

**Department of Legislative Services**  
Maryland General Assembly  
2022 Session

**FISCAL AND POLICY NOTE**  
**Enrolled - Revised**

Senate Bill 273

(Senator Elfreth, *et al.*)

Education, Health, and Environmental Affairs

Health and Government Operations

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**Environment – PFAS Chemicals – Prohibitions and Requirements (George  
“Walter” Taylor Act)**

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This bill establishes and expands several prohibitions and requirements that relate to the manufacture, sale, and distribution for sale or use in the State of specified products that contain “intentionally added” “PFAS chemicals.” Existing penalties apply to violations. The bill establishes related reporting requirements and requires the Maryland Department of the Environment (MDE) to adopt regulations to implement certain provisions of the bill. The bill also requires MDE to take back and dispose of Class B fire-fighting foam from fire departments upon request, as specified, and requires the Governor to include in the annual budget bill for fiscal 2024 an appropriation of \$500,000 to MDE for this purpose.

**The bill takes effect July 1, 2022.**

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**Fiscal Summary**

**State Effect:** General fund expenditures increase by at least \$66,800 in FY 2023 and by at least \$803,400 in FY 2024 (which includes the \$500,000 mandated appropriation); future years reflect annualization, inflation, and termination of two contractual employees in FY 2027. State expenditures (multiple fund types) may increase for State agencies to comply with the bill’s prohibitions. Minimal increase in general fund revenues from the application of existing penalty provisions. **This bill establishes a mandated appropriation for FY 2024.**

(in dollars)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
GF Revenue	\$0	-	-	-	-
GF Expenditure	\$66,800	\$803,400	\$307,300	\$316,300	\$222,800
SF Expenditure	\$0	-	-	-	-
GF/SF Exp.	\$0	-	-	-	-
Net Effect	(-)	(-)	(-)	(-)	(-)

*Note: (-) = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

**Local Effect:** Potential increase in local expenditures. Local revenues are not anticipated to be materially affected. **This bill may impose a mandate on a unit of local government.**

**Small Business Effect:** Meaningful.

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## Analysis

### Bill Summary:

#### *Fire-fighting Foams and Personal Protective Equipment Containing Intentionally Added PFAS Chemicals*

**Fire-fighting Foams:** The bill generally prohibits, beginning January 1, 2024, a person from using, manufacturing, knowingly selling, offering for sale, or distributing for sale or use Class B fire-fighting foam that contains intentionally added PFAS chemicals in the State. However, a person may use, manufacture, sell, offer for sale, or distribute for sale or use Class B fire-fighting foam that contains intentionally added PFAS chemicals in the State (1) until September 30, 2024, if the fire-fighting foam will be used at an airport, a port, a refinery, or a chemical plant; (2) until December 31, 2027, if the fire-fighting foam will be used at a terminal, as defined by the bill; and (3) on or before any applicable date specified in federal law, if the fire-fighting foam will be used by a person that is required to use Class B fire-fighting foam that contains intentionally added PFAS chemicals.

A person who is authorized to use Class B fire-fighting foam with intentionally added PFAS chemicals may use these products if the person meets standards of use established under the bill. Among other things, the foam may not be released directly into the environment, as specified. In addition, the person must fully contain all releases on site and dispose of all wastes as specified. Any release in violation of the bill must be reported to MDE within five days, as specified. A person must also maintain documentation of any containment, disposal, and related measures taken, and the documentation may be requested for the purposes of investigating compliance by specified entities, including MDE. A person's failure to meet these requirements (related to containment, disposal, accidental release, and documentation) does not preclude the use of Class B fire-fighting foam containing intentionally added PFAS chemicals if the failure was a result of factors beyond the person's control.

A person is prohibited from disposing of Class B fire-fighting foam that contains intentionally added PFAS chemicals using incineration, as specified, or in a landfill.

