



Grouping of Chemicals

Risk Management in Canada

IOMC Workshop Meeting
GFC OEWG1

June 22, 2025



Government
of Canada

Gouvernement
du Canada

Canada

Presentation

- Chemicals Management in Canada
- Modernization of Chemicals Management
- Key aspects to grouping of chemicals
- Chemicals Groupings for Risk Management
 - Class of Per- and Polyfluoroalkyl Substances (PFAS)
 - Terpenes and Terpenoids

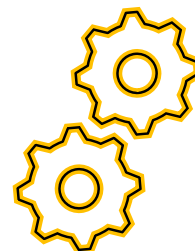
Chemicals Management in Canada

*Canadian
Environmental
Protection Act (CEPA)*
primary legislation for
chemicals
management

CEPA was modernized in
2023 - *implementation
ongoing.*

Chemicals Management Plan
(CMP) is a risk-based
approach to protect
Canadians and environment
from harmful chemicals

The CMP assesses and
manages chemicals using
the most appropriate
management tools



Modernization of *Canadian Environmental Protection Act*

In 2023, Canada modernized its cornerstone environmental law to better protect the health of Canadians and their environment

CEPA modernization offered key transformative environmental protection initiatives:



- Framework for a Right to a Healthy Environment
- Plan of Priorities
- Strategy to Replace, Reduce, or Refine Vertebrate Animal Testing
- Watch List of substances capable of becoming toxic
- New requirements for substances of highest risk

