SENATE THIRD READING
SB 682 (Allen)
As Amended September 02, 2025
Majority vote

SUMMARY

Prohibits, on and after January 1, 2028, a person from distributing, selling, or offering for sale in the state a cleaning product, dental floss, juvenile product, food packaging, or ski wax, as defined, that contains intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS). Additionally, prohibits, on and after January 1, 2030, a person from distributing, selling, or offering for sale in the state cookware that contains intentionally added PFAS.

Major Provisions

COMMENTS

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): PFAS are synthetic, highly fluorinated substances that have been widely used in industrial and consumer applications for their heat, water, and lipid resistance properties for more than seven decades. In consumer products, PFAS are used in carpets, furniture fabrics, apparel, paper packaging for food, non-stick cookware, personal care products, and other products designed to be waterproof; grease, heat, water and stain resistant; or, non-stick. Commercial applications span many sectors of the economy, including aerospace, automotive, building and construction, pharmaceuticals, medical devices, paints, electronics, semiconductors, energy, oil and gas exploration, first responder safety, firefighting foams, and health care. During production, use, and disposal, PFAS can migrate into the soil, water, and air. Some PFAS are volatile, and can be carried long distances through the air, leading to contamination of soils and groundwater far from the emission source. Researchers have found PFAS in indoor and outdoor environments, plants, soil, food, drinking water, wildlife, companion animals, production animals, and humans at locations across the nation and around the globe. PFAS are extremely persistent and degrade very slowly over time, which has resulted in their accumulation in the environment since the onset of their production in the late 1940s. Currently, nearly 15,000 PFAS chemicals are included in the chemicals database CompTox, which is maintained by the United States Environmental Protection Agency (US EPA).

Exposure to PFAS: The main route of exposure to PFAS is through ingestion of contaminated food or liquid (accounting for up to half of total exposure), through contact with consumer products, and through inhalation and ingestion of contaminated indoor air and dust. Food can become contaminated with PFAS through soil and water used to grow the food, food packaging containing PFAS, and equipment that uses PFAS during processing. Some foods, such as fish, meat, eggs, and leafy vegetables, may contain PFAS due to bioaccumulation and crop uptake. Studies have shown that PFAS can transfer from pregnant mothers to their fetuses via the placenta during gestation, as well as transfer from nursing mothers to their infants via breastfeeding. Dermal exposure is also possible when people touch products treated with PFAS, such as carpets or clothing. Young children may be exposed to higher levels of PFAS than adults because they ingest more dust containing PFAS and mouth PFAS-treated consumer products. Workers, such as carpet installers, carpet cleaners, firefighters, and workers in

furniture, furnishings, outdoor clothing, and carpet stores, may also experience above average PFAS exposure levels.

Hazard traits of PFAS: According to the Department of Toxic Substances Control (DTSC), all PFAS display at least one of the hazard traits identified in California's Safer Consumer Products (Green Chemistry) Hazard Traits Regulations (22 C.C.R Section 69401 et seq.). An intrinsic property of PFAS is the extreme environmental persistence of either the individual compounds or their degradation products or both, resulting in their classification as "forever chemicals." Most PFAS are mobile in environmental media such as air and water, and thus are widespread in living organisms and the environment.

Scientific studies have shown that exposure to some PFAS can lead to adverse health outcomes in humans and animals. DTSC states that if humans are exposed to PFAS through diet, drinking water, or inhalation, some of these chemicals remain in the body for a long time. As people continue to be exposed to PFAS, the PFAS levels in their bodies may increase to the point that they suffer adverse health effects.

Chemical bans and the Safer Consumer Products Program: In 2008, California enacted AB 1879 (Feuer and Huffman, Chapter 559, Statutes of 2008) to establish a regulatory process for identifying and prioritizing chemicals of concern in consumer products, to create methods for analyzing alternatives to existing hazardous chemicals, and to ultimately take regulatory action to reduce the level of harm from the chemicals in those products. DTSC did this by promulgating the Safer Consumer Products regulations, which took effect in October 2013. DTSC's approach provides science-based criteria and procedures for identifying and evaluating alternatives with the objective of replacing chemicals of concern with safer chemicals and avoiding the use of substitute chemicals that pose equal or greater harm.

