



Government
of Canada

Gouvernement
du Canada

CEPA 1999 and CMP Challenge Substance and Risk Management

**North American Commission for Environmental Cooperation
Green North American Automotive Industry Supply Chain
December 13, 2011**



CHEMICALS
MANAGEMENT
PLAN

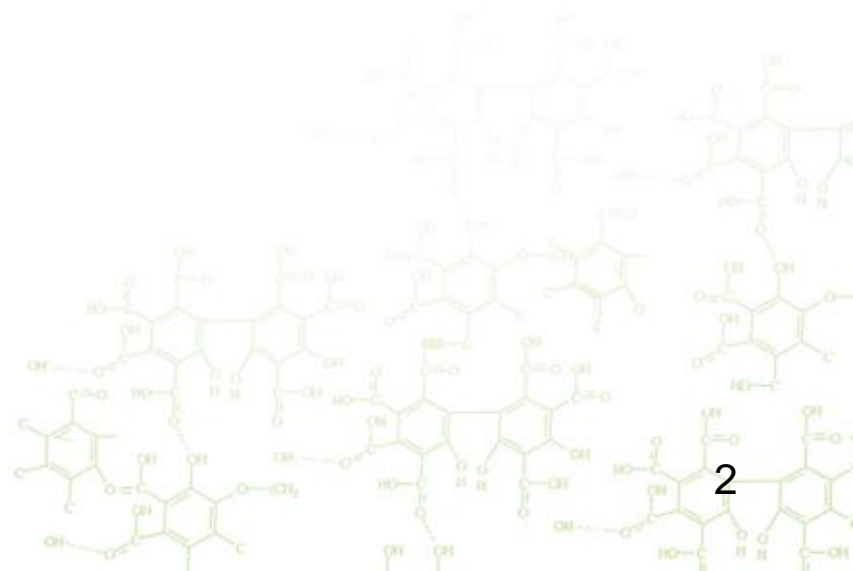
PLAN DE
GESTION DES
PRODUITS CHIMIQUES

Canada 

Objective

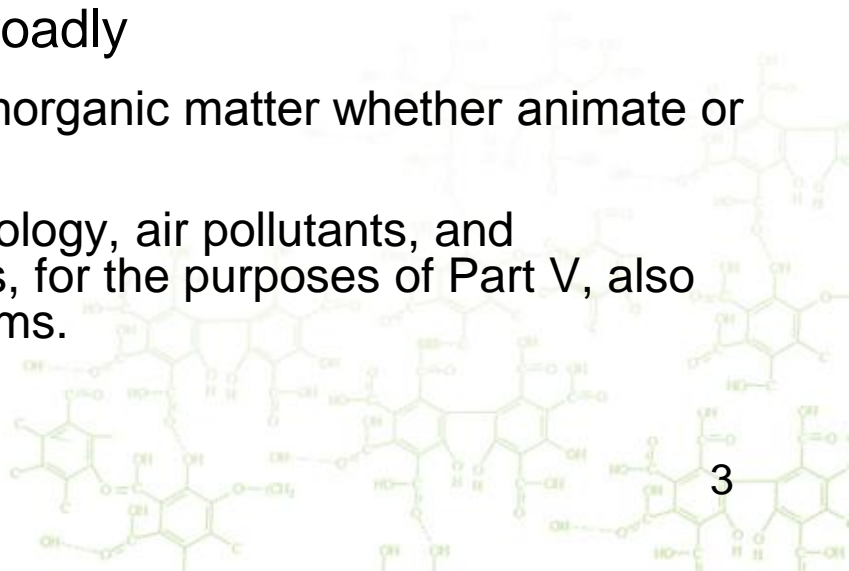
To provide an overview of:

- *Canadian Environmental Protection Act, 1999*
- CMP Challenge with a risk management lens:
 - Action
 - Innovation
 - Emerging Issues



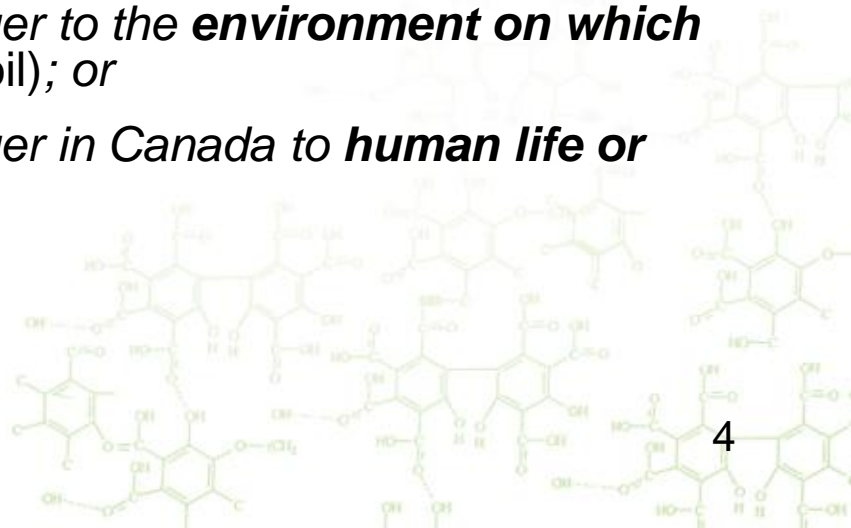
Canadian Environmental Protection Act, 1999

- The *Canadian Environmental Protection Act, 1999* (CEPA 1999) provides authorities for managing substances that are found to be harmful to human health and/or the environment
 - Pollution prevention is a cornerstone for the management of substances
 - Imposes timeframes for initiating risk management of substances
 - Provides a wide range of tools, beyond traditional regulation
 - Incorporates the Precautionary Principle (Rio Declaration) and the Polluter Pays Principle
- CEPA 1999 defines substances very broadly
 - ‘Any distinguishable kind of organic or inorganic matter whether animate or inanimate’
 - Covers chemicals, products of biotechnology, air pollutants, and greenhouse gases (GHGs). Substances, for the purposes of Part V, also includes mixtures and manufactured items.



