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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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To: Board of Environmental Protection

From: Tom Graham, *Policy Specialist*
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Date: July 17, 2025

Re: Chapter 90: *Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances*

The Department seeks to initiate rulemaking to amend its rule *Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances*, 06 096 C.M.R. ch. 90 (Chapter 90) to include currently unavoidable use (CUU) determinations.

Regulatory Framework

The objective of Maine law *Products Containing PFAS*, 38 M.R.S. §1614, is to reduce the potential for environmental contamination by and human exposure to perfluoroalkyl and polyfluoroalkyl substances (PFAS) by eliminating their non-essential use in products through sales prohibitions. Where the use of PFAS is critical to a product that is determined to be essential for health, safety or the functioning of society, and for which alternatives are not reasonably available, the Legislature has provided for CUU determinations by the Department through routine technical rulemaking. “Essential for health, safety or the functioning of society” is defined as a use of a PFAS in a product when the function provided by the PFAS is necessary for the product to perform as intended, such that the unavailability of the PFAS for use in the product would cause the product to be unavailable, which would result in: (1) A significant increase in negative health outcomes; (2) An inability to mitigate significant risks to human health or the environment; or (3) A significant disruption of the daily functions on which society relies.

This rulemaking is focused on the limited scope of the prohibited use of intentionally added PFAS in the following product categories:

- Cleaning Product
- Cookware Product
- Cosmetic Product
- Dental Floss
- Juvenile Product
- Textile articles (with exception)
- Ski Wax
- Upholstered Furniture
- Fluorinated containers, or containers that otherwise contain intentionally added PFAS, from any of these categories of products included in the 2026 sales prohibition.

The Department considered whether the use of PFAS in the product is necessary for the product to perform as intended, with particular attention to whether the absence of the PFAS used has the potential to result in the product becoming unavailable and creating any of the negative outcomes detailed in the definition of “Essential for health, safety and the functioning of society.”

Similarly, within the category of container, the Department also weighed the necessity of PFAS use in the container with the ability of the container to function properly without the use of PFAS.

Once designated a currently unavoidable use, manufacturers continuing the use of intentionally added PFAS in specific CUU product categories must meet the notification requirements found in Chapter 90 prior to sales in Maine beyond the prohibition effective date.

On April 7, 2025, the Board adopted Chapter 90, in part, to establish criteria for such determinations. Recognizing that it was not possible to adopt CUU determinations for January 1, 2026, sales prohibitions using the rule’s general timeline for CUU submissions of no less than 18 months prior to the start of a sales prohibition and based on a projected rulemaking timeline, a June 1, 2025, deadline for submission of CUU proposals was established.

Rule Development

Considering ease of use by the regulated community and internal data management, the Department established an online submission form for CUU proposals. This mechanism guides users through a series of questions that form important data points for the Department, as established in rule Chapter 90.

The Department has received 11 CUU proposals for consideration in the following product categories: cookware product (5 proposals), cleaning product (4 proposals), cosmetic product container (1 proposal), upholstered furniture (1 proposal).

Based on the information provided within CUU proposals submitted through the online reporting system, the Department makes the following recommendations:

Cookware Category

Proposals: HQC-ZF13-Y8K4R; HQC-ZR29-9YFEB; HQC-JS1V-7C75E

Product Description: Cookware and bakeware

All three of these proposals request a CUU determination for polytetrafluoroethylene (PTFE) as a coating that comes in contact with food on cookware surfaces for its non-stick behavior, chemical and abrasion resistance, resistance to heat and corrosion, and long-lasting product performance. Each proposal states that these properties are essential for consumers' health and safety when cooking due to the resulting low or no fat use during cooking, predictable results by preserving food texture, prevention of burning, and easy clean-up which reduces detergent and water use.

Alternatives: Those identified within the proposal are commonly known and readily available.

[Portions of specific identification and performance information within this section are claimed as confidential business information.]

Recommendation: Based on the lack of evidence that this product meets the statutory definition of essential for health, safety and the functioning of society, and that reasonably available

alternatives that function similarly are readily obtainable by consumers, the Department does not recommend approving the CUU proposals for the use of PFAS in cookware.

