Environment Canada Environnement Canada

Health Canada Santé Canada

The *CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999*

– ISSUES –

September 2006

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Prepared by Environment Canada and Health Canada
in preparation for the five-year review of the
***Canadian Environmental Protection Act 1999* (CEPA 1999)**

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– Foreword –

A Paper in Preparation for the CEPA Review[1]

CEPA 1999 is a major federal legislative tool to protect the environment and human health

This paper:

- describes 12 issue areas that the departments have identified through consultations in preparation for the Review; and
- discusses three broader challenges that have been identified through consultations, and in which CEPA 1999 has a role.

The Canadian Environmental Protection Act, 1999 (CEPA 1999) is the primary federal legislation for preventing pollution to protect the environment and human health and for promoting sustainable development.

Prepared by Environment Canada and Health Canada for the Parliamentary Review of the Canadian Environmental Protection Act 1999 (CEPA 1999.

CEPA 1999 supports a comprehensive approach to environmental management

The Act supports informed decision-making throughout the management cycle of a typical environmental issue. The following steps constitute the CEPA 1999 management cycle.

Issue Scoping: based on a solid foundation of research and monitoring

Scientific approach to risk assessment and information gathering

Responsible and effective risk management

Promoting compliance, enforcing decisions, and providing feedback to inform future actions

Focus on consulting with Canadians and reporting and communicating

Inter-jurisdictional cooperation

[1] This paper has benefited from public consultations, with a broad cross-section of groups including:
- Municipal governments,
- Aboriginal organizations,
- Industry and business interests and civil society, and
- Advice from provincial and territorial governments.

CEPA 1999 provides a solid basis for continuing to protect the environment and human health in Canada, but opportunities for improving the Act and its implementation exist.

Twelve issue areas related to CEPA 1999 have been identified through consultations in preparation for the Review.

1. Existing Substances Regime

- o risk assessment of existing substances
- o clarity in communicating risks
- o flexible and focused regulations
- o virtual elimination requirements
- o managing the risks from substances released from products

2. National Pollutant Release Inventory (NPRI)

- o reliability of data including records retention and the administrative complexity of reporting requirements

3. Equivalency and Administrative Agreements

- o more effective use of equivalency agreements
- o more flexible timeframes for reviewing agreements

4. Managing Canadian Sources of International Pollution

- o clarifying the criteria and procedures

5. New Substances and Animate Products of Biotechnology

- o mutual acceptance of other countries' assessments
- o prohibiting the sale or use of certain new substances
- o remedial measures for animate products of biotechnology

6. Disposal at Sea

- o requirement to publish disposal at sea permits in the Canada Gazette
- o the length of permit terms

7. Vehicle and Engine Emissions

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8. Hazardous Waste and Hazardous Recyclable Materials

- o requirement for exporters to prepare waste reduction plans
- o possibility of revoking or changing the terms of a permit

9. Environmental Emergencies Officers

- o use of environmental emergencies officers with appropriate powers

10. Enforcement

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- o authority to rely on labels during Environmental Protection Compliance Order hearings

11. Economic Instruments

- o effective use of the current authorities
- o authority to auction units

12. Mandatory Review Period

- o balancing the need to keep legislation current against the need to have adequate implementation experience with the legislation

Three broad challenges which relate to the Act's mandate have been identified through consultations.

1. Environmental protection for federal operations and activities on federal lands
2. Environmental protection on aboriginal lands
3. Managing the risks of products of biotechnology and emerging technologies

Canadians have indicated that the Act is fundamentally sound.

Enhanced implementation will address many of the issues related to CEPA 1999 that Canadians identified during consultations in preparation for the Review.

Effective, fair and efficient implementation is an essential part of the environmental and health protection equation.

Section 1

Introduction

The *CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999* – ISSUES PAPER –

Prepared by Environment Canada and Health Canada for the Parliamentary Review of the *Canadian Environmental Protection Act 1999* (CEPA 1999)[2].

– INTRODUCTION –

Environmental quality and human health are linked, and play a major role in determining social well-being and the competitiveness of local and national economies.

A significant competitive edge can be gained by those who learn how to effectively integrate and promote these linkages.

- Companies prosper by being environmentally efficient, by offering consumers products and services that avoid environmental and human health problems, and by supporting a healthy, motivated workforce.
- Countries with a high level of environmental quality and a healthy population enjoy reduced health costs and employee absenteeism, and are more attractive places to work and live.
- Global branding of environmentally responsible Canadian products, technologies and services can contribute to a global competitive advantage.
- Incentives for continuous environmental improvement, integrated into the underlying drivers of the economy, will allow a country to achieve far more environmental and health benefits than would be possible through environmental laws and policies alone.

The federal government is committed to ensuring that environmental laws and policies promote the over-arching national goal of attaining the highest levels of environmental quality so as to enhance the well-being of Canadians, protect human health, preserve the quality of the environment and advance the country's long-term economic competitiveness.

[2] This paper has benefited from consulting with a broad cross-section of groups including:
- Municipal governments;
- Aboriginal organizations;
- Industry and business interests and civil society; and
- Advice from provincial and territorial governments.

CEPA 1999 is a cornerstone of the federal government's efforts to realize the goal of protecting the environment and human health.

CEPA 1999 is the result of the significant changes made to the original 1988 Act following the Parliamentary Review of that Act.

Those revisions reflected the evolution in approaches to environmental management triggered by the 1992 United Nations Conference on Sustainable Development: an evolution that seeks to integrate health, environmental and economic decision-making within governments and the private sector.

The Canadian Environmental Protection Act, 1999 (CEPA 1999) is the primary federal legislation for preventing pollution to protect the environment and human health and for promoting sustainable development.