On July 1, 2021, DTSC designated carpets and rugs containing PFAS as a "Priority Product." A Priority Product is a consumer product identified by DTSC that contains one or more Candidate Chemicals and that has the potential to contribute to significant or widespread adverse impacts to humans or the environment. The Priority Product designation required domestic and foreign carpet and rug manufacturers that use PFAS and related chemicals in their products to submit information on all of the manufacturer's products that contain PFAS and are sold in California, by August 30, 2021. Manufacturers were then required to show intent to remove or replace PFAS in their products, remove the product from the market, or identify potential alternatives to PFAS to be used in the product by December 28, 2021. This process is ongoing.

In regulations that went into effect on April 1, 2022, DTSC also designated treatments containing PFAS for use on converted textiles or leathers such as carpets, upholstery, clothing, and shoes as a Priority Product. This process is ongoing as well.

Regulating PFAS as a class: DTSC adopted a rationale for regulating PFAS chemicals as a class, concluding, "it is both ineffective and impractical to regulate this complex class of chemicals with a piecemeal approach." This rationale was presented in the 2021, *Environmental Health Perspectives* article, "Regulating PFAS as a chemical class under the California Safer Consumer Products Program." The authors of the article state,

> "The widespread use, large number, and diverse chemical structures of PFAS pose challenges to any sufficiently protective regulation, emissions reduction, and remediation at contaminated sites. Regulating only a subset of PFAS has led to their replacement with other

> members of the class with similar hazards, that is, regrettable substitutions. Regulations that focus solely on perfluoroalkyl acids (PFAAs) are ineffective, given that nearly all other PFAS can generate PFAAs in the environment… We at the California DTSC propose regulating certain consumer products if they contain any member of the class of PFAS because: *a*) all PFAS, or their degradation, reaction, or metabolism products, display at least one common hazard trait according to the California Code of Regulations, namely environmental persistence; and *b*) certain key PFAS that are the degradation, reaction or metabolism products, or impurities of nearly all other PFAS display additional hazard traits, including toxicity; are widespread in the environment, humans, and biota; and will continue to cause adverse impacts for as long as any PFAS continue to be used. Regulating PFAS as a class is thus logical, necessary, and forward-thinking."

Other researchers have made the case for managing PFAS as a chemical class, including in "Scientific Basis for Managing PFAS as a Chemical Class" published in 2020, in *Environmental Science & Technology Letters,* and "Strategies for grouping per- and polyfluoroalkyl substances (PFAS) to protect human and environmental health," also published in 2020, in *Environmental Science: Processes & Impacts.*

PFAS in cookware: While this bill prohibits PFAS in multiple consumer products, many stakeholder conversations have centered around the use of PFAS in cookware. Specifically, the conversations have focused on a specific PFAS known as polytetrafluoroethylene or PTFE, which is a fluoropolymer. Several studies have citied toxicity concerns with PTFE-coated non-stick cookware.

The article, "PTFE-coated non-stick cookware and toxicity concerns: a perspective, (Sajid, M., Ilyas, M.)," published in 2017 in *Environmental Science and Pollution Research*, states, "At normal cooking temperatures, PTFE-coated cookware releases various gases and chemicals that present mild to severe toxicity." According to the article, "Are Fluoropolymers Really of Low Concern for Human and Environmental Health and Separate from Other PFAS?", Lohmann, et. al, *Environmental Science and Technology* published in 2020, "The evidence reviewed in this analysis does not find a scientific rationale for concluding that fluoropolymers are of low concern for environmental and human health. Given fluoropolymers' extreme persistence; emissions associated with their production, use, and disposal; and a high likelihood for human exposure to PFAS, their production and uses should be curtailed except in cases of essential uses."

PFAS bans in other states: Below is a list of states that have banned PFAS in products that this bill is also proposing to ban. Please note that this is not an exhaustive list, and some of these states and other states have banned PFAS in other products. The date in ()'s is the date the PFAS was or will be banned.

