



March 27, 2026

Minnesota Pollution Control Agency ("MPCA")

Subject: PFAS in Products: Currently Unavoidable Use

Dear Minnesota Pollution Control Agency,

I am writing to you in support of Minn. Stat. § 116.943 (Amara's Law) and the prohibition on sale of products containing intentionally added PFAS. My name is Kevin Callahan, and I am the Chief Operating Officer for BP Polymers, LLC ("BPP"). BPP offers a unique, proprietary resin, Kortrax® (patent-pending), that can be added to high-density polyethylene ("HDPE") to create various types of packaging imbued with barrier properties. Unlike surface modification barrier treatments such as fluorination, Kortrax® is free of PFAS contamination and the adjoining environmental and public health effects. BP Polymers Kortrax® can be found in a wide variety of industries, and BPP provides proven technologies that benefit users and consumers every day.

We are aware that the Agency is currently accepting comments from the public as to the proposed criteria and processes that MPCA will use to make currently unavoidable use ("CUU") exemptions for products that contain intentionally added PFAS. Though you will undoubtedly receive feedback criticizing the Department's approach to identifying the proper criteria by which to classify a CUU, including the definition of "essential for health, safety or the functioning of society," we feel that it is important to add our voice in support of Minnesota's continued efforts to curb PFAS pollution within the state and inform you of what we have seen in the packaging industry.

In the world of packaging, fluorination has dominated the market. Fluorination provides a needed barrier to containers housing aggressive substances by a chemical process involving the exposure of HDPE containers to fluorine gas. However, fluorination has become more controversial in recent years given that it often comes with unintended side effects, most prominently PFAS contamination.¹

The presence of PFAS in fluorinated HDPE is not a novel issue and has been evidenced as far back as 2011.² Though relatively under-recognized, the connections between PFAS and fluorinated containers have been widely studied by both the government and top academic institutions. Most concerning, both the Environmental Protection Agency ("EPA") and researchers such as Graham Peaslee have shown that there is a high rate of transferability of the PFAS generated by the fluorination process into the contents of fluorinated HDPE containers, including food products.³ This PFAS then makes its way into the waste stream where it harms human health and the environment, widely contaminating persons, water, biosolids, and wildlife.

¹ US EPA, O. (2022, March). https://www.epa.gov/system/files/documents/2022-03/letter-to-fluorinated-hdpe-industry_03-16-22_signed.pdf

² Rand, A. A., & Mabury, S. A. (2011). Perfluorinated Carboxylic Acids in Directly Fluorinated High-Density Polyethylene Material. *Environmental Science & Technology*, 45(19), 8053–8059. <https://doi.org/10.1021/es1043968>.

³ US EPA, O. (2022, September 12). *EPA Releases Data on Leaching of PFAS in Fluorinated Packaging*. [Www.epa.gov. https://www.epa.gov/pesticides/epa-releases-data-leaching-pfas-fluorinated-packaging](https://www.epa.gov/pesticides/epa-releases-data-leaching-pfas-fluorinated-packaging). Whitehead, H. D., & Peaslee, G. F. (2023). Directly Fluorinated Containers as a Source of Perfluoroalkyl Carboxylic Acids. *Environmental Science & Technology Letters*. <https://doi.org/10.1021/acs.estlett.3c00083>.

The PFAS associated with fluorination comes with broad, alarming effects. As you are likely aware, PFAS has a significant negative impact on an assortment of bodily systems, several types of PFAS are bioaccumulative, and it can be found everywhere – in our water, packaging, clothes, food, and more.⁴ When you consider the breadth of exposure to PFAS on a daily basis, it is alarming to say the least. Looking at the scale of this issue, the general public has been robbed of their autonomy to decide for themselves the dose of this constant poison that they are exposed to. Fluorination is just one piece of the PFAS puzzle but an important one.

The pro-fluorination argument is predicated on the assumption that fluorination is the only effective barrier technology to house hazardous substances and, as such, should be viewed as “essential for health, safety or the functioning of society.” The negative repercussions of fluorination, if any, are minimal and of low concern. Yet, due to the increasing scientific awareness of the harms and bioaccumulative effects of even small doses of PFAS, this “minimal” exposure should not be considered acceptable. This is especially true when there are several effective, innovative barrier technology alternatives. For too long, fluorination has aggressively shaped the regulatory framework of the PFAS debate within the plastics and packaging industry due to its influential market power. Fluorination as a barrier is neither necessary nor essential.

