

# **Comments to the Draft State of Per- and Polyfluoroalkyl (PFAS) and Risk Management Scope for Per- and Polyfluoroalkyl substances (PFAS) by Environment and Climate Change Canada and Health Canada (May 2023)**

## **Submitted to:**

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We, the undersigned organizations, are submitting the following comments and recommendations to the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report (paragraphs 68(b) and (c) of the Canadian Environmental Protection Act, 1999) as published for public comments in *Canada Gazette, Part I, Volume 157, Number 20: GOVERNMENT NOTICES* dated May 20, 2023 and preliminary comments to the *Risk Management Scope for Per- and Polyfluoroalkyl Substances (PFAS)*.

## **1. Findings of the State of Per- and Polyfluoroalkyl Substances (PFAS) report**

We welcome the findings of the State of the Per- and Polyfluoroalkyl Substances (PFAS) report and the conclusions made that the class of PFAS as a class meets one or more of the criteria under 64 of the Canadian Environmental Protection Act for Section 64 (a) and (c).<sup>1</sup> The proposed conclusion made under section 64 of CEPA provides the basis for developing regulatory measures to address PFAS as a class.

The State of the PFAS report and the Risk Management Scope document were released for public comments during a time when Bill S-5 (Strengthening Environmental Protection for a Healthier Canada Act) received Royal Assent on June 13, 2023. The updated CEPA includes substantial changes to the listing of toxic substances under Schedule 1 of CEPA. The findings of the State of PFAS concluding PFAS as a class meet more than one criterion under section 64 are expected to be relevant due to the changes in CEPA. A listing of PFAS as a class under CEPA should be made in Part 1 of Schedule 1 of CEPA. Based on the body of evidence collected in the State of the PFAS report demonstrating the ecological toxicity and associated impacts of PFAS as a class to health, it is critical that PFAS as a class be given the full scope of regulatory measures, particularly with a focus on prohibition, that is permitted under CEPA.

**Recommendation 1: Based on the data gathered and reviewed on environmental toxicity and associated impacts to health in the State of the PFAS report, we support the conclusion that PFAS as a class meets the criteria under Section 64 (a) and (c) of CEPA.**

**Recommendation 2: PFAS as class should be listed in Part 1 of Schedule 1 under the new CEPA with regulations aiming for prohibition of PFAS as a class.**

## **2. Definition of the class of PFAS needs to be comprehensive**

The Risk Management Scope states “Per- and polyfluoroalkyl substances are a class of over 4,700 human-made substances.” However, the OECD definition of PFAS, which was published in 2021, encompasses more than 10,000 PFAS, including a few fully degradable subgroups.<sup>2</sup>

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<sup>1</sup> Environment and Climate Change Canada and Health Canada. May 2023. Draft State of per- and Poly Substances (PFAS) Report. Pag 117.

<sup>2</sup> PFASs are defined as fluorinated substances that contain at least one fully fluorinated methyl or methylene carbon atom (without any H/Cl/Br/I atom attached to it), i.e. with a few noted

The class of PFAS continues to grow in number as more substances are found and identified. But every substance in this diverse group shares a common denominator – extreme persistency – which is the leading cause of concern. Due to the strong molecular bonds between fluorine and carbon atoms, all PFAS, including fluoropolymers, shares this persistency. Note that this definition also includes biocidal active substances used in agricultural pest control.

**Recommendation 3: Listing to Schedule 1 under CEPA should encompass a clear definition of PFAS as a class in accordance with the OECD definition of over 10,000 PFASs and specifically include fluoropolymers. PFAS used in biocidal active substances for pest control in agriculture also needs to be included in appropriate legislation.**

**Recommendation 4: The current listing of PFAS substances currently in Schedule 1 of CEPA should be captured under the listing of PFAS as a class.**

**3. The Federal government must take a leadership role to address PFAS in waste streams and drinking water**

The State of the PFAS report as well as the Scope Risk Management documents several areas where PFAS problems exist including such as the waste stream and management of waste (landfills, movement of waste containing PFAS, and use of incineration technologies), drinking water, biosolids, wastewater treatment and potential and confirmed contaminated sites but where the regulatory authority may be under the authority of provincial/territorial governments. Given the growing problems associated with PFAS that have been documented to date in the State of the PFAS report, the role of the federal government to initiate and lead to address PFAS as a class must be paramount if the PFAS exposure and ongoing PFAS contamination are to be addressed.