Further information about the Act can be found in *A Guide to Understanding the Canadian Environmental Protection Act, 1999*, which is available on the CEPA Environmental Registry website at: http://www.ec.gc.ca/CEPARegistry/the_act/guide04/toc.cfm

As a result, CEPA 1999 includes the fundamental principles of sustainable development, as reflected in international charters such as the Rio Declaration, Agenda 21[3] and the Earth Charter[4].

Pollution prevention is the priority approach for protecting the environment and human health when implementing CEPA 1999.

Pollution prevention efforts are directed at avoiding or minimizing the creation of pollutants and waste in the first place.

The Ministers of the Environment and Health are required under the Act:

- to conduct research on and promote pollution prevention, and
- to give priority to pollution prevention in developing regulations and instruments.

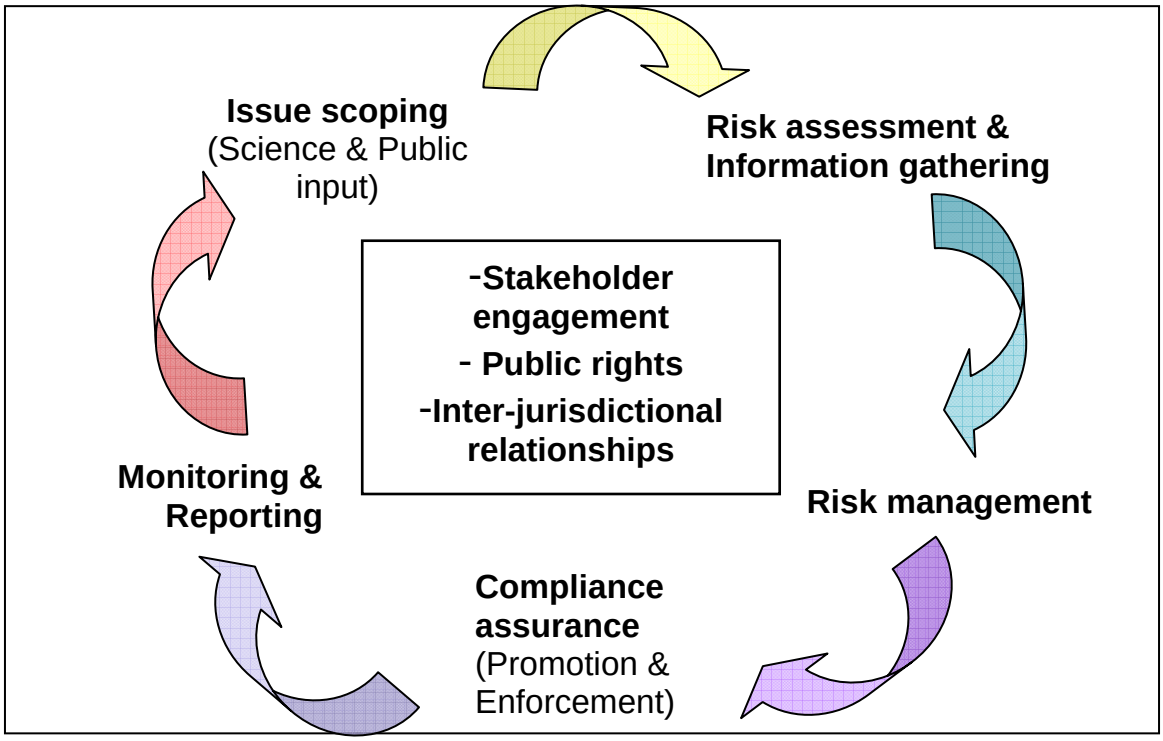
Pollution prevention also underlies the provisions in CEPA 1999 for preventing harmful risks from new substances and for restricting material disposed of in the ocean.

[3] See documents at http://www.unep.org/
[4] See documents at http://www.earthcharter.org/

CEPA 1999 supports a comprehensive approach to environmental management

The CEPA management cycle

The Act supports informed decision-making throughout the management of a typical environmental issue: the CEPA management cycle.



Issue Scoping: based on a solid foundation of research and monitoring

CEPA 1999 requires and authorizes a wide range of research and monitoring and provides broad information gathering authorities. These activities generate information that helps ensure decisions made under the Act are sound; builds the knowledge base for future decisions; and informs the public, industry and other interested groups.

Scientific approach to risk assessment and information gathering

Substance risk assessments are based on sound science, which supports a better understanding of their impacts and exposure to the environment and human health. The assessments incorporate the precautionary principle and a weight of evidence approach.

Responsible and effective risk management

CEPA enables the government to tailor risk management activities to the problem being addressed. It authorizes a wide range of risk management tools including pollution prevention planning requirements, guidelines, codes of practice, and a broad assortment of regulations. These tools can apply to the most appropriate stage in the lifecycle of an issue. The Act also authorizes economic instruments, such as tradeable units systems. This allows the government to protect the environment in cost-effective ways that reflect social, economic, and technological factors.

Promoting compliance, enforcing decisions, and providing feedback to inform future actions

Actions by Enforcement Officers can be tailored to circumstances by way of warnings, tickets, or Environmental Protection Compliance Orders (EPCOs). Court actions can also be tailored to circumstances through prosecutions, Environmental Protection Alternative Measures agreements (EPAMs) and various court orders.

Focus on consulting with Canadians and reporting and communicating

CEPA 1999 provides a structured predictable approach to risk management decision-making that provides for the input and full consideration of public values and concerns at all stages of the decision-making process. The CEPA 1999 decision-making framework:

- enables the government to be informed on an ongoing basis of the public's concerns;
- allows the public to influence the identification of environmental problems to be assessed and provides an opportunity for public values to influence environmental objectives and solutions; and
- engages a wide spectrum of stakeholders including environmental groups, industries, aboriginal people, other governments and communities;

Inter-jurisdictional cooperation

CEPA 1999 recognizes action under other federal, provincial and territorial legislation and it also encourages cooperation with provincial, territorial and aboriginal governments through:

- The National Advisory Committee and obligations to consult on various decisions under the Act.
- Equivalency and Administrative agreements, which allow recognition of provincial, territorial and aboriginal risk management tools.