1) Cleaning products: Colorado (2026), Connecticut (2028), Maine (2028);

2) Cookware: Colorado (2026), Connecticut (2028), Maine (2028);

3) Dental Floss: Colorado (2026), Connecticut (2028), Maine (2028);

4) Food packaging: California (2023), Colorado (2024), Connecticut (2023), Hawaii (2024), Maine (2022), Maryland (2024);

5) Juvenile products: California (2023), Colorado (2024), Connecticut (2028), Maine (2026); and,

6) Ski wax: Colorado (2026), Connecticut (2028), Maine (2028).

This bill: SB 682, prohibits, on and after January 1, 2028, a person from distributing, selling, or offering for sale in the state a cleaning product, dental floss, juvenile product, food packaging, or ski wax, as defined, that contains intentionally added PFAS. Additionally, SB 682 prohibits, on and after January 1, 2030, a person from distributing, selling, or offering for sale in the state cookware that contains intentionally added PFAS. Based upon DTSC's conclusion that PFAS should be regulated as a class, the Legislature has banned PFAS (as a class, without any exemptions) in cosmetics, certain food packaging, certain juvenile products, menstrual products, and textiles. This bill expands on those prohibitions by adding several consumer products to the current prohibitions.

According to the Author

"SB 682 aims to comprehensively ban unnecessary uses of per- and polyfluoroalkyl substances (PFAS), commonly known as 'forever chemicals,' in products. SB 682 will pragmatically shift California to an essential use model, eliminating unnecessary uses of PFAS while creating a pathway for necessary uses to continue. This will focus on reducing the public health impacts and financial burden of managing these toxic chemicals, while still allowing for critical uses of PFAS to continue.

Manufacturers who wish to continue to use PFAS will have to demonstrate that the use of PFAS in their product is unavoidable, the function provided by PFAS in the product is necessary for the product to work, and the product is critical for the health, safety, or functioning of society. To ensure industries have sufficient time to comply, this bill includes three time periods to phase-in various products, beginning in 2027 with a handful of products with known PFAS-free alternatives and PFAS prohibitions in other states, 2035 for many other products, and finally 2040. To focus on PFAS chemicals contaminating our water, the 2035 and 2040 timelines apply to those that are water soluble, may release water soluble chemicals, or may decompose into water soluble chemicals.

California has long been a national leader in regulating harmful chemicals, so this bill is the natural next step in this fight. PFAS is impacting our communities, our environment, and utility ratepayers. This issue is quickly becoming a significant and costly management concern for drinking water and wastewater utilities tasked with protecting public health and the environment. SB 682 will protect people from exposure to harmful chemicals, prevent further contamination, and will hold manufacturers accountable to produce more sustainable products without these harmful chemicals."

Arguments in Support

According to Breast Cancer Prevention Partners, California Association of Sanitation Agencies, Clean Water Action, Environmental Working Group, and the Natural Resources Defense Council,

"PFAS are a class of approximately 14,000 man-made chemicals. California, as well as 23 other states define PFAS as 'a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom'. The European Union uses a scientifically aligned definition. Extensive independent science demonstrates that all PFAS, whether they be 'long-chain',

'short-chain', or polymers like PTFE, commonly known as Teflon ®, persist and spread in the environment and can transform into other forms of PFAS that are well documented as being toxic. Health concerns linked with these chemicals include cancers, decreased fertility, hormone disruption, liver disease, developmental harm, and immune system suppression, including interference with the efficacy of vaccines. For this reason, all of California's PFAS restrictions regulate PFAS as a class, including polymers. The scientific community supports a strong science-based PFAS definition (for example, see this open letter from 160+ scientists from around the world that states, 'any PFAS definition grounded in science must include all PFAS polymers.') and the class-based management of PFAS. DTSC also regulates PFAS as a class and has published a scientific paper articulating the rationale for doing so.

The good news is that restricting PFAS use works. California (and other states) have demonstrated this by banning unnecessary PFAS use in many product categories, including textiles, fire-fighting foam, certain children's products, paper-based food-packaging, cosmetics, and more. SB 682 will build on that progress, and help in relieving the heavy economic burden on water agencies and their rate payers.