The federal government approach on management measures must be comprehensive. To reach the environmental and health objectives goal will require action by provincial and municipal governments. We cannot afford a disjointed response or lack of implementation of solutions to the PFAS contamination that affects all Canadians and our environment. The federal government must therefore convene multiple government level working groups to ensure implementation of precautionary drinking water standards, substantial changes to address PFAS in waste streams including the leachates released from landfills, prevention of use of incineration technology to eliminate PFAS and to ensure that municipalities and municipal wastewater treatment plants are not burdened with financial costs associated with adoption of technologies for PFAS removal, and recycling programs do not perpetuate the cycling of materials that contain PFAS. These working groups should include participation of

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*exceptions, any chemical with at least a perfluorinated methyl group (-CF<sub>3</sub>) or a perfluorinated methylene group (-CF<sub>2</sub>-) is a PFAS.*

See: OECD. Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance Series on Risk Management No.61. July 2021. Prepared by Environment Directorate Chemicals and Biotechnology Committee

stakeholders, including civil society organizations, community organizations and representatives of disadvantaged and vulnerable groups, to ensure inclusivity and prioritization of their concerns.

The federal government should ensure that the findings of the State of the PFAS report and conclusions drive the regulatory measures at the provincial and territorial levels in these areas within specified timelines and provide an annual report outlining the progress on the management measures taken by the federal government as well as the provincial/territorial governments in these areas. An annual progress report on PFAS should be released publicly for review.

**Recommendation 5: Support strong federal leadership on PFAS measures. This would include the creation of federal/provincial/territorial committees (one option may be the through the CCME) to address such areas with PFAS problems (including the following: Drinking water, waste management such as disposal, landfill, ban incineration, biosolids, wastewater treatment plants, contaminated sites).**

**Recommendation 6: Require an Annual Progress Report on PFAS management activities outlining federal, provincial and territorial measures to address PFAS. The Annual Report should be released publicly for comments and provide sufficient time for this. Zoom or face-to-face meetings should be organized to discuss comments with those who provided them to ensure they are dully addressed in the final report.**

Risk Management measures:

The Scope Risk Management document provides the following context: “Addressing PFAS as a class of chemicals would reduce the chance of regrettable substitution, support more holistic research and monitoring programs, and provide an opportunity for a decrease of future environmental and human exposure to PFAS.”<sup>3</sup>

**4. Firefighting foam: a regulatory requirement for PFAS-free firefighting foam with a clear timeline for implementation is the only effective option to halt ongoing release of PFAS associated with firefighting.**

In the Risk Management Scope proposal, the Government of Canada is considering regulatory and/or non-regulatory controls to minimize environmental and human exposure to the class of PFAS from firefighting foams.

In 2019 Transport Canada announced they would allow all airport operators to use fluorine-free foam if they chose to do so, but did not make this a regulatory requirement; it is up to the

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<sup>3</sup> Environment and Climate Change Canada Health Canada. May 2023. Risk Management Scope for Per- and Polyfluoroalkyl substances (PFAS). P. 9.

individual airport to voluntarily choose to buy PFAS-free foam. A list of 44 sites contaminated by PFAS is listed on the Federal Contaminated Sites Inventory<sup>4</sup> but in March 2023, CELA released a map of Canadian military and airport sites that shows even more widespread contamination across Canada.<sup>5</sup> The data for the map was obtained in response to a petition filed by five NGOs and reveals 115 confirmed or suspected PFAS contaminated sites. The data does not include information about privately operated airports, so this listing of contaminated sites is almost certainly an underrepresentation. Current voluntary measures are inadequate because it will legally allow ongoing use of PFAS firefighting foam. A regulatory requirement is needed to halt this important exposure route from the use of fluorinated foam in fire suppression and in training exercises. It will also ensure consistent PFAS-free firefighting practices across Canada.

A regulatory requirement will also support the uptake and further innovation in PFAS-free firefighting foam, which is now widely available on the market. For example, GreenScreen Certified™ for Firefighting Foams are free of PFAS and other chemicals of concern and is the first ecolabel for firefighting foams.<sup>6</sup> We recommend that fluorine-free firefighting foam be defined as zero intentionally added PFAS to the product and PFAS contamination in the product must be less than 0.0001 percent by weight of the product (1 part per million) total organic fluorine as measured by combustion ion chromatography.