- Geographically differentiated regulations, which allow the federal government to account for regional environmental differences.

Canadians have indicated that the Act is fundamentally sound.

In preparation for the reviews, Environment Canada and Health Canada undertook a number of initiatives, including:

- the release in late 2004 of a *CEPA 1999 Scoping Paper* to provide background information for the public engagement process;
- creation of an interactive website to provide information on the CEPA Review and to permit online comments on the *CEPA 1999 Scoping Paper* or any other matter related to CEPA 1999 and the Review process; and,
- holding six public workshops across Canada in early 2005, to allow anyone with an interest in CEPA 1999 to express their views.

Independent evaluations, commissioned in early 2005, indicate that both Environment Canada and Health Canada have made progress over the past five years in implementing the many significant changes introduced in CEPA 1999, and that much has been learned over this period of time.

These evaluations also recognized that more can be done to improve and accelerate the departments' efforts to take advantage of the full range of opportunities provided by the Act.

Enhanced implementation will address many of the issues related to CEPA 1999 that Canadians identified during consultations in preparation for the Parliamentary Review.

Effective, fair and efficient implementation is an essential part of the environmental and health protection equation.

This paper:

- describes 12 issue areas that have been identified through consultations in preparation for the Review; and
- discusses three broader challenges that have been identified through consultations, and in which CEPA 1999 has a role.

Section 2

Issues

– ISSUES[5] –

Twelve issue areas related to CEPA 1999 have been identified through consultations in preparation for the Review.

1. Existing Substances Regime in CEPA 1999
2. National Pollutant Release Inventory (NPRI)
3. Equivalency and Administrative Agreements
4. Managing Canadian Sources of International Pollution
5. New Substances and Animate Products of Biotechnology
6. Disposal at Sea
7. Vehicle and Engine Emissions
8. Hazardous Waste and Hazardous Recyclable Materials
9. Environmental Emergencies Officers
10. Enforcement
11. Economic Instruments
12. Mandatory Review Period

CEPA 1999 provides a solid basis for continuing to protect the environment and human health in Canada, but opportunities for improving the Act and its implementation exist.

For each of the 12 issues, this Paper:

- provides background information on that issue area; and
- identifies, where possible, stakeholder views on the issue.

[5] Most of these and other issues were presented to those consulted during the preparations to help scope this Issues Paper.

1. The Existing Substances Regime in CEPA 1999

Addressing the legacy of substances that were put into use in Canada prior to the 1990s without rigorous environmental and health risk assessments is a major element of CEPA 1999.

- This regime provides a comprehensive process for identifying and managing the risks that may be associated with these substances.
- Sections a) and b) provide the background and context for the 5 issues identified in section c).

a) Background[6]

- The Domestic Substances List (DSL) was established in the 1988 CEPA to distinguish between new substances and those manufactured or imported above a certain quantity, or already in commercial use in Canada.
  - When first developed, the DSL consisted primarily of about 23,000 substances that were in commercial use in Canada in the mid-1980s.
  - Any substance not on the DSL is classified as a "new substance", and is subject to rigorous notification and risk assessment requirements before it can be manufactured or imported in Canada.
- Prior to the development of the new substances requirement in the 1988 CEPA, few of the substances introduced for commercial use in Canada and elsewhere had been assessed by governments for the risks that they may pose to human health or the environment.
  - Many of these substances are likely not harmful or if harmful, not released into the environment in sufficient quantities to present a risk.

Canada is not alone in confronting the legacy of existing substances. The OECD's High Production Volume (HPV) initiative is an effort to work with industry to gather basic toxicological information about the substances in greatest use. The European Union has been discussing the proposed "REACH" (Registration, Evaluation and Authorization of Chemicals) program for many years. If implemented, REACH would require manufacturers, importers and users of chemicals to register substances and provide basic information to governments. It also would require them to seek authorization before continuing to use substances that meet certain criteria.
Notwithstanding these other initiatives, Canada is the only country with a legal requirement to assess all existing substances that were grandfathered that meet certain criteria.

[6] For additional information on this, and other Parts of CEPA 1999, please see "A Guide to Understanding the Canadian Environmental Protection Act, 1999". The Guide is available at http://www.ec.gc.ca/CEPARegistry/the_act/guide04/toc.cfm

- Until each substance is properly assessed, however, governments, industry and the public face uncertainty as to which substances pose risks.
- The "existing substances" provisions in CEPA 1999 provide Canada with a detailed regime for identifying, assessing and managing the risks from this legacy of unassessed "existing" substances.

Methods of assessing risks

- There are four main methods, or "pathways" under CEPA 1999 to assess risks from existing substances:

Pathway 1 – Requirement to conduct a screening assessment:

- As the first step in this process, all existing substances on the DSL must be categorized by September 2006.
- Categorization involves the identification of each substance on the DSL that has inherent hazard characteristics and
  - either persists in the environment; or
  - bioaccumulates in the tissues of wildlife or humans.
- The categorization process also requires the identification of those DSL substances which may present the greatest potential for exposure to individuals in Canada.
- The categorization process will provide Canadians with a baseline of information that will help identify priorities for further action.
- The Act requires the Ministers of the Environment and of Health to conduct a "screening assessment" of each substance meeting the categorization criteria to determine whether it meets the criteria set out in section 64 of the Act (see textbox). The Act uses these criteria to identify substances that pose or may pose a risk to human health or the environment and which therefore meet the requirements for some form of risk management.

