



**Solutions
for a Toxic-Free
Tomorrow**

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RE: Chapter 90: Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances

Thank you for the opportunity to provide comments on the draft rules for Chapter 90: Chapter 90: Products Containing Perfluoroalkyl and Polyfluoroalkyl Substances. Below you will find Defend Our Health's detailed comments on the draft rule. Please don't hesitate to contact us if you have any follow-up questions or would like clarification of these comments.

We commend the Department of Environmental Protection's (DEP) work regarding industry requests for currently unavoidable use (CUU) designations to allow certain products to be exempt from the PFAS products law. We recognize that, over the next several years, the DEP will be tasked with making decisions on thousands of products, and we understand it will be a significant undertaking. We greatly appreciate the hard work of the staff.

We first want to focus on the products that the DEP said did not meet the criteria for a currently unavoidable use designation. In particular, the cookware products. We commend the Department for recognizing that there are viable alternatives to PFTE and other PFAS in cookware on the market and that these products do not meet the statutory definition of being necessary for the "health, safety, and functioning of society" as laid out by the PFAS products law. The cookware industry has been attempting to get exemptions for its products since the passage of the PFAS products law in 2021. The Maine legislature recently opposed legislation to exempt cookware from the PFAS products law during the first session of the 132nd legislature.

Additionally, several other states also ban PFAS in cookware, including CO, MN, CT, VT, and RI. New Jersey and California require labeling of PFAS in cookware. Several bills have also been introduced in states that ban the use of PFAS in cookware, including MD, OR, and IA. Maine is not an outlier with this policy and should continue to reject any attempts to exempt cookware from the PFAS products law.

Industry has been arguing over the past several months before several state legislatures, including Maine's, and the Maine Board of Environmental Protection (BEP), that the PFAS fluoropolymers that are used in non-stick cookware are "safe" and that all scientists agree they are safe. This is false. Polytetrafluoroethylene (PTFE or Teflon), Perfluoroalkoxy alkane (PFA), and Fluorinated Ethylene Propylene (FEP), which are all PFAS fluoropolymers used to make nonstick pans, are relatively stable but break down into smaller, more harmful PFAS that are water-soluble, mobile, and bioavailable when exposed to

heat¹. PTFE, PFA, and FEP also break down into microplastics, which are becoming a significant health concern and are being detected at alarming rates in the human heart, brain, and semen in recent studies². PTFE was found to be a significant reproductive health risk, associated with decreased semen quality and reductions in total sperm count³.



It is well established that PTFE causes harm to the environment and human health at all stages of the life cycle. Several peer-reviewed studies have shown that fluoropolymer production pollutes nearby communities⁴ and increases the risk of kidney and testicular cancer in workers and fence-line communities⁵. As the BEP considers whether or not to accept the DEP's recommendations to reject the CUU for any cookware, you should take into account the full lifecycle of the product, whether or not it's manufactured in Maine.

The Cookware industry states that their products are safe under “normal conditions.” Pans and other cookware should only be used⁶ on low to medium heat, cannot be washed with abrasive cleaners, and should not come into contact with steel utensils. Most consumers do not follow these guidelines. How many of you have Teflon pans at home that are scratched or chipped? We have all seen cookware like that. That flaking and chipping releases dangerous chemicals. In fact, even “normal use” of Teflon can kill pet birds⁷. This is according to industry studies and information on their website. Normal heating of PTFE pans releases toxics in the air that are lethal to birds. This clearly demonstrates that there are, in fact, mobile, bioactive toxic releases from these types of pans.

Proponents argue that because the FDA approves the chemicals listed in cookware, they are safe. We know that isn't necessarily true. Many chemicals approved for use in food contact materials have been linked to known health impacts, yet the FDA still permits their use in these materials. Maine banned PFAS in food packaging long before the FDA took any action. Even now, the phase-out of PFAS from food packaging is considered “voluntary” by the FDA. Maine also banned phthalates as a class in food packaging in 2019 because of their health impacts, particularly on children. The FDA still permits the use of several phthalates in food packaging. There are numerous examples of the FDA lagging behind the states and the European Union in phasing out hazardous toxics from products.

During the public comments before the BEP on this very rule, industry representatives claimed that other cookware was upwards of \$1,000 more expensive than Teflon-coated non-stick cookware. This is patently false. A quick search of Amazon for a 10” frying pan showed Teflon pans ranging

¹ Keller, D. A., Kennedy, G. L., Ross, P. E., Kelly, D. P., & Elliott, G. S. (2020, August 1). *Toxicity of Tetrafluoroethylene and S-(1,1,2,2-tetrafluoroethyl)-L-cysteine in Rats and Mice*. Oxford Academic. <https://academic.oup.com/toxsci/article-lookup/doi/10.1093/toxsci/56.2.414>

² LaBeaud, D., & Meister, K. (2025, January 29). Microplastics and our health: What the Science says. Stanford Medicine News Center. <https://med.stanford.edu/news/insights/2025/01/microplastics-in-body-polluted-tiny-plastic-fragments.html>

³ Zhang, C. (2024, September 28). *Association of mixed exposure to microplastics with sperm dysfunction: A multi-site study in China*. EBioMedicine. <https://pubmed.ncbi.nlm.nih.gov/39342804/>