Because of this comprehensive approach to PFAS-free and preferred chemistry, multiple states including Colorado, Connecticut, Massachusetts, Michigan, Minnesota, Washington, and Wisconsin refer fire departments to GreenScreen for AFFF substitutes.<sup>7</sup>

On January 12, 2023 the U.S. Department of Defense (DOD) released a revised military specification (“mil spec”) for the purchase and use of firefighting foam free of PFAS.

This means states across the U.S. will now be able to approve PFAS-free firefighting foam for land based, Class B fires, where previously fluorine free foams were not considered. Eleven states including California, Illinois, New York, and Washington have passed restrictions on AFFF, and this announcement from the DOD will spur wider expansion of the use of PFAS-free firefighting foams.

While both GreenScreen Certified and the mil spec require analytical testing for PFAS, the revised mil spec requires testing for up to 40 specific PFAS of the thousands in this class, whereas GreenScreen Certified requires testing for total organic fluorine, used as a surrogate for capturing all PFAS. However, DOD has indicated their intent to expand PFAS testing in the

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<sup>4</sup> Federal Contamination Sites Inventory. Treasury Board of Canada Secretariat. <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx>

<sup>5</sup> PFAS Contamination Sites in Airports and Military Bases in Canada. March 21, 2023. CELA. <https://cela.ca/map-pfas-contamination-sites-in-airports-and-military-bases-in-canada/>

<sup>6</sup> GreenScreen Certified™ for Firefighting Foam: The world's first ecolabel to confirm fluorine-free firefighting foam products. Clean Production Action. <https://www.greenscreenchemicals.org/certified/fff-standard>

<sup>7</sup> PFAS Foam Replacement Challenges Nation's Fire Departments. Bloomberg Law. Jan. 24, 2023 <https://news.bloomberglaw.com/environment-and-energy/pfas-foam-replacement-challenges-nations-fire-departments>

future “once multiple laboratories have been accredited to conduct the testing,” which will allow the more comprehensive approach for PFAS testing using total organic fluorine tests.<sup>8</sup>

**Recommendation 7: All firefighting foam containing PFAS should be banned with a clear timeline for transitioning to clearly defined “PFAS-free” alternatives.**

**5. Canada lacks workable transparency around the issue of PFAS use in firefighting foam, and monitoring for PFAS in drinking water.**

At the federal level, no information is available from the federal government about which airports in Canada are using fluorine-free firefighting foam and which continue to use PFAS-based foams. This information may be collected but no such information is available to the public. Communities who live near military bases or airports do not know if their well water or other local water bodies (lakes or rivers) are contaminated. At the provincial level, Public Health authorities have very low awareness about PFAS and consider well water to be safe based on fecal coliform testing.

In 2018, Health Canada advised that ‘water utilities should sample source water for PFOA and PFOS, particularly if source waters are impacted by firefighting training areas, military bases, airports, manufacturing sites and/or waste disposal sites.’<sup>9</sup> However, the general public does not know what monitoring for PFAS has occurred, because any location-specific monitoring results have not been made public or communicated directly to the community.

For example, monitoring done by the Ontario Ministry of the Environment, Conservation and Parks on PFAS in drinking waters in Ontario, published in 2020, noted that communities known to be impacted by firefighting foam were not included in their study.<sup>10</sup> As they state: ‘the conclusions drawn are confined to this dataset and the facilities that participated in this monitoring program, which do not represent the total extent of drinking water monitoring data for the entire province, including sites known to be impacted by aqueous fire-fighting foam use and military operations.’ Communities living near sites that are known to be impacted are, therefore, none the wiser. Furthermore, the full report is behind a paywall and unavailable on the Ministry’s website for free access by the public.

**Recommendation 8: The location of PFAS contaminated sites needs to be publicly identified in a user-friendly way and actively disseminated to Public Health offices, and**

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<sup>8</sup> Regulatory demands for PFAS-free firefighting foam products are on the rise - but are the alternatives safer? GreenScreen Certified™ meets this demand and more. February 14, 2023 Clean Production Action. <https://www.greenscreenchemicals.org/resources/entry/pfas-free-foam-blog-20230214>

<sup>9</sup> Health Canada. Guidelines for Canadian Drinking Water Quality: Guideline Technical Document -Perfluorooctane Sulfonate (PFOS). 3.1.1 Source characterization. 2018-12-07. <https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidelines-canadian-drinking-water-quality-guideline-technical-document-perfluorooctane-sulfonate/document.html#3.1.1>