Criteria for determining risks

Section 64 sets out three criteria which are used to determine whether or not a substance may present a harmful effect or a danger. A substance is assessed to determine 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;
b) constitute or may constitute a danger to the environment on which life depends; or
c) constitute or may constitute a danger in Canada to human life or health."

- Screening assessments determine whether a substance poses a risk by accounting for both the inherent hazard characteristics of the substance and the level of exposure or contact that people or the environment are likely to have with it.

Pathway 2 – Reviewing decisions made by other governments:

- If another government in Canada or of a national or state-level government of an OECD country prohibits or substantially restricts a substance for environmental or human health reasons, CEPA 1999 requires a review of that decision.
- The review must determine whether the substance meets the criteria in section 64.

Pathway 3 – the Priority Substances List (PSL) process:

- Under the 1988 CEPA, the Ministers twice convened expert panels to nominate substances onto the Priority Substances List.
- Many of the substances on PSL1 and PSL2 were complex mixtures or effluents, composed of more than one chemical substance.
- During the past 15 years, 67 PSL assessment decisions have been made covering about 550 individual substances.
- Most of these assessments were time and resource intensive.
- Under CEPA 1999, the Ministers can add any substance to the PSL when a more comprehensive assessment is required following a screening assessment or review of another jurisdiction's decision.
  - Also any person may ask the Minister to add a substance to the PSL.
- There are no substances on the PSL at present.

CEPA 1999 does not specify the nature of the assessment to be carried out under any of the four main pathways. As such, the difference between a screening assessment and a PSL assessment must be defined by policy. PSL assessments would likely only be used in situations where considerably more public input is needed than will be the case for most screening assessments.

Pathway 4 – Recommend addition to the List in Schedule 1:

- The Ministers of Environment and of Health may recommend that the Governor in Council add to Schedule 1 of CEPA 1999 any substance they determine meets the criteria in section 64, regardless of whether the substance has followed one of the other three risk assessment paths.
  - For example, in the early 1990s, the Ministers recommended the addition to Schedule 1 of various ozone depleting substances based primarily on international assessments.

Courses of action following an assessment

- The Ministers must propose one of the following courses of action following completion of a risk assessment under the first three pathways:
  - Add the substance to the Priority Substances List.

  - Recommend to the Governor in Council that the substance be added to the List in Schedule 1. In general, this will be done if the substance meets the criteria in section 64 and requires management under CEPA 1999.
  - "No further action" under CEPA 1999. This will be done if it is determined that the substance does not meet the criteria in section 64.
    - In some cases, the Ministers may also propose "no further action" if they determine that the substance meets the criteria in section 64 but that it is, or will be, managed in a timely and effective manner by another federal, provincial or territorial law or by a non-regulatory measure.

- The Ministers must publish a preliminary version of their proposed course of action together with "a summary of the science" on which their proposal is based for a 60-day public comment period. After taking into account any comments received, they must publish their final proposal.

CEPA 1999 authorizes the use of a wide range of tools to manage the risks from substances on Schedule 1.

- These include[7]
  - mandatory pollution prevention planning,
  - virtual elimination,
  - environmental emergency planning,
  - codes of practice,
  - guidelines,
  - regulations, and
  - some economic instruments.
- At least one "regulation or instrument" must be in place to manage the risks of each substance added to Schedule 1 as a result of one of the first three pathways outlined above.
- In addition to measures under the Act, various actions may be taken to manage risks from substances on Schedule 1. Examples include:
  - technical assistance and training programs,
  - environmental performance agreements, and
  - challenge, award and recognition programs.
- These non-mandatory tools can also be used to manage risks of substances not on Schedule 1.

[7] For further explanation, see Identifying Risk Management Tools for Toxic Substances Under CEPA 1999 at www.ec.gc.ca/CEPARegistry/gene_info/Factsheets.cfm

b) Implementation of the Existing Substances Regime

Categorization of the Domestic Substances List

- The government will complete the categorization requirement by the September 2006 statutory deadline. As a result, the government will have categorized approximately 23,000 commercial substances according to criteria related to their persistence; ability to bioaccumulate; and inherent toxicity to humans or the environment. In addition, Health Canada will have identified those substances on the DSL with the "greatest potential for exposure" to humans.
  - It is anticipated that approximately 4700 chemicals will meet the categorization criteria.
- All substances "categorized in" must undergo a screening assessment.
- Environment Canada and Health Canada are working together to determine priorities for assessment and management for the substances meeting the categorization criteria, and to clearly communicate the meaning of the categorization results.
- Canada will be the first country in the world to have examined the hazardous properties of all of its "existing substances" providing an information baseline on all of those substances.

Conducting Risk Assessments

- The implementation of the Act in relation to risk assessments includes:
  - setting priorities for the numerous substances that will be categorized as requiring a screening assessment, and
    - developing and communicating a realistic timeframe for completing the screening assessments;
  - clarifying and ensuring the systematic application of the weight of evidence approach in risk assessments;
  - grouping substances together for assessments in order to support the development of multi-pollutant and/or sectoral approaches; and
  - working cooperatively with industries in Canada and abroad, other governments, international organizations, and civil society.
- In conducting risk assessments of substances on the DSL, the departments will need to consider the following:
  - Industry has unpublished data on some of the substances, though the costs and workload implications of providing data and filling the information gaps could be substantial for both government and industry.
  - International cooperation is essential to ensure that risk assessments are carried out as efficiently as possible.

- Canadian industry is a relatively minor player in worldwide chemical production, producing approximately two percent of the global total.
- The European Union, with the world's largest chemical industry, has 100,000 existing substances on its inventory, and the U.S. has an inventory of 82,000 substances.
- The importance of collaboration with initiatives such as:
  - the U.S. High Production Volume Challenge Program,
  - the High Production Volume Programme of the International Council of Chemical Associations,
  - the OECD Chemicals Programme, and
  - the International Programme on Chemical Safety of the World Health Organization.
- Monitoring developments with the European Union's REACH proposal for a new approach to chemicals management in Europe.