When it comes to Minnesota’s legislative efforts, we expect proponents of fluorination to challenge the application of Amara’s law to fluorination by asserting that fluorination is not an intentional use of PFAS. However, it is indisputable that most forms of fluorination create PFAS. Because the fluorination-related creation of PFAS is of clear concern, advocates will then turn to the CUU argument that fluorination is “essential for health, safety or the functioning of society” because of its role as a barrier.

Proponents of fluorinated packaging will assert that there are no reasonably available alternatives to fluorination so it is critical to maintain access to fluorination via a CUU exemption. Additionally, supporters of fluorination will underscore the economic and safety impact of effectively banning fluorination through bills targeting PFAS. They will argue that there will be significant market wide disruption and negative health outcomes as companies rush to find alternatives and chemicals leak from non-barrier containers.

The pro-fluorination argument is predicated on the assumption that fluorination is the only effective barrier technology to house hazardous substances and, thus, fluorination is a currently unavoidable use. In sum, fluorination is a necessary evil whereby access is essential. However, this argument is fundamentally flawed. Although fluorination may present itself as the pinnacle of barrier technology, the reality is that there are a wide range of innovative, proven alternatives. We are just one of many companies that have, for years, provided effective PFAS-free barriers to the packaging industry and successfully protected against leaking and permeation from hazardous substances.

⁴ Fenton, S. E., Ducatman, A., Boobis, A., DeWitt, J. C., Lau, C., Ng, C., Smith, J. S., & Roberts, S. M. (2020). Per- and Polyfluoroalkyl Substance Toxicity and Human Health Review: Current State of Knowledge and Strategies for Informing Future Research. *Environmental Toxicology and Chemistry*, 40(3), 606–630. <https://doi.org/10.1002/etc.4890>.

Brunn, H., Arnold, G., Körner, W., Rippen, G., Steinhäuser, K. G., & Valentin, I. (2023). PFAS: forever chemicals—persistent, bioaccumulative and mobile. Reviewing the status and the need for their phase out and remediation of contaminated sites. *Environmental Sciences Europe*, 35(1). <https://doi.org/10.1186/s12302-023-00721-8>.

Jeffrey Kluger (2023, May 19). *All The Stuff in Your Home That Might Contain PFAS ‘Forever Chemicals.’* TIME. <https://time.com/6281242/pfas-forever-chemicals-home-beauty-body-products/>.

We urge you to remain steadfast in the face of industry interference that seeks to manipulate state regulation for its own gain. The proposed CUU criteria for Minnesota, with its accompanying definitions, is strong and follows in the footsteps of similar provisions such as those seen in Maine. However, we encourage the MCPA to not be persuaded by organized attempts to manipulate this criteria, especially when it comes to the application of the definitions “essential...to the functioning of society” and “reasonably available,” such that PFAS-laden products, like fluorinated HDPE, are believed to be unavoidable when they are not. The reality is that for packaging, and many other industries, there are reasonably available alternatives to products that contain PFAS and such products are not essential to the functioning of society.

In conclusion, we applaud Minnesota’s comprehensive Amara’s Law as a tremendous example of powerful legislation that combats the insidious, widespread uses of PFAS. With the negative health effects of PFAS becoming more widely known, it is important to reduce exposure and reliance on processes that create these substances. However, we also encourage Minnesota to follow in the footsteps of Maine and other states to expand the focus of its PFAS legislation to include fluorinated HDPE packaging, especially considering the widespread use of this packaging across industries such as food, cosmetics, household cleaners, and healthcare. Proponents of the fluorination process will negate its negative health effects and argue for its “essential” role, but the reality is that we cannot avoid regulatory enforcement of a known health hazard. Therefore, we champion Amara’s Law and the prohibition on sale of products containing intentionally added PFAS but it is only the beginning.

Should you have any questions or wish to further discuss this letter and the information contained therein, please do not hesitate to reach out as we welcome the opportunity to discuss fluorination alternatives in the marketplace.

Sincerely,



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