<sup>10</sup> The impact of risk management measures on the concentrations of per- and polyfluoroalkyl substances in source and treated drinking waters in Ontario, Canada. Ontario Ministry of the Environment. 25 July 2020. <https://doi.org/10.1016/j.scitotenv.2020.141195>

**local communities across Canada. The federal government must take a leadership role in requiring provincial/territorial government officials to ensure transparency of PFAS monitoring in drinking water and ensure drinking water standards for PFAS contamination are enacted at the provincial and territorial level. These requirements should prioritize communities living in potential and known contaminated sites.**

**6. The European Union has already identified and is prioritizing action based on sectors that use the largest amount of PFAS with timelines for transitioning to PFAS-free alternatives. Canada should align with this approach.**

The current Risk Management Scope proposes to 'gather information necessary to identify and prioritize options for reducing environmental and human exposure from the class of PFAS from other sources and products; and align with actions in other jurisdictions, where appropriate.'

Many jurisdictions have already identified sources and products that contain PFAS and are prioritizing action based on sectors that use the largest amount of PFAS as well as the availability of PFAS-free substitutes. To take a leadership role, Canada should align its approach to the European Chemical Agency (ECHA) proposal for PFAS restriction.<sup>11</sup>

During their dossier preparation, the European authorities embarked on extensive PFAS research, identifying over 5,000 more than the figure previously circulated in the EU. They also aligned with the OECD definition of PFAS that was published in 2021<sup>12</sup>, which encompasses more than 10,000 PFAS, including fluoropolymers and a few fully degradable subgroups.

Based on comprehensive research<sup>13</sup>, the overarching sectors where PFAS are used include:

- textiles;
- food contact materials;
- metal plating/metal products;
- consumer mixtures;
- ski wax;
- applications of fluorinated gases;
- electronics and semiconductors;
- construction products;
- lubricants;
- petroleum and mining;
- medical devices;
- cosmetics;
- firefighting foams; and

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<sup>11</sup> ECHA publishes PFAS restriction proposal. European Chemicals Agency. 7 Feb 2023. <https://echa.europa.eu/-/echa-publishes-pfas-restriction-proposal>

<sup>12</sup> OECD's revised PFAS definition includes missing fluoropolymers. Chemical Watch. 22 July 2021.

<sup>13</sup> ECHA. Registry of Restriction Intentions - PFAS Annex A. <https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18663449b>

- Biocidal active substances in pest control.

Under ECHA's proposal for a PFAS Restriction, the timelines for substitution to PFAS-free alternatives range from 18 months to 12 years.

For consumer products, such as non-stick cooking products, ski wax, cosmetics and cleaning agents, the authorities propose a ban after 18 months; a derogation (or a flexible implementation period) of five years as appropriate will be given for cases where there is information that alternatives are under development but more time is needed; and a 12-year timeframe will be set for cases where there are no alternatives yet available and the identification and development will take time.

**Recommendation 9: Canada should establish an action plan with timelines to prohibit the use of PFAS in specific manufacturing sectors and align with the approach taken by the European Chemical Agency (ECHA) proposal for PFAS restriction. Public access to information about the location of facilities that process or use PFAS must be established. A list of consumer products available in Canada that have or potentially could have PFAS should be developed, released publicly and revised as new information becomes available.**