Adding Substances to Schedule 1

- When the Ministers recommend adding a substance to Schedule 1, the Governor in Council must be satisfied that the substance meets at least one of the criteria in section 64 based on conclusions from the risk assessment or other information.
  - A proposed order for adding the substance must be published in the Canada Gazette for 60 days, to provide an opportunity for public comments.
  - Any member of the public may file a notice of objection along with the reasons for the objection and request a Board of Review be established.
- The addition of the substance to Schedule 1 does not put in place any risk management measures for the substance.
  - Adding a substance to Schedule 1 of CEPA 1999 enables the government to use the regulatory authorities under the Act, such as section 93 regulations or requirements for pollution prevention plans.
- Environment Canada and Health Canada facilitate the Governor in Council decision-making process regarding the addition of substances to Schedule 1 by:
  - developing a risk management strategy that provides information on:
    - the sources and uses of the substance;
    - the sectors targeted for risk management action; and
    - the tool or types of tools to be developed to manage or prevent the risks from this substance.
  - publishing a preliminary version of a risk management strategy at the same time they propose adding a substance to Schedule 1.

Risk Management

- Risk management under CEPA 1999 includes continued efforts to:
  - identify efficient and effective ways to promote pollution prevention;
  - seek policy coherence among environmental and related federal policies;
  - enhance federal-provincial-territorial cooperation;
  - select and design appropriate risk management measures for the particular issue including application of the precautionary principle;
  - ensure that risk management measures promote innovation and continuous improvement by relying on performance-based measures;
  - emphasize multi-pollutant and/or sectoral approaches wherever possible;
  - establish performance targets in risk management measures that correspond to the environmental or health objective for the substance; and
  - measure and report on the effectiveness of risk management actions implemented.

National Consistency

- National consistency secures the same level of environmental and human health protection for all Canadians.
  - It also creates a more level playing field by reducing problems associated with having a patchwork of different regulations across the country being applied to the same industry sectors.
- One model for achieving national consistency is through the use of nationally applied CEPA 1999 regulations, supported by equivalency agreements with jurisdictions that regulate to the same standard.
  - Where an equivalency agreement has been negotiated, the nationally consistent standard will be achieved by allowing the provincial, territorial or aboriginal rules to apply in place of the federal regulation.
  - This eliminates any uncertainty for the regulated community as to which regulation or standard applies.

c) Issues on the Effectiveness of the Existing Substances Regime

Five key areas related to the assessment and management of existing substances have been identified through consultations.

(i)	Risk Assessment of Existing Substances
(ii)	Clarity in Communicating Risks
(iii)	Flexible and Focused Regulations
(iv)	Virtual Elimination Requirements
(v)	Managing the Risks from Substances on Schedule 1 Released from Products

(i) Risk Assessment of Existing Substances

Issues

Accounting for Vulnerable Populations

- The new *Pest Control Products Act* requires the Minister of Health, in evaluating the health and environmental risks of a pest control product, to account for the different sensitivities of major subgroups, including pregnant women, infants and seniors.
- Health Canada routinely accounts for impacts on children and other vulnerable populations in its CEPA risk assessments, even though there is no requirement under CEPA 1999 to do so.

Efficient Information Collection

- CEPA 1999 authorizes the Minister of the Environment to require industry and other producers, importers and users to submit information to Environment Canada (Section 71) to determine whether a substance meets any of the criteria in section 64 of the Act or to determine whether and how to control the substance.
  - Only the Minister of the Environment has this authority.
  - Under CEPA 1999 the Minister of Health assesses risks to human health, but must ask the Minister of the Environment to collect the relevant information.

Substances in Use on the Domestic Substances List (DSL)

- CEPA 1999 requires the Ministers to conduct a screening assessment of every substance on the DSL that meets the categorization criteria.
- As a result, a screening assessment must be performed on any substance that meets the categorization criteria – even if the substance is no longer used in Canada or if all of its uses are already regulated under another federal act.

The U.S. Toxic Substances Control Act gives the Environmental Protection Agency the authority to require industry to submit information on the quantity and use of a substance. The EPA uses this information to update its inventory of substances in commerce.

Stakeholder comments

- Some industry representatives have not been supportive of suggestions to allow the Ministers to update and perhaps remove substances no longer in use from the DSL as this would then require them to follow the new substances route if they were reintroduced.
- Some environmental groups are supportive but would like to ensure that any data on file be retained and that the re-introduction of a substance be treated as a new substance.

(ii) Clarity in Communicating Risks

Issues

- The term "toxic" is used in CEPA 1999 to describe substances that meet the criteria in section 64 of the Act. Most substances that meet these criteria are proposed for addition to the List of Toxic Substances, Schedule 1 of the Act.
  - Over the years, some affected stakeholders have lobbied against having a substance they use or produce as being labelled "toxic" under CEPA 1999.
- CEPA 1999 applies to substances that are both toxic in the common sense of the term, as well as substances that may harm or pose a danger to the environment or human

Criteria for determining Risks

Section 64 sets out three criteria which are used to determine whether or not a substance may present a harmful effect or a danger. A substance is assessed to determine 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;
b) constitute or may constitute a danger to the environment on which life depends; or
c) constitute or may constitute a danger in Canada to human life or health."

health because of the quantity, concentration or condition under which they are released into the environment.

