

Findings of the PFAS Management in Canada Workshop held on September 16, 2025 at Toronto Metropolitan University

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PFAS Management in Canada - Workshop Summary Report

Introduction

The PFAS Management in Canada Workshop was a full-day event held on Sept 16, 2025 that engaged participants in roundtable discussions to explore tools and strategies to mitigate the circulation of PFAS in the Canadian environment.

The agenda was divided into three sections (See [Appendix A](#)). Each section included presentations followed by roundtable discussions focused on:

1. Current regulatory and governance strategies
2. Alternative economic and policy measures
3. Opportunities and challenges related to wastewater treatment plants

Participants included stakeholders from all levels of government, utilities, engineering and consulting firms, technology providers, non-profit organizations, and academia. Attendees were intentionally seated at tables with participants from different sectors and disciplines to encourage cross-sectoral and interdisciplinary dialogue.

Tables were asked to engage with the challenges presented, generate potential solutions, and identify recommendations for government and industry (any party accountable for the management of PFAS). (See [Appendix B](#))

Participants recorded their ideas on notepads and reported back during plenary sessions. This document summarizes the key themes and insights captured from these discussions by note-takers and participants. The raw data from the workshop can be made available upon request.

The workshop was curated and hosted by Urban Water TMU, with engagement from partner organizations including the Ontario Water Consortium, Pollution Probe, the Canadian Water and Wastewater Association, and Actual Media. Financial support was provided by sponsors including Purifics, Continental Carbon Group, ALS, Veolia, Arcadis, and the Office of the Provost at TMU.

General Observations

Workshop participants demonstrated a high level of knowledge about PFAS and often brought specialized expertise related to detection, treatment, policy, and environmental impacts. Participants represented a wide range of disciplines and sectors. Academic, government, and private industry representatives attended in roughly equal numbers. Participants were engaged throughout the day, particularly during the roundtable discussions. (See [Appendix C](#) for a detailed description of participants.)

A recurring theme was the recognition that the science around PFAS continues to evolve and often lags behind the rapid development and introduction of new PFAS chemicals into the environment.

Participants also highlighted the significant costs associated with research and technologies required for PFAS detection, removal, destruction, and the development of alternatives. In recognition of these costs and the urgency of protecting human and environmental health, many participants emphasized the importance of source protection.

Two sentiments were widely expressed:

- The costs associated with PFAS pollution should largely be borne by industry.
- All levels of government should support investment in research, innovation, and solutions.

Participants strongly favored source protection approaches—preventing PFAS from entering the environment—over reliance on end-of-pipe treatment solutions. However, it was also recognized that PFAS contamination is now widespread globally, creating significant challenges for environmental management and risk mitigation.

Recommendations discussed during the workshop included both regulatory interventions and non-regulatory approaches, including international collaboration, stakeholder engagement, and expanded public education on PFAS.

Building on International Relationships and Knowledge

Many participants emphasized **the importance of leveraging international expertise and collaboration to accelerate progress on PFAS management.**

Speakers Dr. Roxana Suehring and Dr. Ian Cousins highlighted European initiatives such as **ZeroPM** and **ChemSec**, which have advanced PFAS research, developed databases of safer alternatives, influenced policy change, and created platforms for ongoing collaboration.

ZeroPM is a consortium of more than 60 collaborators across 10 European countries focused on chemical pollution prevention, prioritization, and removal of persistent and mobile substances, including PFAS.

ChemSec, based in Sweden, is an influential organization funded by the EU, European governments, and private foundations. ChemSec influences European policy and global business practices while maintaining publicly accessible databases of hazardous chemicals and safer alternatives.

Participants suggested that Canada could benefit from collaborating with such initiatives to accelerate research, policy development, and knowledge exchange.

Additional international collaboration opportunities may exist through organizations such as the OECD, which recently hosted the Global Forum on PFAS Substances, and the UN Environment Assembly, which has demonstrated success convening international negotiations on environmental issues such as plastic pollution.

