CONCURRENCE IN SENATE AMENDMENTS
AB 1423 (Schiavo)
As Amended September 1, 2023
Majority vote

SUMMARY

Prohibits, commencing January 1, 2026, the manufacturing or sale of artificial turf that contains perfluoroalkyl and polyfluoroalkyl substances (PFAS), as defined, and prohibits, commencing January 1, 2026, a public entity, a public or private school, or a public or private institution of higher learning, as specified, from purchasing or installing artificial turf that contains PFAS.

Senate Amendments

1) Change the definition of "regulated PFAS" to include the presence of PFAS in a product or product component at or above 20 parts per million, instead of one part per million.

2) Specify that the presence of PFAS shall be based upon testing after the manufacturing process but before installation.

3) Delete the provision that would have required, commencing January 1, 2024, a manufacturer or installer of a covered surface proposing to design, install, or sell a field with a covered surface notify the buying party that the covered surface contains regulated PFAS if the covered surface contains regulated PFAS.

4) Change the date, from January 1, 2024, to January 1, 2026, by which a covered surface containing regulated PFAS is prohibited from being purchased or installed by specified entities, including a public entity, a public or private school serving pupils in kindergarten or any of grades 1 to 12, and a public or private institution of higher education.

5) Change the date, from January 1, 2025, to January 1, 2026, by which a person or entity is prohibited from manufacturing, distributing, selling, or offering for sale in the state any covered surface that contains regulated PFAS.

6) Provide that if the Department of Toxic Substances Control (DTSC) adopts regulations pursuant to the Green Chemistry Program or any other authority that conflict with the enforcement authority in the bill, the Attorney General, a city attorney, a county counsel, or a district attorney shall no longer be authorized to bring any action pursuant to the provisions of the bill. Provide that the Attorney General, a city attorney, a county counsel, or a district attorney may resolve any action brought prior to the adoption of the above regulations.

7) Provide that if a manufacturer of a covered surface or other responsible entity completes an alternatives analysis for the use of regulated PFAS in a covered surface, pursuant to the authority granted in the Green Chemistry Program and related regulations, or any other state law, the conclusions in that alternatives analysis that comply with the Green Chemistry Program and related regulations, or any other state law, as applicable, shall govern the choice of alternatives used by the manufacturer in place of PFAS in a covered surface.

8) Provide that if DTSC adopts a regulatory response described in the Safer Consumer Products Program, as specified, the prohibitions in the bill shall no longer apply beginning upon the

date that DTSC posts a notice on its internet website that it has adopted the regulatory response.

9) Specify that the provisions of the bill shall not be construed to prohibit or restrict the authority of DTSC to prioritize or take action on any products containing PFAS in order to limit exposure to or reduce the level of hazard posed by PFAS.

10) Make other technical and conforming changes.

COMMENTS

Perfluoroalkyl and polyfluoroalkyl substances (PFAS): Per- and polyfluorinated substances (PFASs) are a large group of 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. PFAS are long-lasting chemicals that break down very slowly over time. PFAS are ubiquitous, and 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. Scientific studies have shown that exposure to some PFAS may be linked to harmful health effects in humans and animals. More than 9,000 PFAS chemicals are included in the United States Environmental Protection Agency's (US EPA's) Master List of PFAS Substances.

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), and through inhalation and ingestion of contaminated indoor air and dust. Food can become contaminated with PFAS through contaminated soil and water used to grow the food, food packaging containing PFAS, and equipment that uses PFAS during food 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 susceptible to higher levels of exposure 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.

Exposure to PFAS in drinking water is an escalating concern due to the persistence of PFAS chemicals in the environment and their tendency to accumulate in groundwater.

Hazard traits of PFAS: 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. Several PFAS bioaccumulate significantly in animals or plants and emerging evidence points to their phytotoxicity, aquatic toxicity, and terrestrial ecotoxicity.

