

Conservation Council of New Brunswick Conseil de conservation du Nouveau-Brunswick www.conservationcouncil.ca

Substances Management Information Line <u>Chemicals Management Plan</u> <u>Environment and Climate Change Canada</u> <u>Gatineau, Quebec K1A 0H3</u> <u>Telephone: 1-800-567-1999 (in Canada) or 819-938-3232</u> <u>Fax: 819-938-3231</u> <u>Email: substances@ec.gc.ca</u>

Dear Review Team,

Firstly, we are happy to see the Government of Canada responding to health and environmental concerns surrounding PFAS. We agree that considering PFAS as a class is beneficial due to the large number of PFAS chemicals and the limited information available on each. This includes but is not limited to monitoring, environmental PFAS concentrations, toxicology tests, and ability to identify each PFAS chemical (Guerra et al. 2014; Longpré et al. 2020).

The proposed risk management measures focus on prevention of release of PFAS into the environment, which is crucial due to their persistence and difficulty with monitoring, measurement, and removal. As observed in literature, implementation of prevention-focused PFAS risk management measures have been documented to result in significant declines in their environmental concentrations (Kleywegt et al. 2020).

Due to the broad scope of the 'Draft State of PFAS' document, we are glad to see a comprehensive literature review outlining relevant scientific studies. However, we recommend providing a list or criteria of PFAS chemicals proposed to be under the PFAS class for easier classification.

We recommend risk management measures be implemented first for non-essential PFAS-containing products, such as banning personal care products, textiles, and food packaging containing PFAS, along with a list of banned PFAS chemicals. Since landfill leachate is one of the leading sources of environmental PFAS contamination, it is important to minimize PFAS in products likely to end up in landfills (Masoner et al. 2020). We also encourage consulting impacted communities, such as communities in PFAS hotspots, to draft measures specific to their area.

We're glad to see alternatives to AFFFs discussed. However, studies have shown variable effectiveness of these fluorine-free alternatives, depending on the scenario it is applied to (Hetzer et al. 2014). Thus, we recommend focusing on fuel fire prevention along with AFFF alternatives due to its potential for being an essential PFAS application in some contexts.



180 rue St. John Street Fredericton, N.B. Canada E3B 4A9 Tel: 506.458.8747 Fax: 506.458.1047 Email: info@conservationcouncil.ca



UN Global 500 Roll of Honour Laureate Lauréat du Club global 500 de l'ONU



According to the 'Draft State of PFAS' document, one of the areas with high PFAS concentration are those with high industrial activity. Due to this, we also recommend heavier monitoring around industrial grounds.

The Draft State of PFAS publication is a comprehensive, informative, and scientifically-guided publication that provides a well-rounded overview of PFAS literature, research, and concerns. We are happy to see the Government of Canada responding to health and environmental concerns surrounding PFAS and focusing on prevention, which we advocate for. We agree with considering PFAS as a class and are happy to see alternatives to PFAS presented, and suggest that focus should be put on implementing replacements for non-essential PFAS-containing products before shifting focus to more essential uses (ex, AFFFs).

Thank you for considering our feedback. We look forward to progress on this complex file.

Sincerely,

Sarah Babaei Water Protection and Contaminated Sites Intern Matthew Abbott Marine Program Director





UN Global 500 Roll of Honour Laureate Lauréat du Club global 500 de l'ONU



## Works Cited

- Guerra, P., Kim, M., Kinsman, L., Ng, T., Alaee, M., & Smyth, S. A. (2014). Parameters affecting the formation of perfluoroalkyl acids during wastewater treatment. *Journal of Hazardous Materials*, 272, 148-154.
- Hetzer, R., Kümmerlen, F., Wirz, K. A. I., & Blunk, D. (2014). Fire testing a new fluorine-free AFFF based on a novel class of environmentally sound high performance siloxane surfactants. *Fire Safety Science*, 11, 1261-1270.
- Kleywegt, S., Raby, M., McGill, S., & Helm, P. (2020). The impact of risk management measures on the concentrations of per-and polyfluoroalkyl substances in source and treated drinking waters in Ontario, Canada. *Science of The Total Environment*, 748, 141195.
- Longpré, D., Lorusso, L., Levicki, C., Carrier, R., & Cureton, P. (2020). PFOS, PFOA, LC-PFCAS, and certain other PFAS: A focus on Canadian guidelines and guidance for contaminated sites management. *Environmental Technology & Innovation*, 18, 100752.
- Masoner, J. R., Kolpin, D. W., Cozzarelli, I. M., Smalling, K. L., Bolyard, S. C., Field, J. A., ... & Bradley, P. M. (2020). Landfill leachate contributes per-/poly-fluoroalkyl substances (PFAS) and pharmaceuticals to municipal wastewater. *Environmental Science: Water Research & Technology*, 6(5), 1300-1311.





UN Global 500 Roll of Honour Laureate Lauréat du Club global 500 de l'ONU