The bill repeals a requirement that only nonfluorinated training foam be used for the purposes of fire-fighting training and other measures related to using Class B fire-fighting

foam with intentionally added PFAS chemicals for fire-fighting training purposes. The bill also repeals a prior exemption that specified that Subtitle 16 of Title 6 of the Environment Article did not apply to fire-fighting foams used at the Baltimore-Washington International Thurgood Marshall Airport (BWI Marshall Airport).

*Fire-fighting Foam Takeback Program:* MDE must, upon request from a fire department in the State, take back from the fire department Class B fire-fighting foam that contains intentionally added PFAS chemicals. MDE must dispose of the fire-fighting foam it receives from a fire department in a manner consistent with the bill. For fiscal 2024, the Governor must include in the annual budget bill an appropriation of \$500,000 to MDE to take back and dispose of fire-fighting foam from fire departments in accordance with these provisions.

*Personal Protective Equipment:* The bill defines personal protective equipment (PPE), for the purposes of Subtitle 16 of Title 6 of the Environment Article, as items designed, intended, or marketed to be worn by fire-fighting personnel in the performance of their fire and rescue activities, including jackets, pants, shoes, gloves, helmets, and respiratory equipment. If a person sells PPE for fire-fighting that contains PFAS chemicals in the State, the person must provide written notice to the purchaser at the time of the sale, that includes (1) a statement that the PPE contains PFAS chemicals and (2) the reason the PPE contains PFAS chemicals. Both the person selling the PPE and the purchaser must retain the required notice for at least three years after the date of the sale.

*Provisions Relating to New Rugs to Which PFAS Chemicals Have Been Intentionally Added*

The bill prohibits, beginning January 1, 2024, a person from manufacturing or knowingly selling, offering for sale, or distributing for sale or use in the State a new rug or carpet to which PFAS chemicals have been intentionally added. A person who manufactures a rug or carpet for sale or use in the State must establish a certificate of compliance to attest that the product is in compliance with the bill. A person must provide the certificate of compliance to MDE within 30 days of a request by MDE.

*Existing Penalties Applicable to the Above Provisions*

A person who violates any of the above provisions is subject to an existing civil penalty of up to \$500 for a first violation and up to \$1,000 for a second or subsequent violation.

*Provisions Relating to Food Packages to Which PFAS Chemicals Have Been Intentionally Added*

“Food package” means a package that is designed and intended for direct food contact and is composed, in substantial part, of paperboard, or other materials originally derived from plant fibers, including (1) a food or beverage product that is contained in a food package to which a food package is applied; (2) a packaging component of a food package; and (3) plastic disposable gloves used in commercial or institutional food service.

The bill prohibits, beginning January 1, 2024, a manufacturer or distributor from manufacturing or knowingly selling, offering for sale, or distributing for sale or use in the State a food package or food packaging component designed and intended for direct food contact to which PFAS chemicals were intentionally added. A manufacturer who manufactures, sells, offers for sale, or distributes for sale or use in the State a food package or food packaging component must establish a certificate of compliance to attest that the product is in compliance with the bill. A manufacturer must provide the certificate of compliance to MDE within 30 days of a request by MDE.

A person who violates any of these provisions is subject to existing civil and criminal penalty provisions. Specifically, a violator is subject to a civil penalty of up to \$1,000 for each violation, not exceeding a total of \$10,000 for any action. Each package or packaging component in violation constitutes a separate offense. Further, any person who has previously been assessed a related civil penalty and who willfully violates any of these provisions is guilty of a misdemeanor, and upon conviction, is subject to a fine of up to \$20,000.

*Reporting Requirements*

By December 31, 2022, MDE must report to the General Assembly on (1) the location and results of any testing for PFAS chemicals that MDE has conducted on waters of the State; (2) any plan MDE has for further testing for PFAS chemicals in waters of the State; and (3) any plan MDE has for remediation and public education in areas where the water has been found to be contaminated by PFAS chemicals.

By December 31, 2023, MDE and the Maryland Department of Health (MDH) must jointly prepare, in coordination with other relevant State agencies, the federal government, local governments, and the public, and submit to the General Assembly, a PFAS Action Plan that identifies strategies, actions, and funding alternatives to meet several specified objectives.