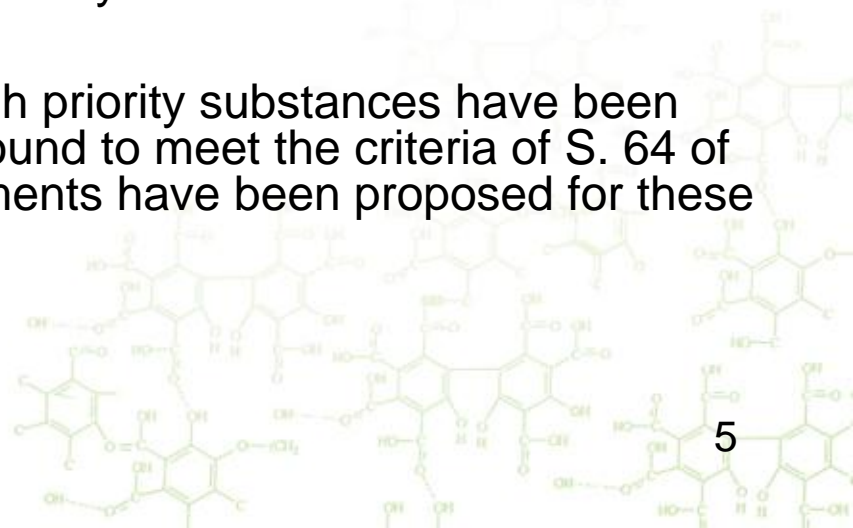
The CEPA Substances Regime

- Separate authorities under CEPA for **new** and **existing** substances.
NOTE: This presentation focuses on risk management of **existing** substances.
- According to Section 64 of CEPA 1999, a substance is considered harmful if:
 - ... it is entering or may enter the environment in a quantity or concentration or under conditions that:*
 - a) have or may have an immediate or long-term harmful effect on the **environment** or its biological diversity (such as fish or wildlife);*
 - b) constitute or may constitute a danger to the **environment on which life depends** (such as water, air, soil); or*
 - c) constitute or may constitute a danger in Canada to **human life or health***



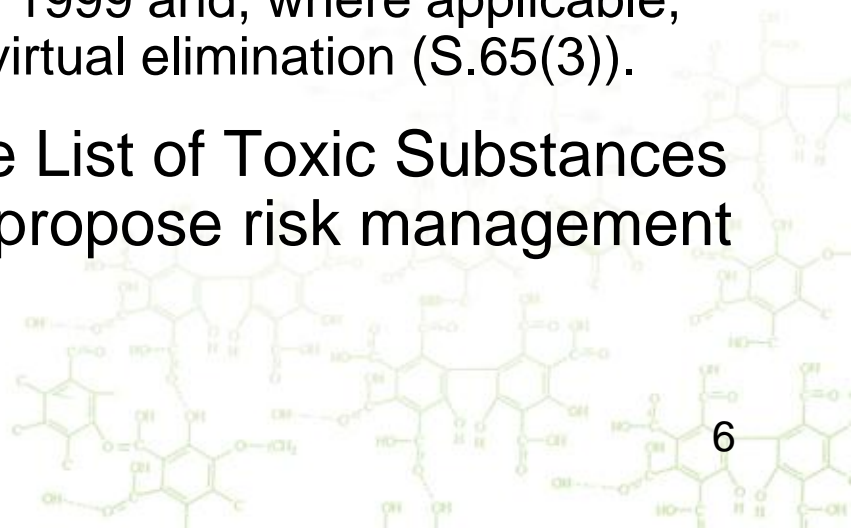
Existing Substances

- Prior to 1994, substances introduced for use in Canada were not assessed to determine their impacts on health and the environment. CEPA 1999 prescribed a “categorization” exercise to address this gap.
 - Canada demonstrated global leadership by completing categorization in September 2006, i.e., systematically sorting its approximately 23,000 **existing** substances on the Domestic Substances List (DSL)
 - Domestic Substances List (DSL) = approximately 23,000 substances identified as being in commercial use in Canada in the mid-1980s.
 - All 4,300 substances that were identified through categorization as priorities for assessment will be addressed
- Under the Chemicals Management Plan (CMP), the Government of Canada committed to address these 4,300 substances by 2020 and to take action to manage the risks identified
- To date, under the CMP Challenge, 179 high priority substances have been assessed. Of these, 43 substances were found to meet the criteria of S. 64 of CEPA 1999 and a total of 55 control instruments have been proposed for these



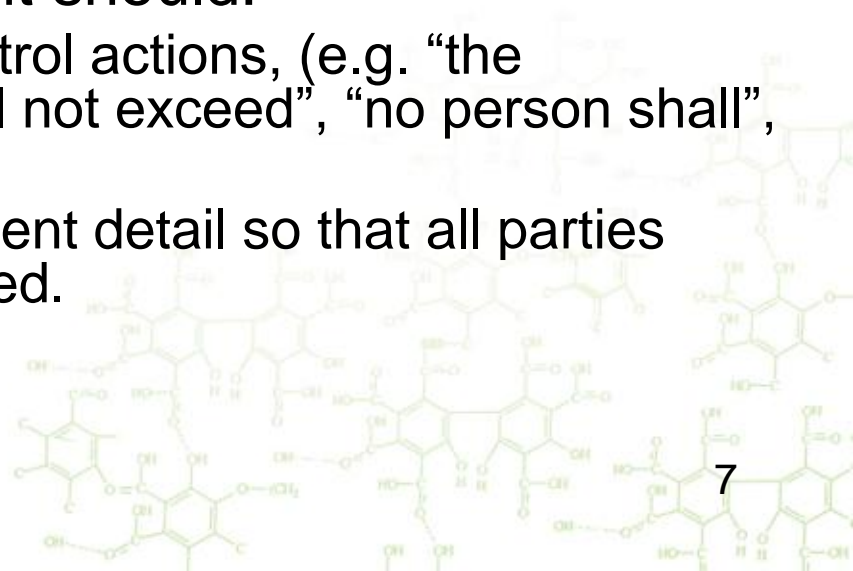
Following Risk Assessment

- Following the risk assessment (RA), the Ministers must publish a statement proposing one of the following measures:
 - Take no further action in respect of a substance;
 - Add the substance to the Priority Substances List (PSL) (unless the substance is already on the PSL); or
 - Recommend that the substance be added to the List of Toxic Substances in Schedule 1 of CEPA 1999 and, where applicable, recommend the implementation of virtual elimination (S.65(3)).
- Once a substance is added to the List of Toxic Substances in Schedule 1, the Minister must propose risk management actions