Stakeholder comments

- Views expressed during departmental consultations focused on the confusion caused by the definition of "toxic" in CEPA 1999 as compared to the everyday use of the term. The dictionary definition of toxic means "poisonous".
  - Industry representatives stated that the term creates a stigma for some substances.
    - Some industry groups supported a change in the designation of substances meeting the section 64 criteria.
    - Some environmental and health advocacy groups believe the term "toxic" serves a useful purpose in drawing attention to the need to prevent and manage risks posed by a substance.
  - Other environmental groups suggested that the term causes confusion because a substance may be found to be toxic in another country even though it is not found to be toxic under CEPA 1999. This situation occurs more often when there is a very low use of the substance in Canada.
  - A majority of participants felt there needed to be more explanation as to why substances have been added to Schedule 1 and require much better risk communication.
- Some participants, primarily from civil society organizations, felt that a substance with a low hazard characterization but with high exposure can still cause significant damage to the environment and would require appropriate action.

(iii) Flexible and Focused Regulations

Issues

- In general, federal regulations, including those under CEPA 1999, must apply uniformly to all parties in similar situations.
- CEPA 1999 allows the development of some regulations that apply in only a part or parts of Canada to reflect specific ecological or health related reasons. The legislation does not specify that regulations may be focused on selected provinces or territories.
  - A regulation under CEPA 1999 must apply in all jurisdictions, unless there is a signed equivalency agreement with a particular jurisdiction.
  - The authority in the Act for equivalency agreements with provincial, territorial and aboriginal governments allows for the risk management

tools in these jurisdictions, which have an equivalent effect to a CEPA regulation, to apply to the regulated community rather than the CEPA regulation.

Stakeholder comments

- Some stakeholders have suggested that the Act should authorize the development of regulations that apply only to certain facilities or persons within a sector.
  - These stakeholders argue that this should enable regulations to effectively exclude "leaders" who have gone beyond the regulatory requirements.
  - Some also suggest that there is a need to be able to distinguish between old and new facilities.
- Some industry groups, during departmental consultations, indicated support for the use of focused regulations.
- Some members of civil society organizations were hesitant to have substances assessed under CEPA 1999 and then managed by another department or jurisdiction.
  - However, other members of these organizations stressed that where the federal government decides that an issue is better managed outside of CEPA 1999, the Act must still ensure such decisions are completely transparent.
  - This latter group of participants also felt strongly that the Ministers of the Environment and Health must remain fully accountable for ensuring that the substances are managed effectively, be able to track progress, and be able to act quickly and decisively when other jurisdictions are not managing the risk effectively.
- Provincial governments indicated that they would like to have greater recognition and use of their legislative tools for CEPA-related priorities.

(iv) Virtual Elimination Requirements

Provisions under CEPA 1999 support the virtual elimination of the release of substances that have been recommended for addition to Schedule 1 and are persistent, bioaccumulative, and are present in the environment primarily as a result of human activity and are not naturally occurring.

The Act requires that a Virtual Elimination (VE) List be established for these substances and that:

- For each substance added to the VE List, a level of quantification (LoQ) must be specified,
  - An LoQ is the lowest concentration at which that substance can be measured using sensitive but routine sampling and analytical methods.
- Once the level of quantification has been specified on the VE List, a Ministerial regulation must prescribe a limit on the quantity or concentration of the substance that can be released into the environment (known as the release limit).
- In addition, the substance may also be controlled by other regulations and risk management tools.

Issues

- It was originally anticipated that the virtual elimination provisions would apply mainly to industrial emissions. In practice, many of the substances meeting the criteria for virtual elimination are being found as contaminants in products rather than in emissions.
- For substances contained within a product (e.g. contaminants):
  - It may be scientifically difficult to develop an LoQ and involve costly laboratory testing methods. In some instances, given today's technology, it may not be possible.
  - The requirement in the Act to manage these substances, in the first instance, by providing a maximum limit that can be released into the environment is not practical or effective when attempting to reduce the concentration of a substance in a product.
- With respect to managing the risks posed by substances being proposed to the Virtual Elimination list, there is not always a need for a release limit regulation because:
  - GIC regulations may already exist to manage the risks of some substances such as dioxins and furans that were managed under the 1988 CEPA.
  - the substance may be more appropriately managed in another manner.

Stakeholder comments

- There has been public criticism that the Virtual Elimination List is not complete without the addition of substances such as dioxin and furans.
- Industry groups have expressed mixed opinions as to whether they want to have the virtual elimination provisions reopened for debate during this review of CEPA 1999.

- Most environmental groups have indicated that, in their view, all persistent and bioaccumulative substances should be on the Virtual Elimination List, but not every substance should be required to have an LoQ.

(v) Managing the Risks from Substances on Schedule 1 Released from Products

The use of some products may lead to the creation and release of substances listed on Schedule 1.

Issues

In recent years, Canadians have called for increased attention to managing the risks from substances on Schedule 1 released through the use of a product or from the end-of-lifecycle treatment or disposal of that product.

- CEPA 1999 contains several authorities (in Section 93) relevant to the management of substances and products, including ones which allow for regulating the manufacture of a product containing a Schedule 1 substance.
  - Part 5 of CEPA 1999 cannot regulate the manufacture of a product that releases a substance on Schedule 1 as a by-product of use.
  - This limits the government's ability to manage these risks. (see textbox)
- Other federal Acts also have provisions to manage risks from products.
  - Both CEPA 1999 and the *Hazardous Products Act* have authorities to limit the concentration of a substance in a product.
  - The *Pest Control Products Act* also regulates substances in a very specific set of products.
- The government's implementation of the *Hazardous Products Act* has focused on immediate risks to users of consumer products.
- The *Hazardous Products Act* can regulate the sale, importation and advertisement of a product that poses a public health and safety risk.
  - However, the government cannot use it to control the manufacture of a product.

Woodstoves – An example

- When woodstoves burn fuel they release particulate matter, which is a substance listed on Schedule 1.
- There are provisions in CEPA 1999 that could make it illegal for individual users to release particulate matter in the smoke released from their stove.
- It would, however, be highly impractical to enforce this type of regulation.

- The question of possible regulatory overlap is often raised with respect to the *Hazardous Products Act*.