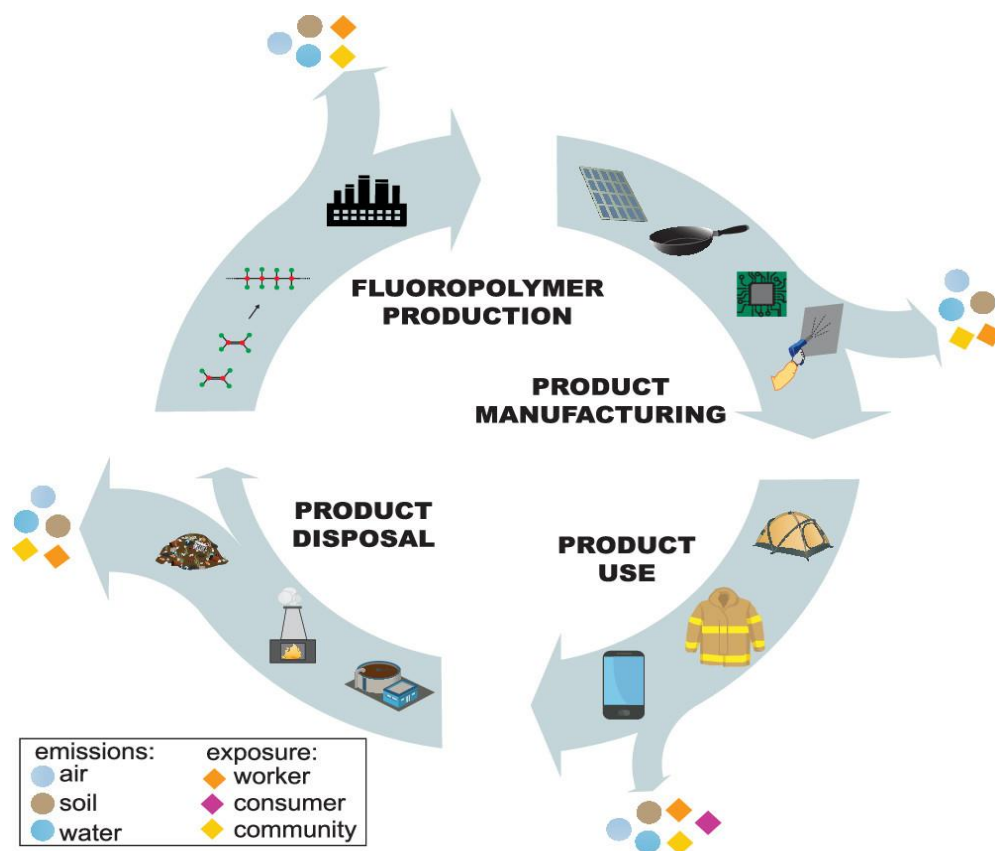
#### **7. Fluoropolymers must not be given blanket exemptions from regulatory measures to restrict PFAS**

The fluoropolymer industry is arguing that fluoropolymers are non-toxic in "the use phase" and should be classified as 'polymers of low concern'.<sup>14</sup> However, a life cycle approach is essential when considering fluoropolymers and how they are used because PFAS polymer production and use creates toxic PFAS pollution. The term fluoropolymer encompasses a) fluoropolymer substances with a known chemical structure; b) fluoropolymer products which are the actual material produced and sold by a chemical manufacturer and comes in granulate, powder, etc., and c) fluoropolymers in finished products such as waterproof clothing with a PTFE membrane, or PTFE-coated cookware. See Figure 1.

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<sup>14</sup> American Chemistry Council. New Study Demonstrates Vast Majority of Commercial Fluoropolymers Meet Criteria for Polymers of Low Concern Designation. June 2022. <https://www.americanchemistry.com/chemistry-in-america/news-trends/press-release/2022/new-study-demonstrates-vast-majority-of-commercial-fluoropolymers-meet-criteria-for-polymers-of-low-concern-designation>.





**Figure 1. Conceptual diagram of PFAS emissions during fluoropolymer production, product manufacturing, and disposal.<sup>15</sup>**

PFAS polymers are made using other harmful PFAS chemicals, which are subsequently released into the environment when waste byproducts enter air and waterways.<sup>16</sup> In fact, when scientists studied the fate of a commonly used group of toxic PFAS, they estimated 80% of those chemicals made since the 1950's have been released to the environment from PFAS polymer "manufacture and use."<sup>17</sup> Certain PFAS polymers are known to release toxic PFAS chemicals in their use phase, posing acute and chronic risk to human and ecological health.<sup>18</sup>

The fluoropolymer industry is arguing for a blanket allowance of all uses of PFAS polymers claiming these polymers are essential for sustainable innovation in wind turbines, solar cells,

<sup>15</sup> Lohmann R, Cousins IT, DeWitt JC, Glüge J, Goldenman G, Herzke D, Lindstrom AB, Miller MF, Ng CA, Patton S, Scheringer M, Trier X, Wang Z. 2020. Are Fluoropolymers Really of Low Concern for Human and Environmental Health and Separate from Other PFAS? *Environ Sci Technol*. Oct 20;54(20):12820-12828. Doi: 10.1021/acs.est.0c03244

<sup>16</sup> Lohman, R. op cit

<sup>17</sup> Prevedouros K, Cousins IT, Buck RC, Korzeniowski SH. (2006). Sources, fate and transport of perfluorocarboxylates. *Environ Sci Technol*. Jan 1;40(1):32-44. doi: 10.1021/es0512475. PMID: 16433330