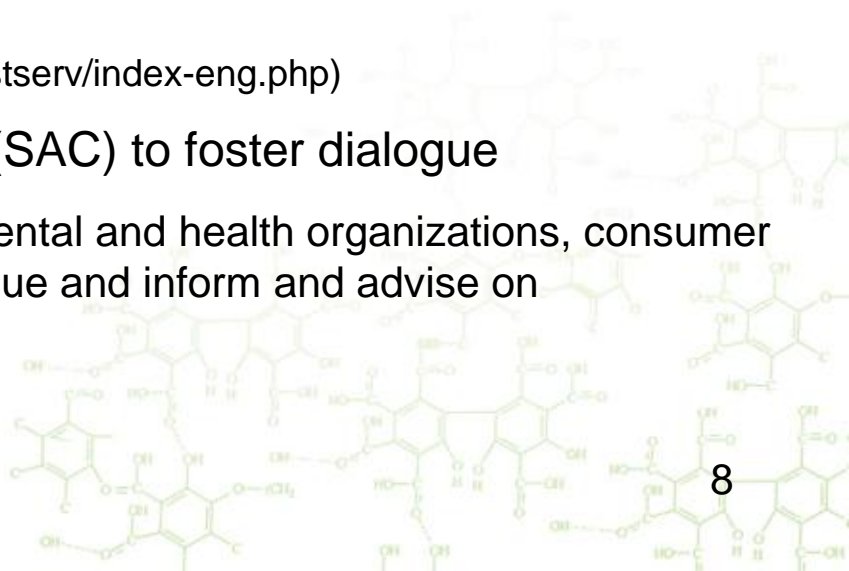
Risk Management Timelines

- There is a 24 month timeline established in CEPA 1999 to propose an instrument respecting preventive or control actions after a determination that the substance is “CEPA Toxic”.
- The instrument must be finalised within 18 months of being proposed (42 months after fSAR)
- A preventive or control instrument should:
 - Provide specific preventive or control actions, (e.g. “the concentration of a substance shall not exceed”, “no person shall”, etc.); and
 - Describe these actions with sufficient detail so that all parties clearly understand what is expected.



Engaging Stakeholders Throughout the Risk Management Cycle

- Seek input to inform risk assessment and risk management actions
 - Engage and partner with manufacturers, importers, retailers and retail associations to better inform supply-chain managers
 - Offer workshops/webinars to dialogue with and inform stakeholders
 - Use a wide range of tools to collect information
- Utilize Chemical Substances Website and other communication tools (e.g., social media) to educate and share information
 - An email subscription service is available to keep stakeholders and the public informed of new information releases
(<http://www.chemicalsubstanceschimiques.gc.ca/listserv/index-eng.php>)
- Maintain the Stakeholder Advisory Council (SAC) to foster dialogue
 - Allows stakeholders from industry, environmental and health organizations, consumer groups and aboriginal groups to foster dialogue and inform and advise on Government implementation of the CMP

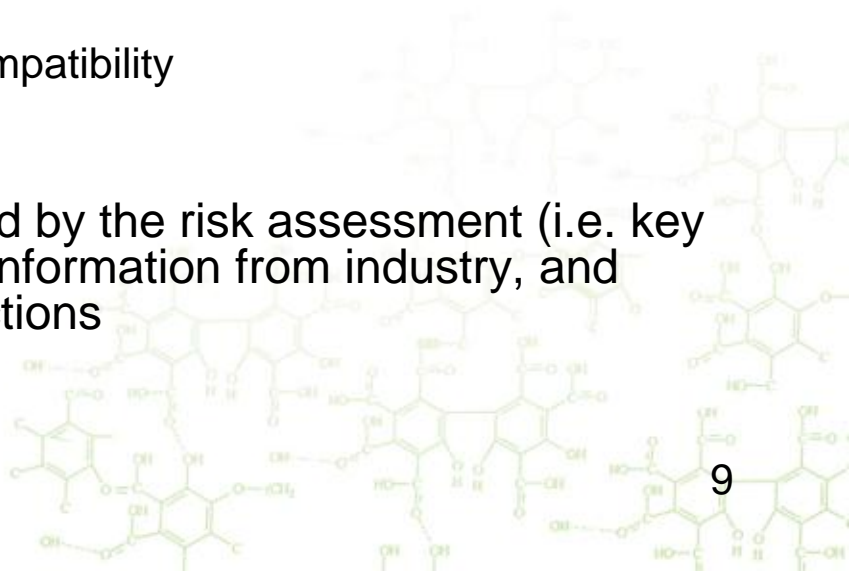


Selecting A Risk Management Tool

- Choosing a tool or, more importantly, the appropriate mix of tools, involves selecting the tools that are most likely to achieve the public policy objective pursued on a sustained basis and at an acceptable cost
- A standardized framework is used for selecting tools which ensures that risk managers systematically consider all available options to identify tools that are appropriate to the level of risk

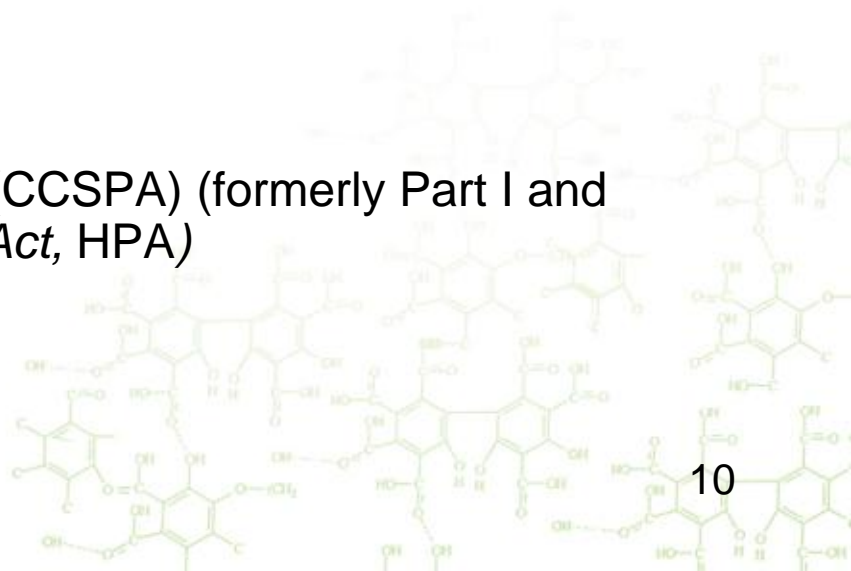
There are 5 main criteria that tools are assessed against

1. Effectiveness
 2. Economic efficiency
 3. Distributional impacts
 4. Stakeholder acceptability & jurisdictional compatibility
 5. International obligations
- The development of RM tools are informed by the risk assessment (i.e. key hazard and exposure points of concern), information from industry, and existing domestic and international RM actions

