are the next logical step because PFAS are not needed for most uses in textiles and their manufacture, cleaning and disposal are a major source of human and environmental exposure.
The textile industry (which includes products such as apparel, footwear, bedding, draperies, and upholstery) has been identified as the biggest user of fluorotelomers, a main subgroup of PFAS. PFAS market research shows that the textile industry makes up approximately 36% of the total fluorotelomer market and the industry is projected to remain on the top of the list in the coming years.

We do not have equivalent US data yet, but a comparison from the European Union (EU) helps illustrate the scope of PFAS use in textiles. In the EU, the annual amount of PFAS used in firefighting foams (which will be phased out in CA, thanks to SB 1044, signed into law in 2020) is an estimated 480 to 560 metric tons; textiles sold in the EU are estimated to use about 100 times more PFAS.

A 2019 report published by the European Commission found that 20% of indoor and outdoor products and 10% of sportswear and footwear products in Europe are coated in PFAS. While we don’t have equivalent US information, a 2018 study by the Commission for Environmental Cooperation, a government research collaboration among Canada, Mexico, and the United States, found PFAS chemicals in approximately 70% of the 137 articles of clothing tested.

PFAS in textiles can lead to PFAS exposures throughout the lifecycle of textiles, including through contamination of drinking water. In California, water systems serving up to 16 million people have already been found to have PFAS contamination, and contamination is more prevalent in disadvantaged communities.

In addition, there is also the potential for exposures to consumers through shedding of PFAS into air or house dust and subsequent inhalation or ingestion, or through direct dermal exposures.

While California’s Safer Consumer Products Program (SCP Program) has directed regulatory attention to carpets, rugs, and after-market sprays and treatments used to waterproof or stainproof textiles, it has not focused on other textiles that come to the consumer already embedded with PFAS.

AB 1817 would ban the sale in California of all textiles containing PFAS with some limited exceptions, such as carpets and rugs, which are being addressed by the SCP Program, and specialized protective equipment used for critical functions such as firefighting.
PFAS polymers pose many of the same health and environmental concerns over their lifecycle as any other PFAS, which is why both the California legislature and regulators have included polymers in their definition of PFAS in multiple bills and regulations. For instance, PFAS polymers are made using other harmful PFAS chemicals, which are subsequently released into the environment when waste byproducts enter air and waterways, including when polymers are landfilled or incinerated. It’s also worth noting that much of the current PFAS pollution was the result of the production and use of the polymer, Teflon®. California law must continue to ban polymers with the rest of the class of PFAS, as the legislature has done when banning PFAS chemicals in firefighting foam, food packaging and juvenile products. For more information on the potential harms from PFAS polymers, please see *PFAS polymers pose serious health and environmental threats.*

**Alternatives are Available**

PFAS are used primarily for water and stain repellency in textiles. For the vast majority of products, PFAS’ functionality is simply not needed or provides minimal additional value given the potential harm. Soap and water work very well to address most situations where stain repellency is concerned. In addition, PFAS’ toxicity and persistence makes their use unjustifiable to address non-life-threatening stains or moisture, especially when alternatives exist for a great majority of the stain-repellency and water-proofing needs in textiles. A report created for the [European Commission](https://ec.europa.eu) and a Washington State [analysis](https://washingtonstate.gov) both point to the availability of multiple alternatives—both chemical replacements and design changes.

**PFAS should be removed from:**

For more information contact:

- Natural Resources Defense Council, Avinash Kar ([akar@nrdc.org](mailto:akar@nrdc.org))
- Breast Cancer Prevention Partners, Nancy Buermeyer ([nancy@bcpp.org](mailto:nancy@bcpp.org))
- Clean Water Action, Andria Ventura ([aventura@cleanwater.org](mailto:aventura@cleanwater.org))

Vote Yes on AB 1817!