According to the US EPA, current peer-reviewed scientific studies have shown that exposure to certain levels of PFAS may lead to: reproductive effects such as decreased fertility or increased high blood pressure in pregnant women; developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes; increased risk of

some cancers, including prostate, kidney, and testicular cancers; reduced ability of the body's immune system to fight infections, including reduced vaccine response; interference with the body's natural hormones; and, increased cholesterol levels and/or risk of obesity.

Regulating PFAS as a class: DTSC has 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 February, 2021, *Environmental Health Perspectives* article, "Regulating PFAS as a Chemical Class under the California Safer Consumer Products Program," which states, "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… Regulating PFAS as a class is thus logical, necessary, and forward-thinking."

PFAS in turf: DTSC notes that it is interested in PFAS in synthetic turf due to multiple public comments received on its proposed regulations to list carpets and rugs containing PFASs as a Priority Product under its Safer Consumer Products program. DTSC points to testing on artificial turf commissioned by two non-profit organizations, Public Employees for Environmental Responsibility (PEER) and The Ecology Center. The testing, which appears to have been on 10 samples of artificial turf (one new, one manufactured in 2004, and 8 of unclear manufacturing dates), found elemental fluorine and specific PFAS chemicals, which they argue suggests that PFAS is an ingredient of the carpet grass fibers or the backing, or a byproduct of the manufacturing process. PEER and The Ecology Center also report that that they found turf patents and industry literature discussing the widespread use of PFAS as a plastic processing aid to enhance smoothness and reduce friction. It should be noted that, in response to the media coverage of these reports, the Synthetic Turf Council put out a statement that condemned the groups' "inaccurate, non-verified report using questionable test methods."

Through the Safer Consumer Products Program, DTSC has previously evaluated PFASs in carpets and rugs, as well as in other consumer products. DTSC says that, as with carpets and rugs, PFASs may be used in the manufacture of artificial turf as an aid in molding and extrusion of the plastic blades, or may be applied to the finished product to enhance surface properties. According to DTSC, the PFASs present in artificial turf have a similar potential to contribute to or cause adverse impacts to sensitive subpopulations.

This bill: This bill prohibits, commencing January 1, 2026, a person or entity from manufacturing, distributing, selling, or offering for sale in the state any artificial turf that contains PFAS at or above 20 parts per million. It also prohibits, commencing January 1, 2026, a public entity, a public or private school, or a public or private institution of higher learning, as specified, from purchasing or installing artificial turf that contains PFAS at that level. Additionally, this bill provides the Attorney General and other government attorneys with specified civil penalties to bring against violators of the law. These penalty provisions are in addition to the Attorney General's existing authority to enforce this, and related product safety statutory provisions, such as through the Unfair Competition Law.

According to the Author
"PFAS are a class of 'forever chemicals' which, when ingested, inhaled, or contacted with the skin can harm human and environmental health. This includes negative impacts on the immune

system, cardiovascular system, childhood development, and risks of cancer. Artificial turf fields have been found to contain PFAS, and, as fields age, they releases microplastic dust that contains PFAS. Children are particularly at risk of inhaling and ingesting this dust as they play on fields. AB 1423 protects youth and adult athletes by ensuring that fields installed in schools and by public agencies do not contain PFAS and that artificial turf of the future does not contain these harmful chemicals."

Arguments in Support
A coalition of supporters argues, "[DTSC] has confirmed the science -- PFAS are long-lasting, toxic chemicals that adversely affects humans and the environment. We are exposed through water, food, and consumer products like food packaging, furniture, carpet, cosmetics, and clothing. The Legislature has recognized this and has taken recent actions to ban PFAS in a wide range of consumer products. One product that has yet to be addressed and which creates a health hazard especially for children is artificial turf. PFAS contaminates every blade, as it's used to prevent the blades from sticking to the mold in the extrusion process. The Legislature's science committees, Assembly ESTM and Senate EQ have both approved this bill after considering the impacts of this products and the exposure to athletes and the environment…. We are just now beginning to understand the financial implications of PFAS pollution. Purveyors of drinking water are grappling with wells that must be closed or filtering water coming from long-standing water sources."