Participants suggested that Canada could join or help expand international platforms, potentially developing North American collaborations that bring together government, industry, researchers, and non-profit organizations.

One example of successful international collaboration cited during the workshop was the European Sustainable Phosphorus Platform (ESPP). Established in 2014 through a public–private partnership of 150 organizations, ESPP focuses on stewarding phosphorus resources within a circular economy framework by promoting recovery technologies, policy development, and sustainable management practices.

Defining “Essential Use”

Many participants emphasized the need to limit the creation and circulation of PFAS by prioritizing source control measures.

A stepwise approach was suggested:

1. Identify and phase out products containing PFAS where safer alternatives already exist.
2. For remaining applications, **assess whether the use qualifies as “essential.”**

Essential uses would be those necessary for public health, public safety, or critical societal functions where alternatives are not currently available.

Participants noted that defining “essential use” will require careful consideration of health and safety needs, economic implications, and the availability of alternative technologies.

Some tables suggested that an internationally recognized ISO standard could help define essential use and provide guidance for determining which applications should be phased out and which may temporarily remain.

Under such a framework, PFAS uses deemed essential would be periodically reassessed to determine whether safer alternatives have become available. **This would create a continuous essentiality management system, complementing regulatory measures.**

The Government of Canada has signaled openness to this approach in its Proposed Risk Management Approach for PFAS (excluding fluoropolymers), published March 5, 2025, which references the potential categorization of products as essential or non-essential.

Permitting

For products containing PFAS that remain permitted in the Canadian marketplace, participants suggested that time-limited permits or certifications could be required.

Under this model, suppliers would receive authorization for a specific use and timeframe, subject to conditions such as:

- Conducting research to identify safer alternatives
- Demonstrating efforts to reduce PFAS use
- Periodic reassessment of the need for the substance

An example presented by Dr. Roxana Suehring was the Offshore Chemical Notification Scheme (OCNS) under OSPAR, which regulates chemicals used in offshore industries in the North-East Atlantic. **Chemicals are registered, assessed for hazards, and permitted only for specific uses under defined conditions and time limits.**

Many participants suggested that a similar permitting or certification framework could be applied to PFAS substances or PFAS-containing products in Canada.

Industry Responsibility

Participants overwhelmingly agreed that industry should bear primary responsibility for the costs of PFAS pollution.

Extended Producer Responsibility (EPR) approaches were frequently proposed as a policy tool. Under EPR frameworks, producers are responsible for managing the environmental impacts of their products throughout their life cycle, including disposal and remediation.

Applying EPR to PFAS could incentivize industry to:

- Develop safer product alternatives
- Invest in clean-up technologies
- Reduce PFAS use in manufacturing processes

Government Role and Coordination

A substantial number of participants also recognized that the scale and cost of PFAS management would demand government involvement and investment.

Suggested policy tools included:

- Targeted government grants and matching funds
- Tax incentives
- Venture capital and debt financing programs
- Support for market development and commercialization
- Government assistance in identifying and removing regulatory barriers

Participants noted that the U.S. Superfund Program provides an example of how government programs can help de-risk innovation related to site remediation.

Because PFAS governance in Canada spans multiple jurisdictions and departments, one group proposed establishing a Federal–Provincial PFAS Secretariat under the Council of Canadian Ministers of the Environment (CCME).

Such a secretariat could coordinate policy efforts, report on progress, and facilitate stakeholder engagement across government, industry, academia, and non-profit sectors.

Public Education

Public education was identified by a large proportion of participants as an important component of PFAS management.

Participants suggested several initiatives to help inform consumers and encourage informed purchasing decisions:

- Public awareness campaigns led by trusted institutions
- Educational resources on PFAS in everyday products
- Identification of safer alternatives

Participants also suggested eco-labelling programs that certify products as PFAS-free. Existing labelling initiatives, such as “BPA-free” programs, could serve as models for similar certification systems.