<sup>18</sup> Schellenberger S, Jönsson C, Mellin P, Levenstam OA, Liagkouridis I, Ribbenstedt A, Hanning AC, Schultes L, Plassmann MM, Persson C, Cousins IT, Benskin JP. (2019). Release of Side-Chain Fluorinated Polymer-Containing Microplastic Fibers from Functional Textiles During Washing and First Estimates of Perfluoroalkyl Acid Emissions. *Environ Sci Technol*. Dec 17;53(24):14329-14338. doi: 10.1021/acs.est.9b04165.

batteries and medical devices.<sup>19</sup> However a report prepared for the Fluoropolymer Product Group of Plastics Europe reveals that only about eight per cent of the total production volume goes towards the often-cited examples of renewable energy, semiconductors and pharmaceuticals. In addition, the EU's proposal to ban PFAS has derogations for green technologies. Therefore, the argument that the PFAS ban will undermine the green transition – or some other essential project – can be discounted as hyperbole.<sup>20</sup> The lion's share of the volumes of fluoropolymers that are produced has nothing to do with high-tech sustainability innovations or medical products but are used in transportation, textiles, electronics and cookware where there are in most cases, viable alternatives.<sup>21</sup>

**Recommendation 10: Canada must ensure that fluoropolymers not be given blanket exemptions from regulatory measures to restrict PFAS.**

#### **8. Prioritize PFAS-free alternatives in the Risk Management Scope proposal.**

The most effective way to identify and prioritize options for reducing environmental and human exposure from the class of PFAS from sources and products is to incentivize the production and use of PFAS-free alternatives in Canada. Regulatory certainty using a timed phase out approach similar to the European Union's PFAS Restriction proposal is an essential driver. This will enable manufacturing facilities in Canada that currently use PFAS to transition to PFAS-free processes. The government of Canada can facilitate this transition through publicly available information dissemination, webinars<sup>22</sup>, and collaboration with industry sector organizations and research institutions to support innovation, similar to the Toxic Use Reduction Institute research on PFAS-free semiconductor manufacturing.<sup>23</sup> The production and import of products containing PFAS must be prioritized for regulatory prohibitions.

**Recommendation 11: Substitution to PFAS-free alternatives must be the priority goal in the Risk Management Scope proposal for PFAS as a class. Measures to incentivize the use and research in safer substitutes must be established including multi-government/industry collaboration. The Canadian government must prioritize a restriction on the import of products containing PFAS and establish an implementation mechanism to check on progress.**

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<sup>19</sup> Proposed EU PFAS restriction may remove critical applications – industry. Chemical Watch. 9 Feb 2023.

<sup>20</sup> Update of market data for the socioeconomic analysis (SEA) of the European fluoropolymer industry. Wood Group. May 2022.

<sup>21</sup> Slam debunkin' three myths about fluoropolymers. 21 June 2023. Chemsec. <https://chemsec.org/slam-debunkin-three-myths-about-fluoropolymers/>

<sup>22</sup> Chemsec. Find out how to replace "difficult" PFAS uses with safer alternatives. 20 June 2023. <https://chemsec.org/find-out-how-to-replace-difficult-pfas-uses-with-safer-alternatives/>

<sup>23</sup> "Forever Chemicals" Replaced in Materials Used by Semiconductor Industry. Oct 2022. <https://www.uml.edu/news/stories/2022/transene-research.aspx>