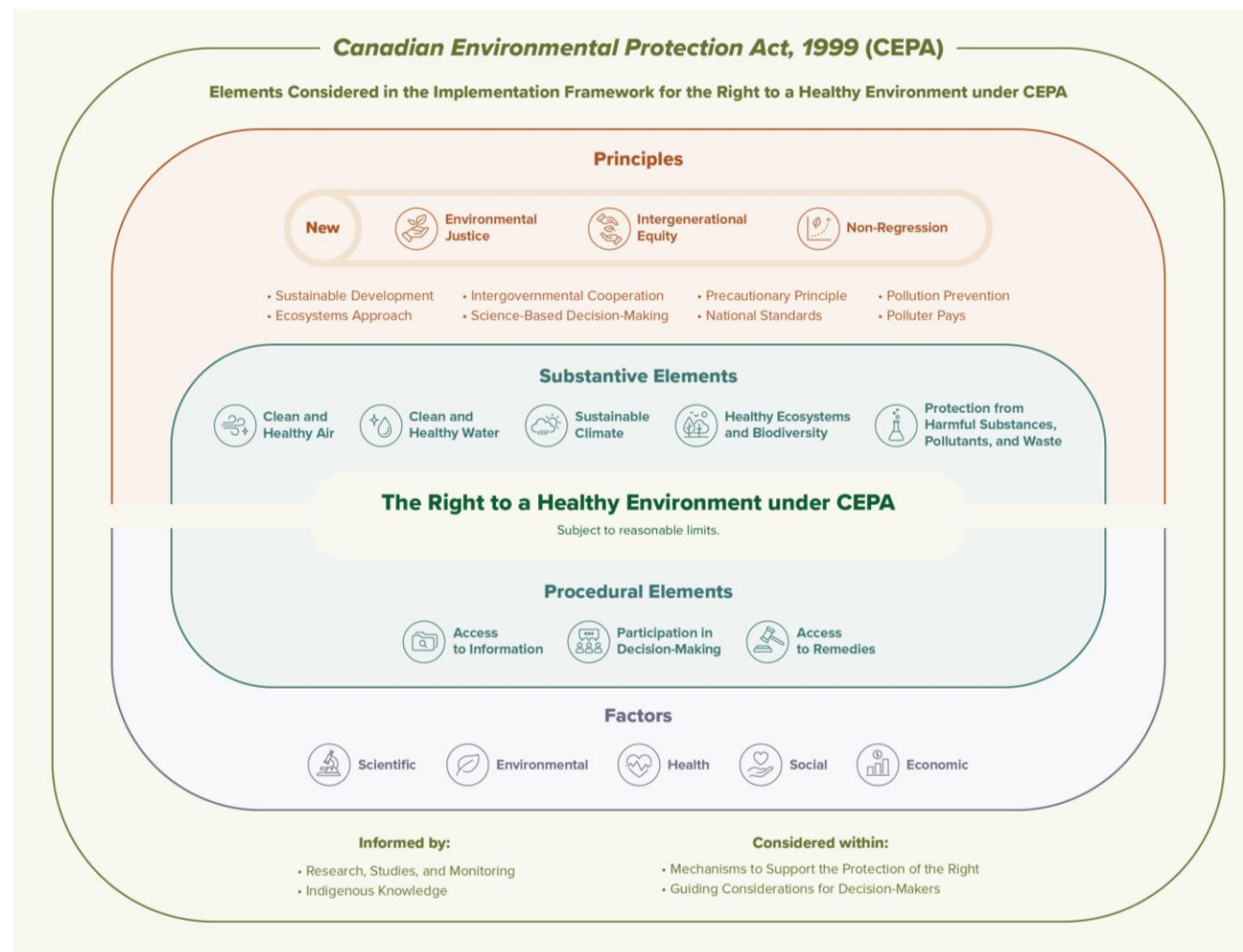


Significant stakeholder and partner engagement throughout modernization

Right to a Healthy Environment

Developing a draft Implementation Framework

- Framework will set out - *How will Canada fulfill its duty to protect the right to a healthy environment?*
- Applies to decision making and activities when administering CEPA
- The [draft implementation framework](#) was published for public comment in October 2024



Chemicals Management: Plan of Priorities

The **Plan of Priorities** communicates chemicals management priorities publicly and includes:



- List of over 30 priority substances and substance groups and related activities that support risk assessment and risk management
- Activities and initiatives to promote development and use of approaches to replace, reduce or refine the use of vertebrate animals in toxicity testing.

Under s.76 of CEPA, any person may request that the Ministers assess a substance. They must evaluate the request and decide whether to add the substance to the Plan for future assessment.

The Plan of Priorities is flexible and must be reviewed every 8 years.

Chemicals Management modernization

Canada is taking steps to enhance assessment approaches and future prioritization to better protect Canadians

Assessments and prioritization will expand to consider a broader range of populations that may be disproportionately impacted, and of a broader range of risks.



Cumulative effects from combined exposures to multiple chemicals

Implementation of new approach methodologies

Use of non-animal test data

These aspects inform assessment approaches such as grouping of chemicals

The modernization of chemicals management responds to a changing global chemicals landscape and consideration of new science.

Innovative approaches to groupings

CEPA modernization builds on Canada's efforts to addressing grouping of chemicals

Groupings are generally determined in the early stages of the chemicals management cycle

Key factors are considered for a grouping approach:

- Substances are organized in structural or functional groups (e.g., moieties) to maximize the effectiveness and efficiencies in the assessment and management processes.
- Stakeholder engagement, identification of alternatives, account for the ability to support informed substitution decisions, and timing of international actions.

CEPA enables the federal government to address groupings (i.e., “a class of substances”) as a substance for the purposes of the Act

Key Risk Management activities

The Government administers over 200 risk management instruments for substances determined to pose a risk to human health and/or the environment

Canada uses a wide range of tools to manage risks

Risk management activities include:

- **Selecting the most appropriate action(s)** to reduce exposure to toxic substances based on the risk identified in the assessment
- **Consulting** on risk management action(s) under consideration
- **Promoting compliance** and **enforcing** risk management instruments
- **Evaluating and reporting** on risk management actions in place

Risk Management Tools:

- Regulations
- Pollution prevention planning notices
- Guidelines
- Codes of practice
- Among other tools

Case Study

Class of Per- and Polyfluoroalkyl Substances (PFAS)