Government leadership or public–private partnerships could play an important role in developing and implementing these initiatives.

Beneficial Use and the Circular Economy

Wastewater treatment plants may provide opportunities to remove hazardous contaminants currently circulating in the environment. However, treatment processes designed to remove contaminants may reduce the beneficial use of sludge and biosolids for soil applications.

Participants emphasized the importance of investing in technologies that can remove PFAS while preserving the value of wastewater by-products, including nutrients such as phosphorus.

Potential approaches discussed included:

- Technologies applied in series to recover valuable resources before PFAS removal
- Methods that separate PFAS from wastewater streams while preserving nutrients and moisture in biosolids
- Technologies to destroy PFAS after separation
- Research into alternative products such as biochar

Participants also encouraged a long-term, systems-based perspective, emphasizing that wastewater should be viewed as a resource rather than simply a waste stream.

If wastewater treatment processes recover valuable materials and remove contaminants, final filtration and disinfection could potentially produce water meeting drinking-water standards. Water reuse of this type could reduce municipal costs and provide important benefits in water-stressed regions.

Participants emphasized that municipalities should not bear the full financial burden of such innovations. Any additional infrastructure or operational costs resulting from regulatory changes should be supported through government funding and industry contributions.

Conclusion

Participants brought substantial expertise from government, industry, and academia and engaged actively in the discussions on PFAS Management in Canada. There was strong recognition of the significant costs associated with research, detection, removal, destruction, and the development of safer alternatives.

Participants emphasized the importance of source protection, beginning with restricting PFAS uses where alternatives exist. An internationally aligned definition for “essential use,” potentially supported through an ISO framework, was identified as a useful foundation for a continuous essentiality management system that could include permitting or certification requirements.

Participants also highlighted the value of international collaboration, public education, eco-labelling programs, and coordinated government policy tools to accelerate progress.

Wastewater systems were recognized as both a challenge and an opportunity in PFAS management. Investments in technologies that remove PFAS while preserving the beneficial use of wastewater resources could support broader circular economy goals.

Addressing PFAS contamination in Canada will require coordinated action across governments, industry, researchers, and civil society, supported by sustained investment, policy innovation, and ongoing collaboration.

Next Steps

Participants are invited to provide feedback on this summary document. Comments will be accepted until March 30, 2025.

Following the consultation period, a final version of the report will be published on the Urban Water TMU website and shared with stakeholders across government, industry, academia, and non-profit organizations.

Insights from the workshop may also inform future engagement activities, including additional roundtables, research collaborations, and policy discussions aimed at advancing practical solutions for PFAS management in Canada.