Proposal: HQC-ZH6A-HQE84

Product Description: Cookware, small kitchen appliances

This proposal requests a CUU determination for fluoropolymer-coated small kitchen appliances. Submitter states that fluoropolymers, particularly PTFE, are essential components for this product category for its inherent non-stick behavior, resistance to chemicals, abrasion, heat, and corrosion. The proposal states these features ensure the long-term effectiveness of small kitchen appliances and support healthier cooking practices by reducing the need for added fats and enabling easier cleaning. The submitter describes performance characteristics provided by the fluoropolymers in this product ensure durability of small kitchen appliances, ultimately offering a longer product lifespan.

Alternatives: The proposal states that cast iron, stainless steel and raw aluminum do not possess natural non-stick capabilities. The proposal states that ceramic coatings are mistakenly regarded as a suitable substitute, though they lack non-stick durability and overall performance over time. Because of this, ceramic-coated appliances often wear out faster and need replacement sooner.

Recommendation: Based on the lack of evidence that this product meets the statutory definition of essential for health, safety and the functioning of society, and that reasonably available alternatives that function similarly are readily obtainable by consumers, the Department does not recommend approving the CUU proposals for the use of PFAS in this type of cookware.

Proposal: HQC-XVWW-DVJ0F

Product Description: Coffee maker

This proposal requests a CUU determination for PFAS compounds intentionally added to component parts of coffee makers such as tubing, gaskets, solenoid valves, and vibrating pumps. PFAS use in this product is described as essential for chemical stability, resistance to high pressure, durability, maintenance through high temperatures, and long-lasting non-stick and self-lubricating properties. The proposal states that the properties provided by intentionally added PFAS are essential for consumers' health and safety when using the product because it can be

“...more cost-effective than purchasing coffee from outside sources as consumers can choose the type of coffee, quantity, and minimize waste.”

Alternatives: Those identified within the proposal include silicone, non-PFAS polymers, and ceramics which are commonly known and readily available. However, submitter states that these alternatives do not offer the same combination of properties such as resistance to high pressure and temperature, as well as resistance to friction. Problems associated with use of these alternatives are identified as tubing that dries out and becomes brittle over time, which could create leakage and decrease product lifespan.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving the CUU proposal for the use of PFAS in this type of cookware.

Cleaning Product

Proposal: HQC-ZKB4-SGASS

Product Description: Liquid Cleaner Container – Internal cartridge valve

This proposal requests a CUU determination for PFAS compounds in component parts of a container valve located at the top of the internal cartridge. The vent described is designed to withstand chemical compatibility challenges posed by highly corrosive formulations and associated off gassing of the liquid cleaning product within the container. The submitter states that PFAS used in this component allows for delicate and finely tuned mechanical interaction that helps repel aggressive substances and maintain performance integrity. The vent controls the dilution ratio of concentrated cleaners held within the container, ensuring control of the dilution ratio of concentrated cleaners. The proposal states that the properties provided by intentionally added PFAS are essential for consumers’ health and safety when using the product because controlled dilution is critical to efficacy and limited exposure to concentrated cleaners held within the container.

Alternatives: Submitter states there are none currently available that are adequate to meet performance criteria for this product.

Recommendation: Because this component of the container performs a vital role for the product within it to function properly and concern for consumer safety should this container valve fail, the Department recommends approval of this CUU proposal.

Proposal: HQC-ZR7R-6N0MY

Product Description: Electric Air Care Product Components

This proposal requests a CUU determination for PFAS compounds in internal component parts of an electric fragrance warmer. Within tubes located in the resistor assembly, PFAS are used to provide a flame-retardant barrier around conductive elements, protect against high temperatures, humidity, and mechanical stress. The submitter describes the PFAS compound used as critical as a protective barrier to prevent human contact with live electrical parts, resist fatigued wiring wear over time, as well as reduce risk of short circuits. The proposal states that the properties provided by intentionally added PFAS are essential for consumers' health and safety to prevent insulation failure, reduce risk of short circuits, prevent human contact, and overheating or fire.

Alternatives: The proposal states that silicone is an alternative that offers flexibility and heat resistance, it typically does not meet the full performance profile criteria for this product; particularly, chemical resistance and long-term endurance.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving this CUU proposal.

Proposal: HQC-ZQJK-QWWN2

Product Description: Electric Air Care Product Plug-In

This proposal requests a CUU determination for PFAS compounds in internal component parts of an electric air freshener. Within the plug deck of the device, PFAS is used to coat the wiring jackets. The submitter describes PFAS compounds in this component providing a flame-retardant barrier around stranded copper conductors, provide resistance to heat, cold, humidity, and mechanical stress, as well as preventing insulation failure that could lead to short circuits or fires.

