

Phasing Out Use of PFAS in Commercial & Consumer Products, and by Industry

Policy action in the State of Maine

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PFAS found in milk and water in Maine

- Stoneridge Farm was notified of potential PFOS contamination of their ground water by a public water utility and subsequently had cows' milk tested in late 2016
- Milk contained up to 1,420 parts per trillion of PFOS, then the highest level ever reported in North America
- Detailed site investigation determined source was land-spreading of wastewater treatment sludge as fertilizer
- A second dairy that also spread sludge was identified in 2020 with even higher levels of PFOS in the milk
- 160+ residential wells surrounding the second dairy are contaminated so far, likely from the sludge



Sludge drives PFAS Source Reduction

- In 2019, Maine Department of Environmental Protection required testing of all sewage sludge before allowing it to be land applied
- Screening limits = 5.2 ppb PFOS; 2.5 ppb PFOA; and 1,900 ppb PFBS
- More than 90% of sludge & composted sludge exceeded levels
- No correlation with size of community generating it, nor obvious industrial source – septage had highest average levels
- Sludge spreading now highly restricted, but loopholes remain
- Growing concern with septage, landfill leachate, effluent discharge

PFAS Use Remains Widespread

- Food packaging & food service ware
- Textiles, upholstery, leather, apparel, carpet & rugs, fabric sprays
- Cleaning agents, polishes & waxes
- Cosmetics & ski treatment
- Metal plating & metal products mfg.
- Lubricants & construction products
- Electronics, energy, transportation
- Medical devices & medicinal uses

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Cite this: *Environ. Sci.: Processes Impacts*, 2020, 22, 2345

An overview of the uses of per- and polyfluoroalkyl substances (PFAS)[†]

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Per- and polyfluoroalkyl substances (PFAS) are of concern because of their high persistence (or that of their degradation products) and their impacts on human and environmental health that are known or can be deduced from some well-studied PFAS. Currently, many different PFAS (on the order of several thousands) are used in a wide range of applications, and there is no comprehensive source of information on the many individual substances and their functions in different applications. Here we provide a broad overview of many use categories where PFAS have been employed and for which function; we also specify which PFAS have been used and discuss the magnitude of the uses. Despite being non-exhaustive, our study clearly demonstrates that PFAS are used in almost all industry branches and many consumer products. In total, more than 200 use categories and subcategories are identified for more than 1400 individual PFAS. In addition to well-known categories such as textile impregnation, fire-fighting foam, and electroplating, the identified use categories also include many categories not described in the scientific literature, including PFAS in ammunition, climbing ropes, guitar strings, artificial turf, and soil remediation. We further discuss several use categories that may be prioritised for finding PFAS-free alternatives. Besides the detailed description of use categories, the present study also provides a list of the identified PFAS per use category, including their exact masses for future analytical studies aiming to identify additional PFAS.

Received 2nd July 2020
Accepted 23rd September 2020

DOI: 10.1039/d0em00291g

rsc.li/espi

See also: Report summaries from 2nd Stakeholder Consultation on a Restriction on PFAS under REACH, July 2021, European Union