While cleanup of drinking water is essential for the 25 million Californians with PFAS detections in their water sources, the cost of continued PFAS use in consumer products will only exacerbate the costs to drinking and wastewater agencies, and ultimately ratepayers. More than $500 million has already been spent addressing PFAS contamination in our state, with another $1.13 billion in planned projects. Drinking water remediation for just a handful of PFAS alone could conservatively cost local utilities between $161 million and $217 million annually. Worse, the social costs extend far beyond water bills. PFAS-related healthcare burdens are staggering, again conservatively estimated to cost Californians between $5.5 and $8.7 billion annually (only a few of the many health impacts from the most well-known PFAS have been quantified). For these reasons, it is imperative that the state acts boldly and phases out unnecessary uses of PFAS.

SB 682 will serve the interests of the state by protecting public health, drinking water, and the environment, and reducing long term public costs and impacts to the state."

Arguments in Opposition
According to the Cookware Sustainability Alliance (CSA),

"The CSA was created to express strong concern about the policy and scientific misinterpretations behind legislative proposals to ban products containing per- and polyfluoroalkyl substances (PFAS). Importantly, fluoropolymers and nonstick cookware are approved for use in food preparation by the U.S. Food & Drug Administration (U.S. FDA), European regulatory bodies, as well as decades of sound scientific research. The CSA is made up of companies with a significant stake in the nonstick cookware category, aimed at setting the record straight and emphasizing the science that underpins fluoropolymer cookware safety.

Non-stick cookware contains a specific subfamily of PFAS called fluoropolymers. The fluoropolymers used by our industry, primarily polytetrafluoroethylene (PTFE), do not have the same characteristics of nonpolymeric PFAS of concern, which should be the focus of environmental and public health policy. Fluoropolymers are extremely large and stable compounds.

It is important to acknowledge that since the mid-20th century, PTFE has played a vital role in the technological advancements of many industrial and consumer products. Moreover, over the past several years, chemical manufacturers that supply the cookware industry with PTFE have implemented significant changes to their manufacturing processes. Technologies now exist and are implemented to manufacture PTFE without the use of fluorosurfactant processing aids. Also, those manufacturers who may continue to make fluoropolymers via the use of fluorosurfactant processing aids now include additional steps to ensure negligible remaining non-polymer PFAS are entrained in the final fluoropolymer product. These recent developments in the manufacturing process for PTFE and other fluoropolymer cookware ensure that they are not a health effects concern to humans or the environment."

FISCAL COMMENTS

According to the Assembly Appropriations Committee, enactment of this bill could cost DTSC an unknown, but potentially significant amount, to enforce the prohibitions established by this bill under the AB 347 (Ting, Chapter 932, Statutes of 2024) framework. DTSC has not yet received funding to implement AB 347; therefore, it is challenging to determine the incremental cost of implementing this bill. If it is not allocated funding to implement AB 347, DTSC estimates costs of up to $3.8 million annually, including up to 12 staff, to implement this bill.

VOTES

SENATE FLOOR: 28-7-5
YES: Allen, Archuleta, Arreguín, Ashby, Becker, Blakespear, Cabaldon, Caballero, Cervantes, Cortese, Durazo, Gonzalez, Grayson, Hurtado, Laird, Limón, McGuire, McNerney, Menjivar, Padilla, Pérez, Smallwood-Cuevas, Stern, Strickland, Umberg, Wahab, Weber Pierson, Wiener
NO: Choi, Dahle, Jones, Niello, Ochoa Bogh, Seyarto, Valladares
ABS, ABST OR NV: Alvarado-Gil, Grove, Reyes, Richardson, Rubio

ASM ENVIRONMENTAL SAFETY AND TOXIC MATERIALS: 5-2-0
YES: Connolly, Bauer-Kahan, Lee, McKinnor, Papan
NO: Ellis, Castillo

ASM APPROPRIATIONS: 9-3-3
YES: Wicks, Arambula, Calderon, Caloza, Elhawary, Fong, Ahrens, Pellerin, Solache
NO: Dixon, Ta, Tangipa
ABS, ABST OR NV: Sanchez, Mark González, Pacheco

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