The proposal states use of PFAS in this product is essential for electrical safety and prevention of human contact with live electrical parts, reducing the risk of electric shock.

Alternatives: The proposal states that silicone is an alternative that offers flexibility and heat resistance, it typically does not meet the full performance profile criteria for this product; particularly, chemical resistance and long-term endurance.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving this CUU proposal.

Proposal: HQC-J9ZH-K4EZJ

Product Description: Container Vented Cap Liners

This proposal requests a CUU determination of PFAS compounds in components of a container. Specific to vented cap liners of foam and induction foils, the submitter states that intentionally added PFAS allows lighter weight packaging, higher concentration of active ingredients, and more effective products. The submitter describes the PFAS applied to finished cap liner vents specific to this proposal are components of containers for several product categories, such as cleaning products, haircare products, and liquid chemicals. The proposal states that these vents provide the necessary function of safely allowing off gassing from the containers across all three product categories, which avoids containment failure.

Alternatives: The proposal states that alternatives such as polypropylene membranes, cellulose acetate membranes, polyester polyethersulfone membranes, polyethylene, and polyolefin membranes have been assessed, and none are suitable for this application and performance standard.

Recommendation: Because this internal component of a container performs vital roles for the product to function in a safe manner across multiple product categories (cleaning products and cosmetic products) subject to the 2026 sales prohibition, the Department recommends approval of this CUU proposal.

Cosmetic

Proposal: HQC-ZQC8-3D9RZ

Product Description: Container O-ring, used for hand lotion

This proposal requests continued use of PFAS compounds in internal component parts of a container cartridge. Specifically, the O-ring made with vinylidene fluoride-hexafluoropropene polymer. The submitter states that the PFAS used is inert and has superior properties to provide the seal functionality necessary to ensure chemical compatibility with these complex product formulations. The product is marketed to provide accessible skin protection and hydration in high-risk environments like industrial, healthcare and food service settings.

Alternatives: The submitter states that alternatives such as silicones, EPDM (ethylene propylene diene monomer) and other elastomers have been identified but none match the compatibility necessary for this specific product formulation. Identified alternatives show unacceptable levels of degradation, cracking, brittleness, hardness, or swelling of the material due to chemical incompatibility, which leads to seal failure. The submitter states that an alternative material may be found that is compatible with the product chemistries if given additional time for development.

Recommendation: The proposal under consideration is for a product outside the exemption at 38 MRS §1614(4)(E) for “any product that is a medical device, drug or biologic or that is otherwise used in a medical setting or in medical applications that are regulated by or under the jurisdiction of the United States Food and Drug Administration,” and lacks evidence that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society. The Department does not recommend approval of this CUU proposal for the continued use of PFAS in the O-ring of this product.

Upholstered Furniture

Proposal: HQC-Y1XK-HXXFJ

Product Description: Massage Chair, internal mechanical component

This proposal requests a CUU determination for PFAS compounds in internal component parts of a massage chair, specifically in the ball bearings of internal mechanical components of the

massage chair. The submitter states that PFAS used helps prevent mechanical noise, as well as providing longevity and safe performance for this furniture product. The proposal describes the importance of PFAS use in ball bearings of this product includes reduced friction and ensuring safe operability of internal mechanical components.

Alternatives: Submitter states that suppliers have not provided the identity of non-PFAS alternatives that have been tested and do not meet performance standards.

Recommendation: Based on the lack of evidence provided that the unavailability of PFAS for use in this product category would result in any of the negative outcomes set forth in the criteria of essential for health, safety or the functioning of society and that reasonably available alternatives that function similarly are obtainable by consumers, the Department does not recommend approving this CUU proposal.

Statutory Authority

The proposed rule is authorized by 38 M.R.S. § 1314 (10):

10. Rules. The department shall adopt rules to implement this section. Except as provided in subsection 5, paragraph C [currently unavoidable use determinations], rules adopted to implement this section are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Requested Action

The Department staff recommends that the Board initiate rulemaking by posting for public comment and a public hearing the proposed amendments to rule Chapter 90 and to coordinate with the Board Executive Analyst regarding the date of the hearing and close of comment period.

Estimated time of agenda item

45 minutes

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