Stakeholder comments

- Industry perspectives on this question varied from no support for changing CEPA to support for a specific authority for regulating the manufacture of products which release substances on Schedule 1.
- Most civil society groups indicated that CEPA 1999 should have more comprehensive authority to manage risks from products over the lifecycle of the products.

2. National Pollutant Release Inventory (NPRI)

Under the National Pollutant Release Inventory (NPRI), the government requires facilities in Canada to report on the annual amounts of designated pollutants that they release into the environment or transfer offsite. Environment Canada collects this data and makes it available to the public on an annual basis.

As such, the NPRI:

- provides information on releases of pollutants to air, water and land, as well as on transfers of pollutants for disposal and recycling,
- is designed to support decisions about pollution prevention,
- helps monitor the effects of current actions and identify future priorities, and
- informs Canadians about the pollutants released in their communities.

Issues

- Potential users have not relied on NPRI data as widely as initially expected. In particular, concerns have been expressed about the reliability of the information reported under the NPRI.
- The Act requires those reporting information to retain records for three years.
- Concerns have been expressed about the administrative complexity of the current NPRI reporting requirements.
    - Environment Canada has acknowledged this concern, and is working to reduce complexity and improve guidance. For example, it is working with various provinces to develop a multi-functional, “one window” reporting system.

Stakeholder comments

- Most participants during departmental consultations supported improving the quality of information collected and reported through the NPRI.
    - Industry would like to have simplified reporting requirements,
    - Civil society groups expressed the need for more reliable information.

3. Equivalency and Administrative Agreements

- Under CEPA 1999, the Minister of the Environment is authorized to sign equivalency and administrative agreements with provincial, territorial and Aboriginal governments.
- These agreements support intergovernmental cooperation, coherence and harmonization.

Equivalency agreements

- These are agreements that a CEPA 1999 regulation will no longer apply in a province, a territory or an area under the jurisdiction of an Aboriginal government that has equivalent requirements to the CEPA 1999 regulation and mechanisms for citizens to request an investigation.
  - Under CEPA 1988, an equivalency agreement was entered into with the province of Alberta and addressed four regulations.
  - No new agreements have been entered into since CEPA 1999 came into effect.
  - There is interest in developing more equivalency agreements.

Administrative agreements

- These are work-sharing arrangements that can authorize provincial, territorial or Aboriginal government officials to undertake work under CEPA 1999 on behalf of the federal government, on activities such as monitoring, inspections and investigations.
  - They do not release the federal government from its responsibilities under the Act, nor do they delegate legislative power.
  - Several such agreements have been entered into.

Issues

- In order to use equivalency agreements there must be provisions in force by or under a provincial, territorial or Aboriginal government law that are equivalent to the CEPA 1999 regulation.
- Many provinces and territories use a permitting system instead of regulations to impose enforceable standards on facilities.
  - While this type of regime is not specifically recognized in CEPA 1999 as eligible for an equivalency agreement, it could be if the effect produced is equivalent to that in the CEPA regulation.
- The other jurisdiction must also have in its legislation the same citizens' rights to request an investigation of alleged offences as are established under sections 17 to 20 of CEPA 1999.

  - Not all jurisdictions have these rights enshrined in legislation.
- CEPA 1999 requires that all equivalency and administrative agreements terminate five years after coming into force.

Stakeholder comments

- Provinces and territories have indicated their support for having a more flexible timeframe for reviewing agreements without necessarily terminating the agreements at a predetermined time.
  - Some civil society groups have expressed concern about performance and accountability under the agreements.

4. Managing Canadian Sources of International Pollution

CEPA 1999 allows the federal government to require emissions reductions from a facility or source in Canada where those emissions affect another country or risk impeding the fulfillment of Canada's commitment under an international agreement.

- These provisions enable the Governor in Council to make regulations, and provide authority to the Minister of the Environment to require a pollution prevention plan for any substance released from a source in Canada into air or water that either creates or may contribute to:
  - air or water pollution in another country; or
  - air or water pollution that violates or is likely to violate an international agreement that is binding on Canada.
- The Ministers of the Environment and Health share the responsibility for determining if the substance is a source of international air or water pollution.
  - Only the Minister of Environment is responsible for taking action to deal with the source of pollution.
  - These provisions can apply to any substance that causes pollution, and are not limited to substances that meet the criteria in section 64 and are on Schedule 1.
- The Act sets out the basic consultation process that must be followed by the Minister of the Environment.
  - First, consulting with the government(s) responsible for the area where the source is situated to determine if that government can address the problem.
  - If the other government can act, the Minister must offer it an opportunity to do so.
  - If the other government cannot or does not act, the Minister must then seek approval from the Governor in Council to use the pollution prevention planning provisions of CEPA 1999 or must recommend that a regulation be made to prevent, control or correct the pollution.

"air pollution" / "water pollution" means a condition of the air / water, arising wholly or partly from the presence in the air / water of any substance, that directly or indirectly

(*a*) endangers the health, safety or welfare of humans;

(*b*) interferes with the normal enjoyment of life or property;

(*c*) endangers the health of animal life;

(*d*) causes damage to plant life or to property; or

(*e*) degrades or alters, or forms part of a process of degradation or alteration of, an ecosystem to an extent that is detrimental to its use by humans, animals or plants.

CEPA 1999, sec. 3 & sec. 175

  - There is also an obligation to notify the government of any country that would be affected or benefit from the regulation before it is published in *Canada Gazette* for consultation.

- A mandatory board of review may be triggered by any person filing a notice of objection concerning the danger posed by the release of the substance.
  - Until completion of a board of review and preparation of a final report the development of a regulation cannot proceed.

Issues

- The Act does not specify criteria to determine when the Minister of the Environment may take action.

Stakeholder comments

- Some environmental groups would like to have the international air pollution provisions of CEPA strengthened by removing constraints on direct federal action.