### *Relevant Definitions*

With respect to the bill's provisions that relate to fire-fighting foam, PPE, and new rugs, under Subtitle 16 of Title 6 of the Environment Article, "intentionally added" means the act of deliberately using a chemical in the formation of a product where its continued presence is desired in the product to provide a specific characteristic. The bill alters the definition of "PFAS chemicals" as used in Subtitle 16 of Title 6 of the Environment Article (which governs PFAS chemicals) to mean, when used in fire-fighting agents, fire-fighting equipment, food packaging, and rugs and carpets, a class of fluorinated organic chemicals that contain at least one fully fluorinated carbon atom, including perfluoroalkyl and polyfluoroalkyl substances.

With respect to the bill's provisions that relate to food packages (Under Subtitle 19 of Title 9 of the Environment Article), "intentionally added" means the act of deliberately using a chemical in the formation of a package or packaging component when the chemical's continued presence is desired in the final package or packaging component to provide a specific characteristic. Under these provisions, "PFAS chemicals" have the same meaning as the one used in Subtitle 16 of Title 6 of the Environment Article (as amended by the bill).

### **Current Law:**

#### *Relevant State Law*

Chapters 276 and 277 of 2020 generally prohibit, beginning October 1, 2021, the use of "Class B fire-fighting foam" that contains intentionally added PFAS chemicals for testing purposes, with specified exceptions, or training purposes. Nonfluorinated training foam must be used for fire-fighting training purposes. These Acts do not apply to fire-fighting foams used at BWI Marshall Airport, nor did they restrict the manufacture, sale, distribution, discharge, or use of Class B fire-fighting foam that contains intentionally added PFAS chemicals in emergency fire-fighting or fire prevention operations. A person who violates these provisions is subject to a civil penalty of up to \$500 for a first violation and up to \$1,000 for a second or subsequent violation.

Subtitle 19 of Title 9 of the Environment article governs toxics in packaging and generally prohibits a manufacturer or distributor from selling or offering for sale (or for promotional purposes) any package or packaging component or any product in a package or packaging component to which lead, cadmium, mercury, or hexavalent chromium was intentionally added during manufacture or distribution.

### *Relevant Federal Law and Recent Regulatory Action*

The Federal Aviation Administration (FAA) Reauthorization Act of 2018 directed FAA to stop the use of fluorinated foam by October 4, 2021. In response, FAA issued guidance that states the fire-fighting foam standard that applies to airports no longer specifically requires the use of fluorinated chemicals (PFAS) but maintains the same military standard (which is based on how fluorinated foams perform). Under the guidance, foam that contains fluorinated chemicals may still be used, and FAA encourages certificate holders who have identified alternative foam to seek approval from FAA.

On October 18, 2021, the U.S. Environmental Protection Agency announced its comprehensive national strategy to confront PFAS pollution, called the “Strategic Roadmap.” Among other things, the roadmap contains (1) timelines to set enforceable drinking water limits under the federal Safe Drinking Water Act; (2) a hazardous substance designation under the federal Comprehensive Environmental Response, Compensation, and Liability Act; (3) timelines for action on effluent guideline limitations under the federal Clean Water Act for nine industrial categories; (4) a review of actions taken under the federal Toxic Substances Control Act (which regulates the introduction of new or already existing chemicals); and (5) continued efforts to build the technical foundation needed on PFAS air emissions to inform future actions under the federal Clean Air Act.

### **State Expenditures:**

#### *Maryland Department of the Environment*

General fund expenditures for MDE increase by \$66,772 in fiscal 2023, and by \$803,394 in fiscal 2024. These estimates account for the timing of the bill’s mandated appropriation to take back and dispose of PFAS fire-fighting foam from fire departments (in fiscal 2024), and the effective date of the bill’s prohibitions, which begin January 1, 2024. This estimate reflects the cost of hiring one contractual administrator in fiscal 2023, and four employees in fiscal 2024 (two regular employees (one environmental compliance specialist and one chemist) and two contractual employees (both environmental compliance specialists)).