## 9. PFAS is an Environmental Justice issue

PFAS use in manufacturing and in products will continue to contaminate wastewater treatment plant (WWTP) effluent, biosolid use and landfill leachate. Municipal incinerators burning household garbage will release PFAS into air and incinerator ash. Yet the cross-border importation of waste containing PFAS for disposal in Canada is allowed and Canada lacks any regulatory requirement to limit PFAS in effluents, biosolids or leachate. Communities who live near landfills, WWTP, and incinerators are particularly at risk due to ongoing cumulative exposure from PFAS in consumer goods, food packaging materials, household dust and drinking water. In addition, contaminated sites both federally owned and non-federal contaminated sites continue to be sources of concern to the surrounding communities. Generally, communities near or surrounding these PFAS sources may not be aware of such operations in their community or information on PFAS releases and transfers are not disclosed to the community. Nor are there mechanisms in place to address the potential PFAS exposure. This is an example of environmental injustice. We now know PFAS exposure sources are wide ranging through biomonitoring and environmental monitoring data, yet the limited measures in place to address PFAS as a class do not yet exist. Communities such as Sarnia and, in particular, the Aamjiwnaang First Nations community, are front line communities facing sources of PFAS that include, but are not limited, to the Petroleum Sector as well as Hazardous Waste Management facilities that are receiving and processing waste containing PFAS. Yet there is no publicly available information about these PFAS emissions and releases. Other communities vulnerable to PFAS contamination include the City of North Bay, Ontario, where PFAS contamination is already confirmed in local water systems and impacting drinking water sources, is now expecting to be the site for a new plant, which will use fluoropolymers in their processes. The involvement of communities facing PFAS problems is generally absent due to lack of transparency and mechanisms for engagement on new permitting proposals, remediation needs or environmental monitoring. Community voices are only heard when testing results reveal a problem such as in North Bay, Ontario or Smith Falls, Ontario.<sup>24</sup>

That is why regulatory restrictions on PFAS as a class in all uses and waste streams, together with a remediation action plan that is made publicly available and actively disseminated to communities in known 'hot spots' is paramount.

**Recommendation 12: Development of the federal management strategy on PFAS as a class should prioritize the impacts to vulnerable groups and communities from PFAS and ensure active dissemination of information to impacted communities.**

**Recommendation 13: Cross-border and interprovincial movement of waste must include PFAS as a class for notification and ensure the requirement for the environmentally sound management of waste containing PFAS. Relevant federal, provincial/territorial and municipal regulations must be strengthened to improve disclosure and tracking of**

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<sup>24</sup> It's Raining 'Forever Chemicals' Across the Great Lakes – Why PFAS is now a public priority for elimination across Canada. How to Reduce Your Exposure to These Hazardous Chemicals and Increase Community Right-To-Know. CELA. Nov 8, 2021. <https://cela.ca/its-raining-forever-chemicals-across-the-great-lakes-pfas-right-to-know-toolkit/>

**the movement and treatment of waste-containing PFAS (e.g. Canada's Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations, Ontario). Ultimately, Canada needs to restrict and avoid exports and imports of waste containing PFAS.**

**10. Canada's involvement in International policies on PFAS: The need for transparency and traceability**

Canada's involvement to address PFAS at an international level is documented in the State of the PFAS report that specifically mentions Canada's commitments under the Stockholm Convention on Persistent Organic Pollutants (POPS), Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations (Basel Convention), and the Great Lakes Water Quality Agreement (GLWQA). However, the current focus on PFAS in these Agreements is not comprehensive Canada and should play a leadership role in ensuring the class of PFAS is restricted. To be effective, the Stockholm Convention on POPs, Basel Convention and GLWQA will require mechanisms for full transparency of PFAS ingredients in products, the tracking of PFAS releases throughout product lifecycles; and public information about releases and transfers of PFAS as a class from industrial operations. Canada should not only support the need for these transparency and traceability measures but also initiate the establishment of highly precautionary thresholds for PFAS in consumer and industrial products within these international fora.

Given the magnitude of the findings of Canada's State of PFAS report and the current ecological and health impacts we face, it is all the more essential that Canada enact strong PFAS class restrictions supported by public access to information about PFAS ingredients in products and PFAS releases from industrial facilities in Canada. Absent a class-based approach, Canada will face increasing trade restrictions with the European Union, where a PFAS class restriction is under review, as well as the growing number of US States which are restricting this chemical class.<sup>25</sup>

**Recommendation 14: Canada should commit to strengthen international agreements to include PFAS as a class particularly in the Stockholm Convention on POPs, Basel Convention and the GLWQA. These agreements should be improved by establishing mechanisms for transparency regarding the use of PFAS in products and the traceability of PFAS in product lifecycles.**

**Recommendation 15: Canada should initiate discussions in these agreements to establish precautionary thresholds for acceptable levels of PFAS in products.**

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<sup>25</sup> PFAS Bans, Restrictions Go into Effect in States in 2023. Bloomberg Law. Jan 4, 2023. <https://news.bloomberglaw.com/environment-and-energy/pfas-bans-restrictions-go-into-effect-in-states-as-year-begins>

**Recommendation 16: Canada should enact strong public access to information about PFAS ingredients in products sold domestically and require reporting of releases and transfers of PFAS as a class under Canada's National Pollutant Release Inventory.**

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