Arguments in Opposition
The Synthetic Turf Council argues, "As currently drafted, AB 1423 creates significant compliance challenges for artificial turf manufacturers and suppliers for the following reasons: …The bill also intends to regulate levels of unintentionally added PFAS to 1 part per million (PPM) in total organic fluorine. While our manufacturers and suppliers fully intend to comply with the provisions of the bill related to intentionally added PFAS, we are concerned that trace quantities of a chemical may be present in natural or synthetic ingredients, recycled content, manufacturing processes or equipment. Therefore, we believe it would be more prudent (in addition to allowing for testing protocols to be developed) to establish the compliance threshold for unintentionally added PFAS at 100 PPM beginning in 2026 and 50 PPM in 2028. These thresholds have been previously recognized by the legislature in AB 1817 (Ting) (2021) and AB 652 (Friedman) (2021)."

FISCAL COMMENTS

According to the Senate Appropriations Committee, enactment of this bill could result in potential costs of an unknown amount (Proposition 98 General Fund) to local educational agencies, to the extent the cost of alternatives to a covered surface containing PFAS is more expensive. The state has over 11,000 schools. It could also result in potential costs of an unknown but likely minor amount (General Fund) to the University of California (UC), to the extent the cost of alternatives to a covered surface containing PFAS is more expensive. The UC has nine undergraduate campuses with various intercollegiate athletic facilities that may use artificial turf or synthetic surfaces that resemble grass. Additionally, the Senate Appropriations Committee reports that the Department of Justice anticipates any costs due to enactment of this bill would be minor and absorbable.

VOTES:

ASM ENVIRONMENTAL SAFETY AND TOXIC MATERIALS: 7-2-0
YES: Lee, Arambula, Bauer-Kahan, Connolly, McKinnor, Pacheco, Zbur
NO: Hoover, Ta

ASM APPROPRIATIONS: 11-4-1
YES: Holden, Bryan, Calderon, Wendy Carrillo, Mike Fong, Hart, Lowenthal, Papan, Pellerin, Weber, Ortega
NO: Megan Dahle, Dixon, Mathis, Sanchez
ABS, ABST OR NV: Robert Rivas

ASSEMBLY FLOOR: 64-9-7
YES: Addis, Alvarez, Arambula, Bains, Bauer-Kahan, Bennett, Berman, Boerner, Bonta, Bryan, Calderon, Juan Carrillo, Wendy Carrillo, Cervantes, Connolly, Essayli, Flora, Mike Fong, Friedman, Gabriel, Garcia, Gipson, Grayson, Haney, Hart, Holden, Irwin, Jackson, Jones-Sawyer, Kalra, Lee, Low, Lowenthal, Maienschein, McCarty, McKinnor, Muratsuchi, Stephanie Nguyen, Ortega, Pacheco, Pellerin, Petrie-Norris, Quirk-Silva, Ramos, Reyes, Luz Rivas, Robert Rivas, Rodriguez, Blanca Rubio, Santiago, Schiavo, Soria, Ting, Valencia, Villapudua, Waldron, Wallis, Ward, Weber, Wicks, Wilson, Wood, Zbur, Rendon
NO: Megan Dahle, Davies, Dixon, Vince Fong, Gallagher, Hoover, Jim Patterson, Joe Patterson, Sanchez
ABS, ABST OR NV: Aguiar-Curry, Alanis, Chen, Lackey, Mathis, Papan, Ta

SENATE FLOOR: 35-2-3
YES: Allen, Alvarado-Gil, Archuleta, Ashby, Atkins, Becker, Blakespear, Bradford, Cortese, Dahle, Dodd, Durazo, Eggman, Glazer, Gonzalez, Grove, Hurtado, Laird, Limón, McGuire, Menjivar, Min, Newman, Ochoa Bogh, Padilla, Portantino, Roth, Rubio, Skinner, Smallwood-Cuevas, Stern, Umberg, Wahab, Wiener, Wilk
NO: Jones, Niello
ABS, ABST OR NV: Caballero, Nguyen, Seyarto

UPDATED

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