The administrator is hired in fiscal 2023 to (1) conduct outreach to fire departments in the State to provide notice and identify fire departments that choose to participate in the takeback program and to identify the amount and condition of foam to be collected; (2) coordinate the collection of affected Class B fire-fighting foam from fire departments under the takeback program; and (3) oversee the proper disposal of the foam, which includes contracting with an environmental service provider with expertise in collecting and disposing of affected foam. The remaining employees are hired in fiscal 2024 to (1) research, conduct outreach, and identify other affected brands, manufacturers, distributors, retailers, or industry users of affected products; (2) develop regulations;

(3) conduct oversight, targeted inspections, and general enforcement activities; (4) establish procedures for affected entities to submit certifications of compliance; (5) review certifications as necessary for enforcement actions; (6) conduct laboratory analysis and testing to verify whether products contain PFAS chemicals; and (7) write the required report on current and future PFAS testing conducted by MDE on waters of the State. It includes salaries, fringe benefits, one-time start-up costs (including the purchase of one vehicle), and ongoing operating expenses. The information and assumptions used in calculating the estimate are stated below:

- the range of affected products are varied, and MDE does not currently regulate rugs, carpets, food packaging, or PPE that contain intentionally added PFAS chemicals;
- MDE must conduct research and outreach to identify affected entities and products;
- MDE is primarily responsible for enforcing the bill;
- based on information provided by MDE, there are nearly 5,000 different PFAS compounds;
- MDE needs to conduct research to determine participants interested in the takeback program and to identify and contract with an environmental service provider capable of disposing of purchased Class B fire-fighting foam before receiving the mandated funding in fiscal 2024;
- given the regulatory uncertainty, it will take several years to fully dispose of purchased Class B fire-fighting foam; and
- the entire \$500,000 in mandated funding is used in fiscal 2024 to take back and dispose of Class B fire-fighting foam from fire departments (although in reality, it could take more than one year for MDE to fully spend the appropriation).

	<u><b>FY 2023</b></u>	<u><b>FY 2024</b></u>
Regular Positions (New)	0	2.0
Contractual Positions (New)	1.0	2.0
Salaries and Fringe Benefits (Total)	\$58,004	\$227,573
Vehicle Purchase	0	32,000
Mandated Appropriation	0	500,000
Other Operating Expenses/Equipment	8,768	43,821
<b>Minimum MDE Expenditures</b>	<b>\$66,772</b>	<b>\$803,394</b>

This estimate does not include any health insurance costs that could be incurred for specified contractual employees under the State's implementation of the federal Patient Protection and Affordable Care Act.

Future year expenditures reflect salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses. Future year expenditures also reflect termination of the two contractual environmental compliance specialists after

fiscal 2026. It is assumed that the bulk of the enforcement activity occurs in the first three years of implementation and that beginning in fiscal 2027, the two regular employees can handle ongoing implementation and enforcement. Future year expenditures also reflect termination of the contractual administrator at the end of fiscal 2027. It is assumed that by the end of fiscal 2027, all of the Class B fire-fighting foam that MDE takes back from fire departments will be properly disposed of, and, as a result, the employee is no longer necessary. To the extent that MDE is able to fully dispose of the received Class B fire-fighting foam earlier than anticipated, the contractual administrator may not be needed for the full five years and staffing costs may decrease.

The Department of Legislative Services (DLS) notes that MDE also incurs costs to conduct laboratory testing for supplies and equipment. However, MDE was unable to provide a specific estimate of these costs; accordingly, they are not reflected in this analysis.