⁴ Newton, S., McMahan, R., Stoeckel, J. A., Chislock, M., Lindstrom, A., & Stryner, M. (2017, January 13). *Novel Polyfluorinated Compounds Identified Using High Resolution Mass Spectrometry Downstream of Manufacturing Facilities near Decatur, Alabama*. ACS Publications. <https://pubs.acs.org/doi/book/10.1021/acsguide>

⁵ Barry, V., Winkquist, A., & Steenland, K. (2013, September 5). *Perfluorooctanoic Acid (PFOA) Exposures and Incident Cancers among Adults Living Near a Chemical Plant*. EHP Publishing <https://ehp.niehs.nih.gov/doi/10.1289/ehp.1306615>

⁶ DiLorenzo, M. J. (2024, July 24). *Is it safe to use scratched nonstick pans? here's what experts say*. Simply Recipes. <https://www.simplyrecipes.com/is-it-safe-to-use-scratched-nonstick-pans-7480071>

⁷ Chemours.com. (n.d.). *Teflon™ cookware and bird safety | teflon™ pots and pans*. Teflon. <https://www.teflon.com/en/consumers/teflon-coatings-cookware-bakeware/safety/bird-safety>

from \$20 to \$80⁸, ceramic non-stick cookware ranging from \$20-\$150⁹, stainless steel pans ranging from \$25-\$120¹⁰, and cast-iron pans ranging from \$16-\$80¹¹. There is no demonstrable price difference, and, in the case of cast-iron, it is usually cheaper and lasts longer. There are several non-stick, PFAS-free pans, including those from Nordic Ware and Green Pan. I personally own several Green Pan PFAS-free pans, and they work great without costing an arm and a leg. This argument isn't valid and shouldn't be taken into consideration when making the decision about the CUU for these products. Minnesota's ban on cookware is in effect and has shown that it isn't necessary to use PFAS in cookware. We urge the BEP to uphold the DEP's decision on cookware.

We also support rejecting the CUUs for the following proposals: HQC-ZR7R-6N0MY, electric air care product components; HQC-ZQJK-QWWN2, electric air care product plug-in; JHQC-ZQC8-3D9RZ, container O-ring for hand lotion; and HQC-Y1XK-HXXFJ, massage chair internal component.

The Department of Environmental Protection has submitted proposals for product categories, including HQC-J9ZH-K4EZJ container vented cap liners and HQC-ZKB4-SGASS liquid cleaner containers, for approval as currently unavoidable uses. Defend opposes these recommendations and urges the Board to reject these requests. All of these products are included in consumer products, meaning that there is a possibility for exposure to consumers, even if it's an internal part of the product.

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Similar to the other requests around internal components that the Department rejected, there is a possibility for consumer exposure, even if the parts are internal. PFAS is highly mobile and could leach out of these products, particularly HQC-J9ZH-K4EZJ container vented cap liners, which are used in hair care products. These are products that people apply directly to their skin. We should not allow the use of PFAS at all, but particularly in instances where there is a risk of direct exposure to consumers.

Additionally, information provided by the Department is insufficient for the public to make a determination about the necessity of a currently unavoidable use designation. We understand that some information regarding product formulas is proprietary and therefore cannot be shared with the public. However, the information shared in this rulemaking is so generic that it is impossible to determine whether the use is necessary. The public has a right to know which products contain PFAS and which companies and industries are requesting currently unavoidable use designations. The purpose of the PFAS products law is to protect the public from exposure to toxic PFAS and to provide them with the information necessary to make informed choices about which products they want to use. Asking the public to engage in rulemaking without providing them with the necessary information to make an informed and reasoned argument, either in support or opposition, undermines the intent of the public rulemaking process. The limited information provided also does

⁸https://www.amazon.com/s?k=10+inch+teflon+frying+pan&crd=1CBB1CCCD5OTK&srefix=10+inch+teflon+frying+pan%2Caps%2C118&ref=nb_sb_noss_1

⁹https://www.amazon.com/s?k=10+ceramic+frying+pan&crd=3J0E45FEGSDK4&srefix=10+cerami%2Caps%2C129&ref=nb_sb_ss_p13n-pd-dplr-ranker_ci_hl-bn-left_1_9

¹⁰https://www.amazon.com/s?k=stainless+steel+10+frying+pan&crd=3R1VIJ2JGJCKA&srefix=stainless+steel+10+frying+pan%2Caps%2C131&ref=nb_sb_noss_1

¹¹https://www.amazon.com/s?k=10+inch+cast+iron+frying+pan&crd=AG4N0QMFB4SN&srefix=10+inch+cast+iron+fryin g+pan%2Caps%2C120&ref=nb_sb_noss_1



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not clarify how the Department arrived at its conclusions. What information was provided that led to the approval or rejection of the CUUs? Is the Department taking a broad look at what is available as possible safer replacements for the products? For instance, the information provided about the vented cap liners stated that they are used in some haircare products. When the Department examined alternatives, did it only consider other spray alternatives, or did it also consider other products that might achieve the same result but in a non-spray form? The Department should consider all alternatives. They may be, but there is not enough information shared with the public to make that determination.

We urge the Board of Environmental Protection to reject the requests for a currently unavoidable use designation for these products, to protect the health and environment of all Mainers.

Thank you,

Sarah Woodbury
Vice President of Policy and Advocacy
Defend Our Health