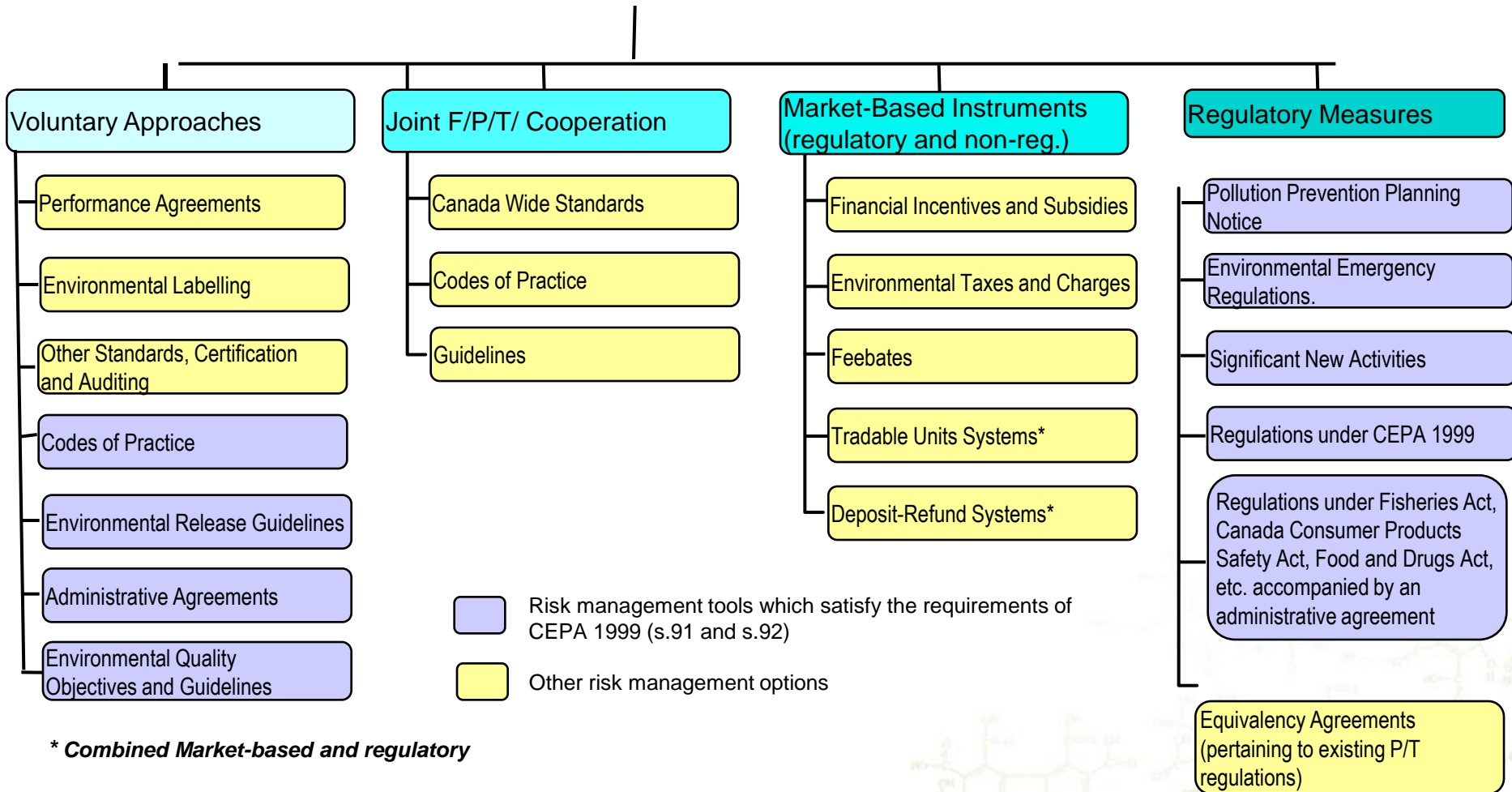


Determining the Most Appropriate Authority to Manage Risk Under CMP

- One of the objectives of the CMP is to strengthen coordination among federal statutes - utilize most appropriate program/statute(s) to manage risk, either on their own, in combination with each other, or with CEPA 1999
- The “best-placed program” decision-making process was proposed to inform departmental discussions and coordinate the appropriate use of relevant federal Acts, including:
 - CEPA 1999
 - *Food and Drugs Act (F&DA)*
 - *Pest Control Products Act (PCPA)*
 - *Canada Consumer Product Safety Act (CCSPA)* (formerly Part I and Schedule I to the *Hazardous Products Act, HPA*)



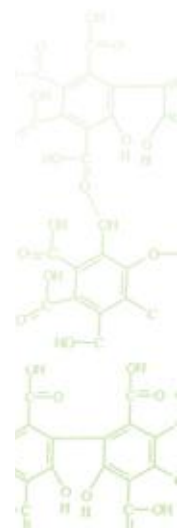
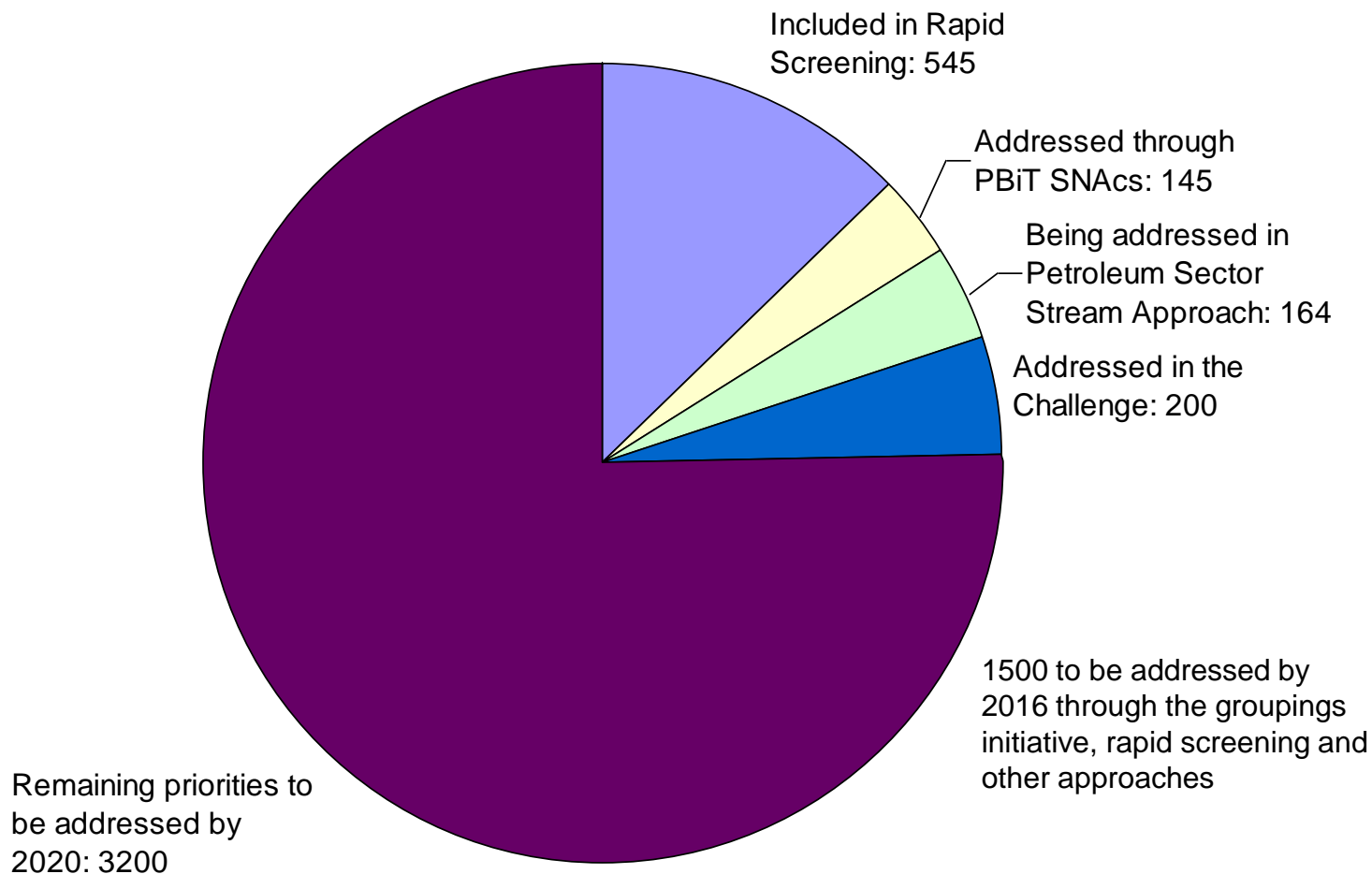
Overview: RM Tools Acceptable under CEPA