#### *Costs to Develop a PFAS Action Plan*

MDE and MDH are unable to provide specific estimates related to the costs of developing the required PFAS Action Plan. However, MDE anticipates that it takes at least 2,500 hours to (1) form a workgroup of individuals with expertise in areas such as toxicokinetics review, human and ecological risk assessments, and regulatory product development and registration; (2) develop PFAS exposure minimization strategies; (3) develop a cleanup plan for historical releases of PFAS by conducting or reviewing existing sampling data of sites where historical land uses indicate possible PFAS contamination; (4) conduct analysis of environmental justice and health inequities as they relate to PFAS contamination; (5) develop and implement educational and risk communication materials; and (6) draft the PFAS Action Plan, incorporating the substantive comments of the workgroup and the general public.

Given the tight timeframe required for the development of the PFAS Action Plan, MDE and MDH likely need to hire a consultant to develop the plan. Although DLS is unable to reliably estimate the costs of such a consultant, based on costs to develop comparable action plans, general fund expenditures could increase by at least \$100,000 to hire a consultant.

#### *Impact of the Bill's Prohibition on the Use of Class B Fire-fighting Foam and Other Products*

To the extent that any State entities use Class B fire-fighting foam that are not exempt from the bill's prohibitions and use restrictions, State expenditures (multiple fund types) may increase to purchase compliant products. State expenditures may increase further for foam disposal, containment, and/or treatment costs. Regulatory uncertainty at the federal level regarding the use of Class B fire-fighting foam has already caused an increase in disposal

costs for these foams. However, DLS does not have enough information to be able to provide a magnitude of the cost difference between compliant and noncompliant products or to predict actual disposal costs. Accordingly, a reliable estimate of any increase in costs cannot be made at this time.

**State Revenues:** General fund revenues increase minimally beginning as early as fiscal 2024 from the application of existing penalty provisions to the bill's provisions.

**Local Expenditures:** The bill affects local governments (primarily local governments that have fire departments or locally operated airports) and likely increases local expenditures beginning January 1, 2024, because local governments must obtain alternative products to replace affected Class B fire-fighting foam. However, local governments that choose to participate in the takeback program are no longer responsible for disposal costs for the foam, which have been increasing in recent years.

Local government expenditures could also increase to purchase food packaging and rugs and/or carpeting that meet the bill's requirements.

The requirement to retain documentation on any PPE that contains intentionally added PFAS chemicals is not anticipated to materially affect local governments.

**Small Business Effect:** The bill has a meaningful impact on small businesses that manufacture, sell, or distribute fire-fighting foam, carpets or rugs, or food packaging with intentionally added PFAS chemicals that are required to cease selling these products beginning January 1, 2024. Additionally, small businesses that manufacture, sell, or distribute fire-fighting foam, carpets or rugs, or food packaging without PFAS must develop and maintain certifications that those products are compliant with the bill. Small businesses that purchase PFAS-containing fire-fighting foam, rugs, or food packaging will no longer be able to purchase those products beginning January 1, 2024, and may realize an increase in costs to purchase alternative products. Small businesses that manufacture, sell, or distribute PFAS-containing fire-fighting foam incur costs to recall the affected foam, reimburse retailers or purchasers, and/or safely transport and store the recalled foam. Finally, small businesses that sell PPE that contain PFAS chemicals in the State must (1) develop a notice to provide to purchasers at the time of sale and (2) retain copies of each notice for at least three years after the date of the sale.

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## Additional Information

**Prior Introductions:** SB 195 of 2021, a bill with similar provisions, received a hearing in the Senate Education, Health, and Environmental Affairs Committee, but no further action

was taken. Its cross file, HB 22, received a hearing in the House Health and Government Operations Committee, but no further action was taken.

**Designated Cross File:** HB 275 (Delegate Love, *et al.*) - Health and Government Operations.

**Information Source(s):** Baltimore City; Caroline, Howard, and Prince George's counties; Maryland Association of Counties; Maryland Municipal League; Maryland State's Attorneys' Association; Maryland Department of the Environment; Department of General Services; Maryland Department of Health; Department of State Police; Maryland Department of Transportation; Federal Aviation Administration; U.S. Environmental Protection Agency; Department of Legislative Services

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