



Committee: Health and Government Operations

Testimony on: HB386 Pesticides - PFAS Chemicals - Prohibitions

Position: Support

Hearing Date: February 12, 2025

The Maryland Chapter of the Sierra Club supports HB386 “Pesticides - PFAS Chemicals - Prohibition” to reduce PFAS in pesticides.

Awareness is growing about PFAS “forever chemicals” in drinking water and other products. This bill is focused on the PFAS-pesticides which are “forever pesticides”. Pesticides containing PFAS contribute to the proliferation of PFAS contamination in people and our environment that can last for lifetimes causing numerous life-altering health issues. According to toxicologist, PFAS expert and former director of the National Institute of Environmental Health Sciences, Dr. Linda Birnbaum, “You give me a physiological system and it's likely there will be evidence that PFAS disrupts it in animal studies, in mechanistic studies, and in human observational studies.”¹

Currently [66 chemicals](#) meet the definition of PFAS and are used as pesticide active ingredients in the U.S.² Legislation in Maine has led to the compilation of over 1,400 pesticides with PFAS listed as an active ingredient.³ Pesticides may also include PFAS through intentional inclusion as an inert (trade secret) ingredient or through container contamination.⁴ Such pesticides would require lab testing to verify if they include a PFAS. **This bill requires no lab testing, as PFAS are listed on product labels as the active ingredient.**

Of the more than 14,000 pesticide products registered for sales/use annually, these PFAS pesticides represent just 10% of available pesticides, so banning them would not likely create an undue burden. According to estimates by the U.S. Geological Survey, the nation [annually uses 23 million to 35 million pounds of pesticide ingredients that are PFAS.](#)⁵

Pesticides with PFAS also contaminate our indoors, impacting schools, hospitals, homes, and businesses, and outdoor environments, contaminating lawns, parks, soil, surface and drinking water, crops, fish, and crabs. Importantly, PFAS accumulate in the body with repeated exposure, thus increasing the risk of harm.

Maryland has found alarming levels of [PFAS in Bay waters, tributaries](#), and fish.^{6,7} These were sufficiently high that the Maryland Department of the Environment [issued a warning](#) against eating fifteen fish species caught in the Chesapeake Bay and its tributaries.⁸ Our greatest source of exposure is ingestion, but dermal exposure is second and poses an increased risk especially to farm workers who come in contact with crops that have been sprayed with these toxins.⁹

Animal studies and *in vitro* human cell studies have identified the following adverse health effects from PFAS-pesticides, including ones currently approved for use in Maryland. The list below is not a complete list but represents a sampling of studies involving fluorinated PFAS pesticides.

- Teratogenicity (harm to fetal growth, anatomy, and development): Bifenthrin, Fipronil, Fludioxonil, Fluvalinate, Oxyfluorfen, Trifluralin
- Immunotoxicity: Bifenthrin, Fipronil, Flonicamide
- Endocrine disruption: Fludioxonil, Fluvalinate, Fipronil
- Carcinogenicity: Trifluralin, Fluopyram, Fipronil, Prodiamine, Thiazopyr
- Kidney and liver toxicity: Fluazifop-*p*-butyl
- Neurotoxicity: Bifenthrin, Bromethalin
- Thyroid toxicity: Fipronil, Thiazopyr

While we are hopeful for effective and affordable PFAS remediation techniques in the future, to date, none of the current PFAS remediation techniques remove ultra-short chain PFAS, which are the 66 PFAS-pesticides targeted to be banned by this bill. This amplifies the urgency of turning off these sources of PFAS contamination. The good news is that the more we avoid these unnecessary PFAS-pesticides, the more we can limit exposure for ourselves and for future generations.

SOLUTION

Prohibit the sale of pesticides known to contain PFAS in Maryland.