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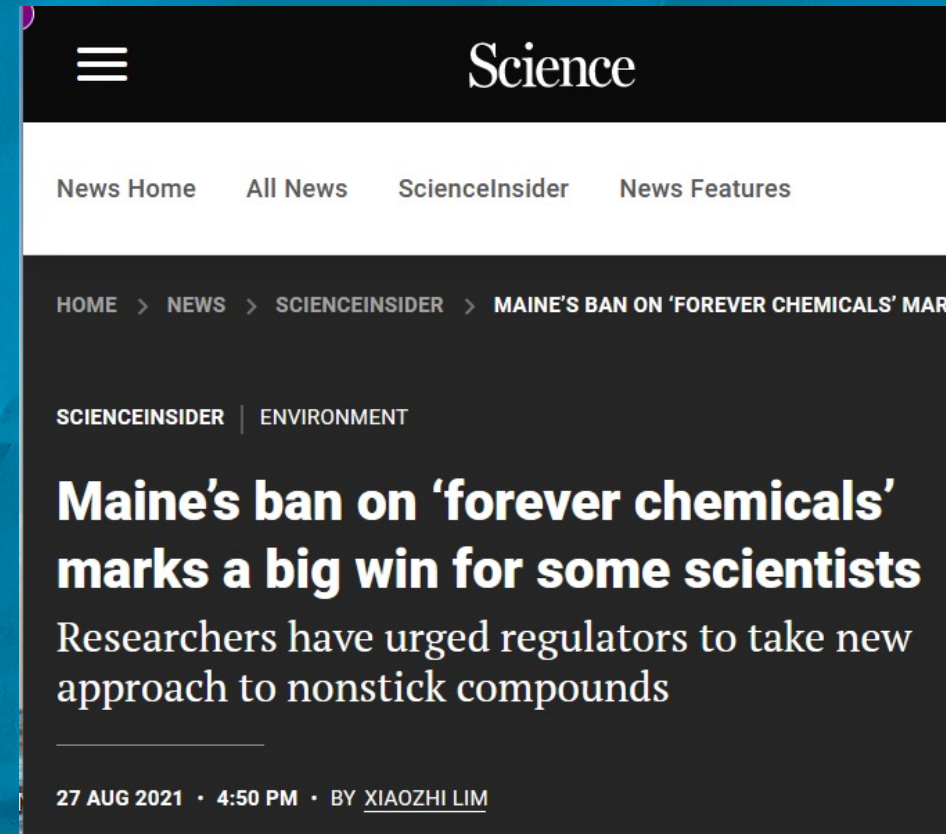
Efforts to phase out PFAS use in products

- Many states tackling specific uses:
 - WA, ME, NY, VT, soon CA are addressing PFAS in food packaging
 - VT, ME, CA and soon WA are addressing PFAS in carpets, rugs, and fabric treatments
 - VT in ski wax
- Retailers and Manufacturers also taking action
 - Chipotle, McDonalds, Taco Bell and others have committed to eliminating PFAS from wrappers
 - Home Depot & Lowes stopped selling PFAS containing carpets and rugs
 - KEEN removing all PFAS from footwear by 2025



Maine Takes a Common-Sense Approach

- By Jan 1, 2023, PFAS use is prohibited in carpets, rugs & fabric sprays sold in state
- By Jan 1, 2023, all manufacturers must report PFAS use in products sold, and by industry
- By rule, Maine can phase out other non-essential uses of PFAS in other products
- By Jan 1, 2030, all PFAS uses are banned unless DEP determines that a specific use is “currently unavoidable” – i.e. “essential to health, safety or functioning of society, and for which alternatives are not reasonably available



The screenshot shows a web page from Science Insider. At the top, there is a navigation bar with a hamburger menu icon on the left and the word "Science" in the center. Below this, there are links for "News Home", "All News", "ScienceInsider", and "News Features". The main content area has a breadcrumb trail: "HOME > NEWS > SCIENCEINSIDER > MAINE'S BAN ON 'FOREVER CHEMICALS' MARKS A BIG WIN FOR SOME SCIENTISTS". Below the breadcrumb, there are tags for "SCIENCEINSIDER" and "ENVIRONMENT". The article title is "Maine's ban on 'forever chemicals' marks a big win for some scientists". The sub-headline reads: "Researchers have urged regulators to take new approach to nonstick compounds". At the bottom of the article preview, it says "27 AUG 2021 • 4:50 PM • BY XIAOZHI LIM".

Opportunity Ahead for Massachusetts

- U.S. states, Europe, and market leaders are driving PFAS use policy
- Maine's law and Europe's PFAS restriction process will generate comprehensive data on which products and industries use PFAS
- The Interstate Chemicals Clearinghouse (IC2), based in Massachusetts, has potential to manage PFAS use data submitted to Maine, resulting in a searchable database available to all states
- Adoption of additional state policies to restrict use of PFAS in products and by industry will accelerate the transition to safer materials

Thank You

Feel free to contact me with additional questions

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