Increasing certainty, burden of proof required for risk management tools; increasingly stringent tool requirements

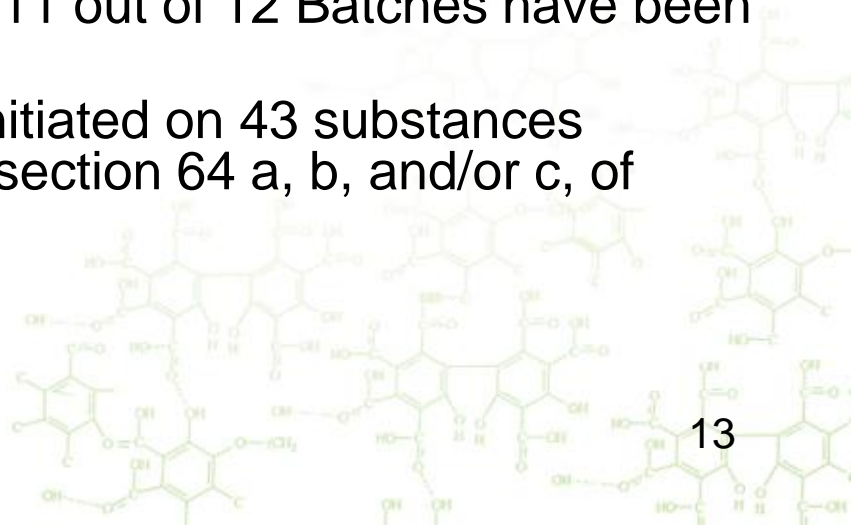
Where we are in the process of assessing and managing existing chemical substances under CEPA

4300 existing chemical substances to be addressed by 2020:



The “Challenge”

- As announced in December 2006, the Government of Canada has addressed 193 of the highest priority substances resulting from categorization.
- The Challenge focused on substances which have been identified as ecological and human health priorities:
 - Ecological: categorized as Persistent (P) and Bioaccumulative (B) and inherently toxic to non-human organisms (iT);
 - Human Health: categorized as high hazard and have a high or intermediate potential for exposure
- The challenge was rolled out in 12 ‘batches’ of 15-30 substances.
- Final Risk Assessment conclusions for 11 out of 12 Batches have been published.
- Risk management actions have been initiated on 43 substances identified as meeting the criteria under section 64 a, b, and/or c, of CEPA 1999.