Canada is building on its previous work and taking action on PFAS as a broad group

In 2021 the Government of Canada announced its intention to address PFAS as a class:

- The large number of PFAS that are commercially available combined with the lack of data on the individual substances renders a traditional substance-by-substance approach impractical
- This approach allowed Canada to consider cumulative effects, to prevent regrettable substitution and to protect vulnerable populations

A class approach to PFAS aligns with CEPA amendments

Case Study

PFAS Risk Management

“Our government is taking action on PFAS to keep Canadians and our environment safe from the harmful exposure to these chemicals”

The objective is to achieve the lowest feasible levels of environmental and human exposure to PFAS.

Canada is proposing risk management actions through a **phased restriction approach**:

1. **PFAS not currently regulated in firefighting foams**, due to high potential for environmental and human exposure.
2. **PFAS not needed for the protection of health, safety or the environment**, including consumer applications (e.g. food packaging, textiles)
3. **PFAS requiring further evaluation** of the role of PFAS for which currently there may not be feasible alternatives (e.g. medical devices, transport and military applications)

“Canada is taking a significant step forward to better protect workers, firefighters, and all Canadians from ‘forever chemicals’”.

Exemptions will be considered as necessary with attention to **feasible alternatives, socio-economic factors** and **international alignment**.

Case Study

Terpenes and Terpenoids

Canada is moving forward on its commitment to address this grouping in the Third Phase of the CMP

Canada is **strategically addressing these groups** based on similarities in chemical structure, properties, and/or toxicity

- Terpenes are chemicals with repeating isoprene units and are classified according to the number of isoprene units they contain.

Possible risk management actions for consumer products, food, cosmetics, natural health products and non-prescription drugs:

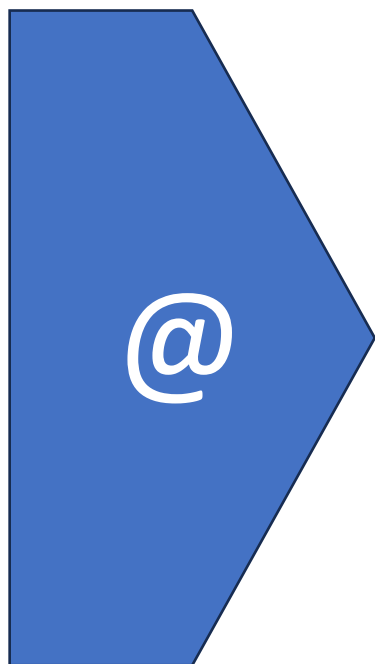
Listings on Hotlists and/or Ingredients Database as restricted ingredients
Regulatory or non-regulatory actions to reduce exposures
Public communications approach

Terpenes and Terpenoids are ingredients for essential oils, natural health products and cosmetics



THANK YOU

For more information, please contact us:



Miranda MacPherson

Director, Chemicals and Environmental Health Management Bureau
Health Canada

miranda.macpherson@hc-sc.gc.ca

Monica Brown

Manager, Horizontal and International Policy Division, CEHMB
Health Canada

monica.brown@hc-sc.gc.ca

For more information on CEPA



[Canadian Environmental Protection Act, 1999](#) (CEPA)



[Bill S-5, Strengthening Environmental Protection for a Healthier Canada Act](#) - Plain language summary of key amendments



[Implementing the modernized CEPA](#) - Information on public consultation opportunities



[Proposed Plan of Priorities](#)

For more information on groupings and RM



[CMP2 Substance Groupings Initiative](#)



[Third phase of the Chemicals Management Plan \(CMP3\)](#)



[Moiety Approach Fact Sheet](#)



[Risk Management Fact Sheet](#)



[Risk Management approach for per- and polyfluoroalkyl substances \(PFAS\), excluding fluoropolymers](#)



[Essential oils and botanical extracts](#) (for more information on Terpenes and Terpenoids)