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Comments sent via email: [substances@ec.gc.ca](mailto:substances@ec.gc.ca)

**RE: Consultation: Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report**

On behalf of Ontario's more than 3,000 environment and cleantech firms, the Ontario Environment Industry Association (ONEIA) is writing to provide our response to the Consultation: *Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report*.

Ontario is home to Canada's largest group of environment and cleantech companies. The most recent statistics from the federal government show that Ontario's environment sector employs more than 226,000 people across a range of sub-sectors. This includes firms working in such diverse areas as materials collection and transfer, resource recovery, composting and recycling solutions, alternative energy systems, environmental consulting, brownfield remediation, and water treatment – to name just a few. These companies contribute more than \$25 billion to the provincial economy, with approximately \$5.8 billion of this amount coming from export earnings.

ONEIA members are committed to engaging with governments as they develop policies and regulations that are consistent with our principles of sound science, a sound environment, and a sound economy.

ONEIA would like to thank the Government of Canada for the opportunity to review and provide comments on the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report and on the Risk Management Scope. PFAS is an area of great interest to our member companies, and we are eager to collaborate with government on a practical approach to mitigate environmental and human health impacts of PFAS. ONEIA's PFAS Committee has solicited comments from interested members and is happy to provide the feedback included below. (Please note that our comments on the Risk Management Scope are being submitted in a separate document.)

**Table 1. ONEIA Comments on the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report**

No.	Comment
1	This document represents a highly comprehensive report on the current status of PFAS research and knowledge, and we acknowledge the immense effort that has gone into researching and compiling the information included herein.
2	The opening statement that PFAS are a class of over 4,700 human-made substances, though true, under-represents the scope of these compounds. Other estimates indicate the class consists of upwards of 10,000 compounds ( <a href="https://echa.europa.eu/-/echa-publishes-pfas-restriction-proposal">https://echa.europa.eu/-/echa-publishes-pfas-restriction-proposal</a> ). Though the number is likely not knowable, the use of the lower estimate does downplay the magnitude of the problem at hand.
3	The ability to identify PFAS contamination from fire foams is important to the fire service. It is currently still possible to purchase PFAS containing foams, and yet more and more municipal fire departments are being sued, or threatened with lawsuits for using these products. The disposal of these products is also complicated given the lack of waste-related guidelines for PFAS. Identification of current foams as a source of PFAS in combination with a class-based approach to regulation should hasten the elimination of PFAS containing fire suppression products; however, direction on the disposal of old stock will still be needed.
4	The unknowns around potential health issues or toxicity associated with exposures to multiple PFAS in environmental media concurrently is a concern; the impacts of human and environmental exposure to PFAS cannot be completely known from the study and restriction of individual compounds. Bioaccumulation is well documented for sentinel compounds, but many others that may also bioaccumulate are not necessarily included in analyses. We appreciate that a class-based regulatory framework does protect against these unknowns.
5	Cancer is indicated as the number one cause of death amongst fire fighters ( <a href="https://www.cbc.ca/news/canada/british-columbia/cancer-tops-list-of-firefighter-fatal-workplace-claims-1.4599348">https://www.cbc.ca/news/canada/british-columbia/cancer-tops-list-of-firefighter-fatal-workplace-claims-1.4599348</a> ). The growing links between some PFAS used in fire foams and specific forms of cancer (kidney, prostate, bladder) may also support regulation of PFAS as a class. Regrettable substitution of shorter chain PFAS for longer chain versions has been prevalent in the fire foam industry since C8 compounds were banned. The shorter chain substitutes, which tend to be more environmentally mobile, are now present in the bodies of the current firefighter population. This is evident in the results presented in Figure 7 of the Draft State of PFAS report, where PFHxS is at the highest relative ratio in firefighter serum versus the general population. It is also of note that PFOA and PFOS are still elevated in firefighter serum, despite a general ban since 2012. The elimination of all PFAS from fire suppression products may be important for improving the health of fire fighters.

7	Section 4.2.2 speaks to observation of PFAS concentrations in various media (e.g., eggs, plasma, invertebrates, water, etc.) and where increases and decreases in concentrations were observed for different PFAS; however, there doesn't seem to be discussion or conclusions around whether impacts to health or the overall population were observed in association with higher PFAS concentrations.
8	Section 8.1.1 (top of page 101) speaks about one third of 270 new PFAS being subject to risk management measures under the new substances regime. Commercially, only about 40 PFAS can be readily analyzed. It would be helpful to understand how these new PFAS, and potentially other new PFAS, will be identified and measured as part of this policy setting.
9	The last paragraph of Section 8.1.3 notes the status of provincial regulation across Canada; however, it does not speak to the current presence of regulated PFAS criteria in Alberta.
10	Section 8.1.5 acknowledges that we currently do not have specific requirements for the acceptance and/or disposal of waste containing PFAS in the regulations and/or standards currently in place at the provincial or territorial level. We note this is a specific pain point in the management of PFAS impacts in the environment and needs the specific focus of regulators at a Federal and provincial/territorial level to facilitate the development and application of science-based policy directed to the management of PFAS impacted media.

ONEIA appreciates the opportunity to provide our comments and suggestions on the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report and Risk Management Scope.

We want to reiterate that we are eager to work with the Environment and Climate Change Canada and Health Canada and other areas of the government to advance a practical approach to mitigating the environmental and human health impacts of PFAS and we look forward to being engaged in future discussions and consultations. We welcome the opportunity to discuss our position and our recommendations further.

Please contact our office at [info@oneia.ca](mailto:info@oneia.ca) or at (416) 531-7884 should you have any questions.

Sincerely,



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