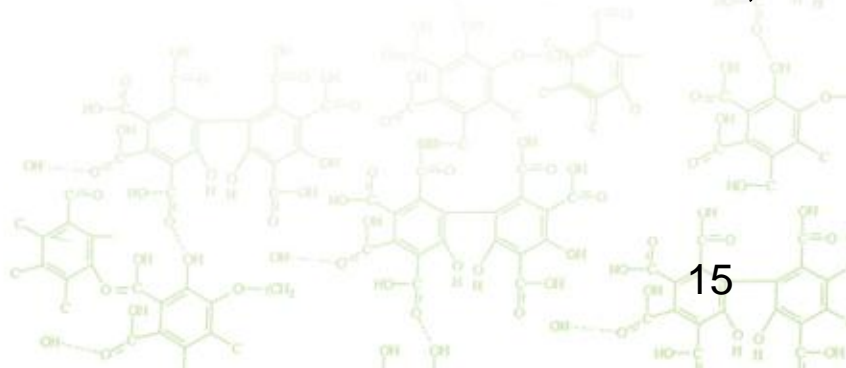
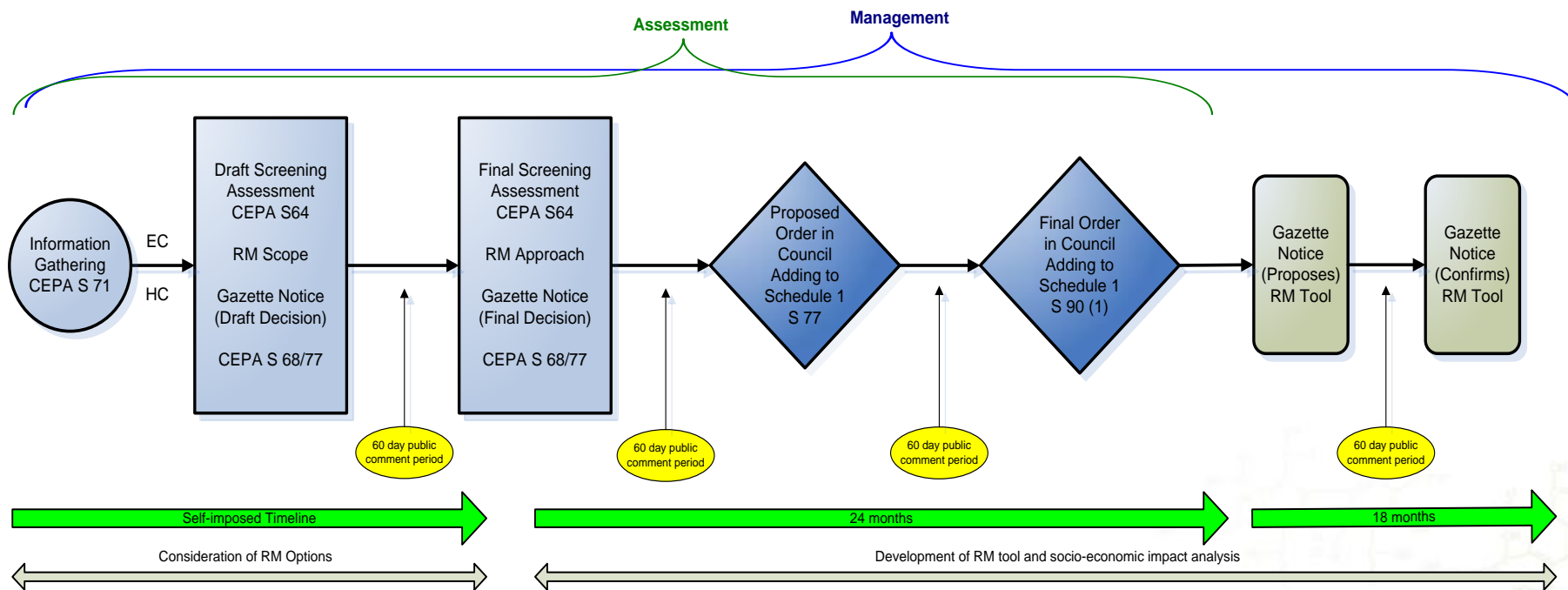
The Challenge with a Risk Management Lens

	Batch											
	1	2+ BPA	3	4	5	6	7	8	9	10	11	12
Draft Screening Assessment Reports (SAR) and risk management scopes	Between Jan 2008 and January 2011, draft SARs have been published for most substances in the 12 batches (4 B12 substances remain to be published in Fall 2011: TBC)											
Final SAR and proposed risk management approach	Final SAR and Approaches have been published for B1-11 between July 2008 and September 2011											Fall 2011: TBC
Proposed Risk Management CEPA Instrument Publishing Deadline	Published between July 2010 and March 2011			Published July 2011	Nov 2011	Mar 2012	July 2012	Sept 2012	Dec 2012	Apr 2013	July 2013	
Final Risk Management CEPA Instrument Publishing Deadline	Jan 2012	July 2012	Sept 2012	Feb 2013	Feb 2013	May 2013	Sept 2013	Jan 2014	Mar 2014	June 2014	Oct 2013	Jan 2014

Phase 1
 Phase 2



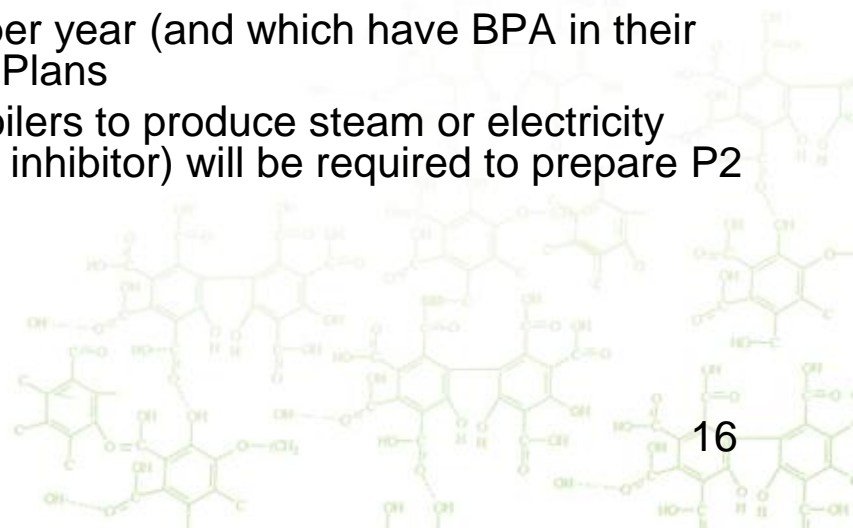
Risk Management & Process Timeline



For Challenge substances deemed CEPA toxic

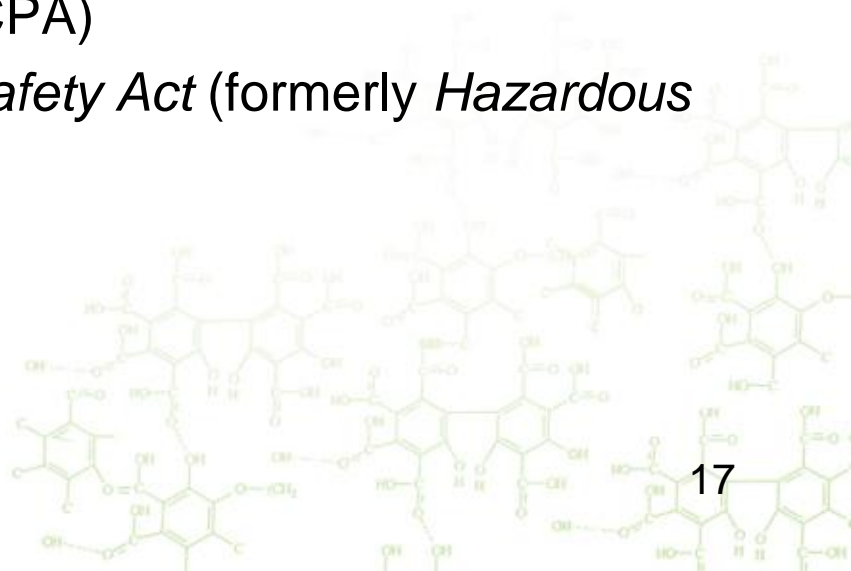
A wide range of risk management actions were taken under *CEPA 1999*, including:

- Prohibition:
 - BNST, (antioxidant in lubricant, evaluated in Batch 4), recently proposed for addition to the Prohibition of Certain Toxic Substances Regulations.
- Additional Regulatory Requirements:
 - 2,4,6 TTBP, (Fuel additive in Batch 2), proposed addition of diesel to the *Environmental Emergency Regulations* contributing to prevention of accidental releases of 2,4,6-TTBP when contained in fuels.
- Pollution Prevention Planning (P2):
 - BPA, (Batch 2), facilities using >100kg per year (and which have BPA in their effluents) will be required to prepare P2 Plans
 - Hydrazine, (Batch 10), facilities using boilers to produce steam or electricity (where hydrazine is used as a corrosion inhibitor) will be required to prepare P2 Plans.