- There are hundreds of alternatives to PFAS “forever pesticides” already registered in Maryland for sales and use that can replace known PFAS-containing pesticides for pests of concern.
- Action is necessary to fill the void caused by a slow-moving federal government, which may be further delayed by intentions to cut EPA budget. This underscores the State’s need to halt unnecessary PFAS contamination at their sources, including banning it from pesticides.
- It is common sense to stop selling a known toxic agent that is being liberally applied in settings throughout the state – especially when there are known replacements for every use.
 - Minnesota has already passed PFAS pesticide laws preventing pesticides known to contain these forever chemicals from being sold.
 - Industry efforts in 2024 were unfortunately successful in weakening Maine’s 2023 law that restricted PFAS pesticides.
- We have done this before, with other known, toxic pervasive agents, like lead, asbestos, chlorpyrifos,¹⁰ and DDT.

ACTION

Protect Marylanders by passing the “Pesticides - PFAS Chemicals - Prohibition” bill to reduce PFAS in pesticides which mandates that starting on certain dates, PFAS pesticides sold in Maryland which have ingredients identified as PFAS and listed as an active ingredient on the label, would be phased out over several years.

“It is unacceptable for any company to knowingly contaminate our drinking water with these toxins, putting Marylanders at risk of severe health conditions,” Maryland Attorney General Anthony Brown said in a statement announcing the Maryland lawsuit against PFAS manufacturers and users. “Our office will not tolerate companies that put profits ahead of the

health and safety of Maryland families.”¹¹ The State should act now to reduce the flow of these chemicals that can harm farmers, their workers, and other Marylanders.

We urge a favorable report on HB386.

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¹Held, Lisa, “Why Are Pesticide Companies Fighting State Laws to Address PFAS?” December 18, 2024, *Civil Eats*, <https://civileats.com/2024/12/18/why-are-pesticide-companies-fighting-state-laws-to-address-pfas/>

² Donley, Nathan et al., [Forever Pesticides: A Growing Source of PFAS Contamination in the Environment | Environmental Health Perspectives | Vol. 132, No. 7](#) 24 July 2024

³ [Maine data unveils troubling trend: 55 PFAS-related chemicals in over 1,400 pesticides | Environmental Working Group](#)

⁴ Donley, Nathan and Bennet, Kyla ‘Forever’ Pesticides Threaten Worse Environmental Harms Than DDT, September 11, 2024 *Scientific American*

⁵ Ibid

⁶ Waterkeepers Chesapeake, Analysis by Waterkeepers Shows Shocking Level of PFAS Contamination in Local Rivers & Streams, November 22, 2022. <https://waterkeeperschesapeake.org/analysis-by-waterkeepers-shows-shocking-level-of-pfas-contamination-in-local-rivers-streams/>

⁷ Miller, Samuel, et al. Factors contributing to pesticide contamination in riverine systems: The role of wastewater and landscape sources, December 1, 2024 [Science of The Total Environment](#)

⁸ Maryland Department of the Environment Issues New Fish Consumption Advisory and Guidelines, Maryland Department of the Environment. December 8, 2023 <https://news.maryland.gov/mde/2023/12/08/maryland-department-of-the-environment-issues-new-fish-consumption-advisory-and-guidelines/>

⁹ Oddný Ragnarsdóttir, Mohamed Abou-Elwafa Abdallah, Stuart Harrad. Dermal bioavailability of perfluoroalkyl substances using in vitro 3D human skin equivalent models. *Environment International*, 2024; 188: 108772 DOI: [10.1016/j.envint.2024.108772](https://doi.org/10.1016/j.envint.2024.108772)

¹⁰ Maryland Government, MDA, <https://news.maryland.gov/mda/press-release/2020/12/16/regular-use-of-chlorpyrifos-prohibited-after-dec-31/>

¹¹ Maryland sues W.L. Gore over decades of forever chemicals contamination, December 18, 2024, The Baltimore Banner <https://www.thebaltimorebanner.com/politics-power/local-government/maryland-suit-wl-gore-associates-pfas-forever-chemicals-W6PRAPMG6NCPBAQME2BS2XSTC4/>