



November 16, 2020

The Honorable Mary D. Nichols  
Chair, California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

Submitted electronically to the [CARB public comment website](#)

**Re: Amendments to the Emission Inventory Criteria and Guidelines  
Report for the Air Toxics “Hot Spots” Program**

Dear Chairman Nichols:

The Performance Fluoropolymer Partnership is pleased to submit these comments to the California Air Resources Board (CARB) on the proposed amendments to the Emission Inventory Criteria and Guidelines (EICG) report for the air toxics “Hot Spots” program. The Partnership represents a group of the world’s leading manufacturers of fluoropolymers, including fluoroplastics, fluoroelastomers and polymeric perfluoropolyethers.<sup>1</sup>

We are concerned with the proposal to list fluoropolymers among the more than 900 substances for which emissions would be required to be quantified, or amounts reported, under the “Hot Spots” program. The proposed listing lacks justification and provides no definition of “fluoropolymer.”<sup>2</sup> Without appropriate justification for this listing in terms of protecting public health, the proposed listing would create a vague, arbitrary, confusing and unnecessary reporting burden for fluoropolymer processors and users in California and also has the potential to create unwarranted public concerns about fluoropolymers.

It is our understanding from reviewing the Initial Statement of Reason (ISOR) that the listing is supported by neither an assessment of whether fluoropolymers can reasonably be expected to be released into ambient air from facilities in California, nor an assessment of potential risk to public health from potential releases. Note 6 in proposed Appendix A - List of Substances notes that fluoropolymers were added pursuant to HSC section 44321(f), which a listing mechanism for substances “recognized by the state board as presenting a chronic or acute threat to public health when present in the ambient air.” CARB has provided nothing that substantiates such a

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<sup>1</sup> The Performance Fluoropolymer Partnership’s members are AGC, Inc., Daikin Industries, Ltd., and The Chemours Company, LLC.

<sup>2</sup> See Buck R.C. *et al.*, 2011. Perfluoroalkyl and polyfluoroalkyl substances in the environment: Terminology, classification, and origins. *Integrated Environmental Assessment and Management* 7(4):513–541. [Open access](#).

conclusion. Although the CARB website contains a document entitled *Scientific Review Panel: Interim Findings Regarding the Chemicals List*, among the materials for the April 30, 2020 webinar,<sup>3</sup> the document provides no insight to the Panel's deliberations, the material it reviewed or any other detail on which the public can comment. Therefore, we cannot view, and CARB should not rely upon, the Panel's interim conclusion as adequately robust (or transparent) to meet the findings required by HSC section 44321(f). It is our position that CARB has not shown an acute or chronic public health threat to facilitate the listing and therefore fluoropolymers should not be listed.

The peer-reviewed scientific literature shows that fluoropolymers have well-established safety profiles and do not present a significant concern for human health or the environment.<sup>4</sup> Because of their unique physical and chemical properties, fluoropolymers meet internationally accepted criteria to be considered "polymers of low concern" meaning they do not present a significant concern for human health or the environment. The criteria for "polymers of low concern" have been developed by governmental and intergovernmental regulators to protect human health and the environment.<sup>5,6</sup>

Large, stable, inert polymeric molecules like fluoropolymers are too large to cross biological membranes and therefore do not present significant concerns for human health or the environment. Their large size and physical and chemical properties also inhibit their migration, so they present little potential for human or environmental exposure. We question the implicit assumption that they would be released to and circulate in ambient air. Fluoropolymers are not water soluble and as a result are not found in water or drinking water. Fluoropolymers are not considered long- or short-chain PFAS, but rather are high molecular weight polymers that are extremely stable, inert, not bioavailable and not water soluble. They cannot transform into PFOA or PFOS or other long-chain PFAS in the environment. Finally, fluoropolymers have undergone significant regulatory evaluation, including substantial testing requirements and have been reviewed under various government regulatory programs around the globe.

We note that within proposed Appendix A - List of Substances, fluoropolymers are listed in section A-1, substances for which emissions must be quantified. Should it be possible for fluoropolymers to be released to ambient air, which we question, there is no validated emission quantification method. It is therefore our understanding, based on

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<sup>3</sup> [Scientific Review Panel: Interim Findings Regarding the Chemicals List](#) among materials for the April 30, 2020, CARB webinar.

<sup>4</sup> Henry, B. J., *et al.* A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers. Integrated Environmental Assessment and Management. Volume 14, number 3, pages 316-334. May 2018. [Open access.](#)

<sup>5</sup> Organisation for Economic Co-operation and Development. 2009. Data analysis of the identification of correlations between polymer characteristics and potential for health or ecotoxicological concern. Document ENV/JM/MONO(2009)1. Paris, France. [Publicly available.](#)

<sup>6</sup> BIO by Deloitte. 2015. Technical assistance related to the review of REACH with regard to the registration requirements on polymers Final report prepared for the European Commission (DG ENV), in collaboration with PIEP. [Publicly available.](#)

proposed section II.H(5) of Appendix B - Proposed Amendments to the Emission Inventory Criteria and Guidelines Report (EICG Report) and its Appendices and ISOR section VIII.C (p. 24) that facility operators will be required to report only the presence, use, or production of the substance and the amounts present, used, or produced. While CARB makes the case that reporting is a reasonable alternative in the analysis of regulatory alternatives, we remain concerned that, in the absence of a compelling human health justification, doing so puts an unnecessary burden on fluoropolymer processors and users in California and has the potential to create unwarranted public concern.

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Thank you for your consideration of these comments. We appreciate the opportunity to provide our views and would be more than willing to discuss these issues at your convenience. Please feel free to contact me at Jay\_West@americanchemistry.com with any questions.

Sincerely,

Jay West  
Executive Director, Performance Fluoropolymer Partnership