...Or in combination with actions under other Acts

- While CEPA 1999 contains a wide variety of tools for substance management, some substances in the Challenge could be more appropriately managed under one or more federal statutes on their own, in combination with each other, or with CEPA 1999.
- These other Acts include:
 - *Pest Control Products Act (PCPA)*
 - *Canada Consumer Product Safety Act (formerly Hazardous Products Act)*
 - *Food and Drugs Act (F&DA)*



RM actions using other Acts

Examples include:

Food and Drugs Act

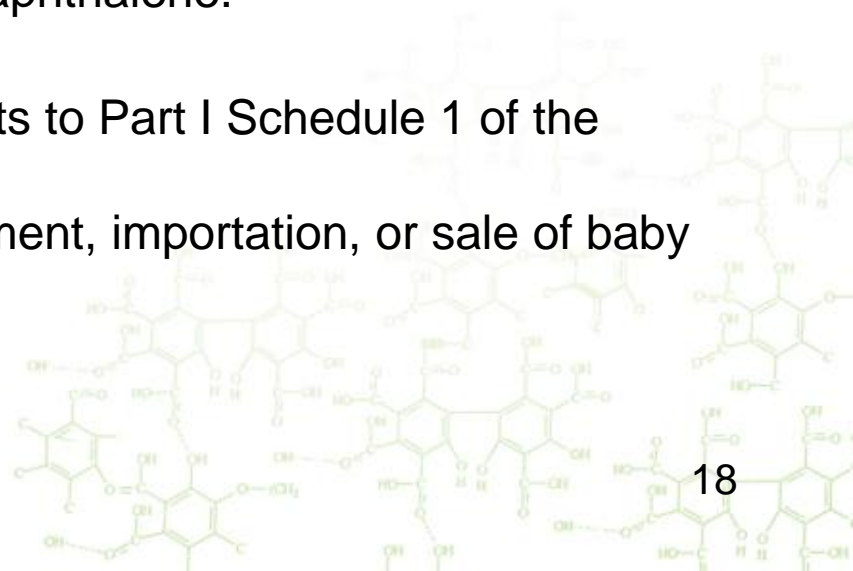
- Acrylamide (Batch 5):
 - permit the use of the enzyme asparaginase as a food additive in bread, flour, whole wheat flour, and unstandardized foods to reduce formation of acrylamide in baked or fried foods.

Pest Control Products Act

- Packaging changes and application rate restrictions have been proposed for products containing naphthalene.

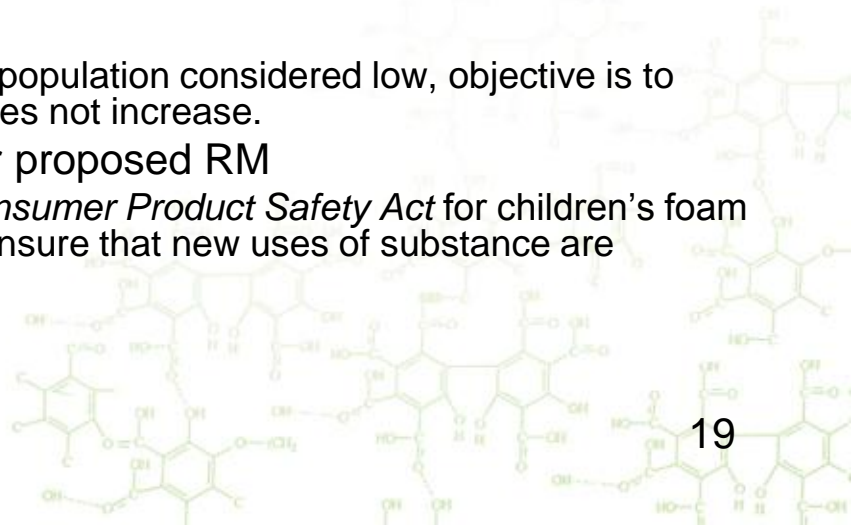
Canada Consumer Product Safety Act

- Amendments/proposed amendments to Part I Schedule 1 of the Hazardous Products Act
 - BPA - to prohibit the advertisement, importation, or sale of baby bottles containing BPA



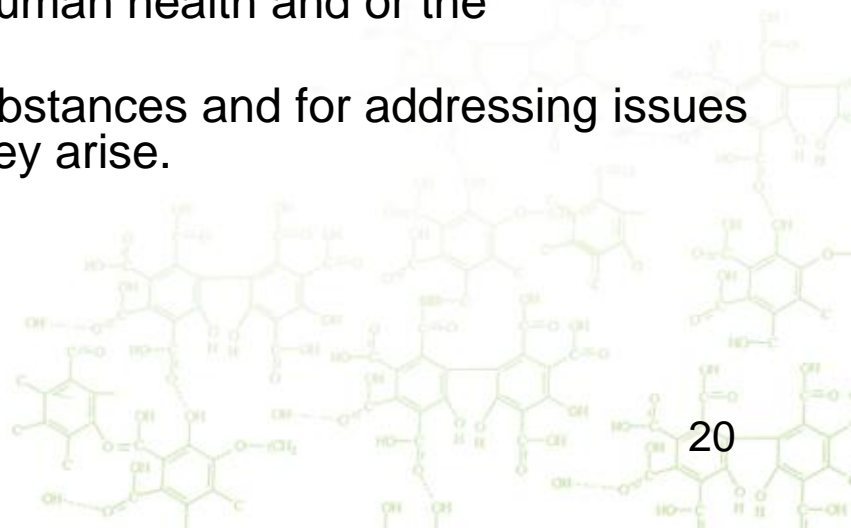
RM innovation: introduced SNACs

- The Significant New Activity (SNAC) provisions used as a risk management tool for several challenge substances.
- SNACs allow the Government to evaluate any new uses of a substance which results or may result in:
 - a significantly greater quantity or concentration of the substance in the environment; or
 - a significantly different manner or circumstances of exposure to the substance.
- SNACs have been proposed for several substances concluded to meet S.64 criteria under CEPA and generally address two conditions:
 1. No further RM activity is warranted. The SNAC is the most efficient and effective tool assess and recommend additional RM should there be an increase in exposure due to new activities.
 - Pigment yellow 34 - exposure to the general population considered low, objective is to ensure exposure to the general population does not increase.
- SNAC as a complementary measure to other proposed RM
 - TCEP – proposed action under *Canadian Consumer Product Safety Act* for children's foam products; in addition, SNAC implemented to ensure that new uses of substance are evaluated.