APPENDIX A: WORKSHOP AGENDA



PFAS Management in Canada Workshop

8:00 - 9:30 AM	Welcome	Dr. Roberta Iannacito-Provenzano, Provost & Vice President Academic, TMU Angela Murphy, Director & Dr. Kim Gibbels, Academic Director, Urban Water TMU Gold Sponsors: Purifco, Continental Carbon Group
9:36 - 10:00 AM	Governance of PFAS in Canada	Dr. Roxana Sushring, Assistant Professor, Dept Chemistry & Biology, TMU Dr. Patrika Hanra, Associate Professor, Dept Law & Business, TMU
10:00 - 10:20 AM	Update on PFAS Activities by MECP	Tim Fletcher, Manager, Water Standards, Technical Assessment and Standards Development Branch
10:20 - 10:40 AM	Break	
10:40 - 11:10 AM	KEYNOTE #1: EU Global Perspective: Strategies for PFAS Governance: From Prevention to Destruction Dr. Ian Cousins, Professor, Stockholm University	
11:15 - 11:45 PM	ROUNDTABLE DISCUSSION #1 Question: How can we further limit the creation, use, circulation of PFAS in the environment? Background: The Canadian Government and provincial governments have several regulatory structures that aim to safeguard the environment and human health. What more can be done?	
11:40 - 12:30 PM	Lunch	
12:30 - 12:50 PM	Health Canada's Role in Drinking Water Quality and the Objective for PFAS	Stephanie McFadyen, Manager, Water Quality Program, Health Canada
12:50 - 1:25 PM	KEYNOTE #2: US Perspective: Forward Thinking PFAS Solutions Dr. Mohamad Abala Ibrahim, WTS Emerging Contaminants Solutions & Innovations, AECOM	
1:25 - 2:00 PM	Nonregulatory approaches as an alternative, precursor or complement to regulation An Industry Perspective on Risk Management Priorities	Mike Goffin, Bruce Water Policy Fellow, TMU Scott Thurlow, Founder and President of Thurlow Law
2:00 - 2:30 PM	ROUNDTABLE DISCUSSION #2 Question: With the rapid development of PFAS chemicals, how can Government possibly keep pace? Background: Canadian legal systems are slow moving, yet PFAS chemicals are being developed every day. Is there another way to regulate these chemicals? What additional economic and policy measures could Government take to guide the course of PFAS? Are there innovative partnerships that could facilitate this?	
2:30 - 2:50 PM	Break	
2:50 - 3:15 PM	Governance of WWTPs and Biosolids in Canada PFAS, Biosolids, and the Role of Municipalities	Dr. Rania Hamza, Associate Professor, Dept Civil Eng, TMU Phil Sidrwa, Chair, Ontario Biosolids Council
3:15 - 3:45 PM	A Closer Look at PFAS in Ontario Water Systems Eliminating PFAS in Biosolids via Pyrolysis	Dr. Scott Hopkins, Professor, Dept Chemistry, University of Waterloo Dr. Naomi Kinghoffer, Assistant Professor, University of Western
3:50 - 4:20 PM	ROUNDTABLE DISCUSSION #3 Question: Is more needed to address PFAS in the environment? Background: WWTPS are a potential point source for PFAS already in the environment. How do we leverage the opportunity to remove PFAS in a cost-effective manner while preserving nutrients that our agricultural sector may need?	
4:20 - 5:00 PM	Closing Remarks & Next Steps	

APPENDIX B: ROUNDTABLE DISCUSSION QUESTIONS

TURNING OFF THE TAP

QUESTION 1: How can we further limit the creation and circulation of PFAS in the environment?

Background: The Canadian Government and provincial governments have multiple regulatory structures that aim to safeguard the environment and human health. What more can be done?

POLICY CHANGE

QUESTION 2: With the rapid development of PFAS chemicals, how can Governments possibly keep pace?

Background: Some scholars highlight how Canada's chemical management regulatory process is slow moving resulting in a slow regulatory response to new PFAS-based chemicals. Are there alternative ways to regulate these chemicals? What additional economic and policy measures could Governments adopt to guide the governance of PFAS? Could innovative partnerships be created to facilitate a more-timely response to emerging PFAS?

PFAS IN OUR ENVIRONMENT

QUESTION 3: Is more needed to address PFAS in the environment?

Background: WWTPS are a potential point source for PFAS already in the environment. How do we leverage the opportunity to remove PFAS in a cost-effective manner while preserving nutrients that our agricultural sector may need?

APPENDIX C: WORKSHOP PARTICIPANTS

A total of 125 participants attended the workshop, representing academia, government, and private industry, with each sector accounting for approximately one-third of attendees. Participants brought expertise from research, policy, regulation, engineering, technology development, and environmental management. Participants were assigned seating at roundtables with participants from different sectors with varied disciplinary backgrounds to engender cross-sectoral and interdisciplinary dialogue.

Academic Participants: 36.2%

- Researchers: 41%
- Students: 59%

Government Participants: 27.6%

- Federal: 17%
- Provincial: 40%
- Municipal: 42%

Private Industry Participants: 29.9%

- Engineering and consulting firms: 30%
- PFAS removal technology companies: 51%
- PFAS detection laboratories: 8%
- PFAS industry and business services firms (e.g., legal, public relations, communications): 11%