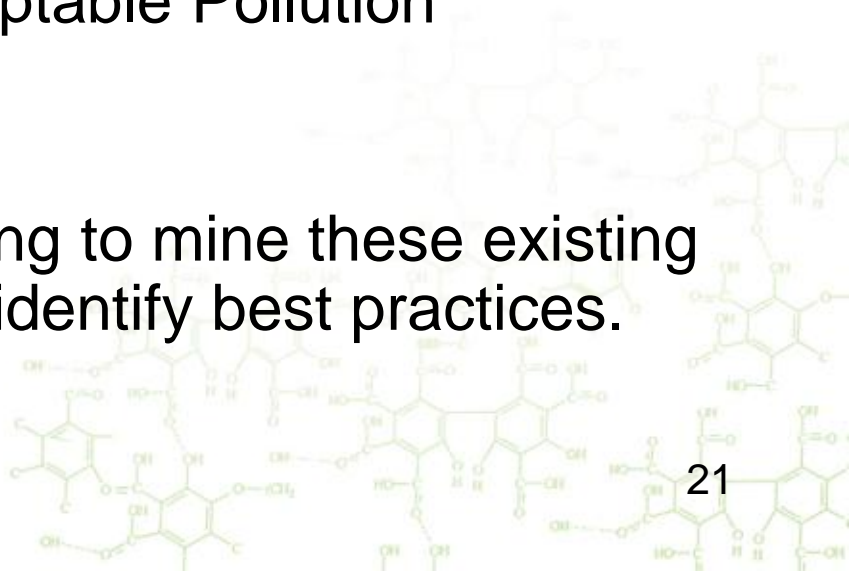
RM innovation: introduced different multi-substance instruments

- Some instruments seen as potential `workhorse` instruments: instruments to manage the risks from multiple substances having “common or similar” requirements.
- Similar requirements could refer to a class of substances, (i.e. based on chemical or physical properties/structure), or similarities based on the presence of concern in the environmental media or a type of product/functional use.
- These instruments, could be mandatory or voluntary, and are designed at the outset with the following key features in mind:
 - Effective: prevent or control risks to human health and or the environment or both.
 - Flexible: allow for addition of other substances and for addressing issues related to individual substances as they arise.
 - Robust: pass the test of time.



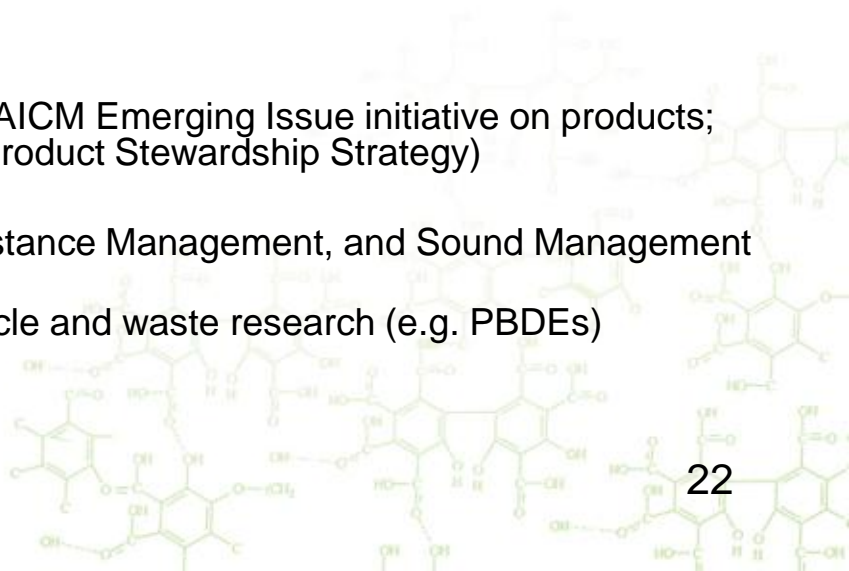
RM innovation: Multi-Substance Instruments cont'd

- Authorities and examples already exist:
 - Under CEPA 1999 (e.g. Prohibition Regulations 2005; Environmental Emergency Regulations).
 - Under other Acts (e.g. Transportation of Dangerous Goods Act [TDG regulations] and Food and Drugs Act [Cosmetic Ingredient Hotlist, Natural Health Products Ingredients Database (NHPID)]).
 - Under other jurisdictions (e.g. Ontario Drinking Water Quality Standards).
- Introduced new possibilities: adaptable Pollution Prevention Planning
- We have mined and are continuing to mine these existing examples and others in order to identify best practices.



Emerging Issues: Chemicals in Products

- Increasing significance of products as a source of environmental and human exposure to chemicals poses unique challenges.
- Diverse approaches possible: need to align infrastructure and approaches emerging data needs and stakeholders/distribution channels.
- Moving forward:
 - Within our borders: Continue analysis to help better understand key challenges with respect to:
 - Identifying and characterizing Risks (e.g. identifying presence of substances in products, release profiles, significance across product uses);
 - Managing Risks (e.g. understanding best approaches and tools for managing product related risks, identifying and engaging stakeholders / regulated community, end-of-life strategies, international trade issues); and
 - Conducting Cost and Benefit Analysis
 - Cooperating internationally
 - Tracking of international CiP initiatives (e.g. SAICM Emerging Issue initiative on products; APEC Virtual Group on CiP; Industry Global Product Stewardship Strategy)
 - EU venues REACH and RoHS developments;
 - North American venues: Consultation on Substance Management, and Sound Management of Chemicals.
 - Multilateral Environmental Agreements – recycle and waste research (e.g. PBDEs)



Further Information

Chemical Substances website:

www.chemicalsubstanceschimiques.gc.ca

Chemical Substances Web site Subscription Service:

www.chemicalsubstanceschimiques.gc.ca/listserv/index-eng.php

The Substance Grouping Initiative:

- www.chemicalsubstanceschimiques.gc.ca/group/index-eng.php

Link to Stakeholder identification form:

- www.ec.gc.ca/ese-ees/default.asp?lang=En&n=0216C3DB-1