5. New Substances and Animate Products of Biotechnology

- The new substances provisions of CEPA 1999 are an integral part of the government's approach to pollution prevention by helping to identify and avoid environmental and human health risks before they arise.
  - The New Substances Program was created under the 1988 CEPA.
  - Regulations for notifying new chemicals and polymers came into force in 1994.
  - Regulations for new biotechnology products came into force in 1997.
- The 1988 CEPA established the Domestic Substances List (DSL) which included all substances in commerce in Canada in the mid-1980s.
- Any substance not on the DSL is considered a new substance.
  - Anyone wanting to import or manufacture a new substance must
    - notify Environment Canada
    - submit the information specified in the regulations, and
    - pay a fee[8].
  - This allow the government to assess the potential risks from the substance and, if necessary, to prohibit or impose controls on the substance.
- Canada can provide other national regulatory agencies with the assessment information upon which decisions were based, provided the notifying company agrees and the receiving country assures against disclosure of confidential business information.

"New industrial chemicals notification and assessment schemes have been established in the majority of OECD Member states, creating a range of notification and assessment requirements. While they have been instrumental in reducing risks of chemicals to human health and the environment, the diversity of schemes and requirements between the countries brings complexity both to industry and government. One of the recommendations of the *1996 OECD Workshop on Sharing Information about New Industrial Chemicals Assessment* was to encourage sharing of information about new industrial chemicals notification and assessment." (www.oecd.org)

Issues

Recognition of new substances notifications and assessments from other countries

- Some substances that are new to Canada may have already been assessed in other countries.

[8] The fees cover about one-quarter of the costs of processing the approximately 800 notifications received each year.

  - Environment Canada and Health Canada are actively working with other countries towards promoting international cooperation on the notification and assessment of new chemicals.
  - Current work in the Organization for Economic Co-operation and Development (OECD) is focused on developing a standard notification package for new substances that could be used in all countries.

The Australian Industrial Chemicals (Notification and Assessment) Act 1989 sets up a regime which allows for formal recognition of a notification and assessment program in another jurisdiction, where these are of an equivalent standard to those under their own Act. To import or manufacture a substance new to Australia but previously assessed in another recognized state, one must still notify and provide the required information on the chemical substances, including the assessment report prepared by the other jurisdiction. Australia is working towards recognizing Canada as a "competent authority" under this regime.

- Under CEPA 1999, the results of an assessment conducted in another jurisdiction must be reviewed for their relevance to Canada and to ensure equivalent standards were met.

Prohibiting the Sale or Use of New Substances

- Parts 5 and 6 of CEPA 1999 prohibit the manufacture and import of a new substance or products of biotechnology until the Minister of the Environment has been notified and an assessment period has expired.
  - Enforcement actions cannot, however, be taken against a third party offering a substance for sale, even if it entered the country or was manufactured illegally.

Remedial Measures for Animate Products of Biotechnology

- CEPA 1999 provides the authority to impose remedial measures for substances on Schedule 1 and for nutrients and fuels.
  - These authorities allow the Minister of the Environment to require that a manufacturer, processor, importer, retailer or distributor give public notice that a substance or product presents a danger to the environment or human health.
  - The Minister can also require manufacturers, processors, importers, retailers or distributors to accept return of the substance or product or to reimburse the purchase price to the purchaser.
- Part 6 of the Act does not provide similar authority for animate products of biotechnology.

6. Disposal at Sea

Under CEPA 1999, a permit system is prescribed for controlling the disposal of wastes at sea.[9]

- Permits for ocean disposal are only considered for the six classes of substances listed in Schedule 5, in keeping with international commitments.

Canada's disposal at sea permit system has been in place since 1975, and meets Canada's obligations under the London Convention and its 1996 Protocol.

- Permits are issued only if the proponent demonstrates that:
  - there are no practicable uses for the material,
  - disposal at sea is acceptable and is the best option based on criteria such as environmental and health impacts and economic factors.

Environment Canada recovers the administrative costs of processing permits and of monitoring representative disposal sites.

Issues

Requirement to Publish Permits in the Canada Gazette

- Under the Act, applicants for a permit must publish a notice of the application in a local newspaper.
- Environment Canada must also publish the permits and any amendments in the Canada Gazette for 30 days before they come into force.
  - Only one notice of objection has been received from the public through this process since CEPA 1999 came into force.

Permit Terms

- A permit must specify that it is valid for a particular date or dates or for a particular period that shall not exceed one year.

Stakeholder comments

- Permit holders who dispose of dredged material at locations with no history of contamination have requested permits that are for longer than the one-year maximum allowed under CEPA 1999.

[9] Basic information on permits issued under CEPA 1999 is available online at the CEPA Environmental Registry. All proposed disposal at sea projects are also reviewed under the Canadian Environmental Assessment Act and available through the registry established under that act.

7. Vehicle and Engine Emissions

The authorities in CEPA 1999 to regulate vehicles, engines and fuels allow the federal government to control emissions from on-road vehicles and a wide range of off-road engines such as those for lawnmowers and bulldozers.

- The Vehicle, Engines and Fuels Program established under the Act seeks to mirror the effective aspects of other countries' regulations, including those in the U.S. under its Clean Air Act.
- This approach can facilitate trade and economic development while promoting environmental protection.

Issues

- Not all of the authorities contained in the U.S. Clean Air Act are found in CEPA 1999 and therefore some provisions of U.S. regulations cannot be duplicated in regulations made under CEPA 1999.

Stakeholder comments

- Industry is generally supportive of aligning vehicle, engine and fuel standards with the U.S.
    - some industry associations would prefer that an industry not be regulated if it is already voluntarily implementing a standard.

8. Hazardous Waste and Hazardous Recyclable Materials

- CEPA 1999 provides authorities to ensure that the transboundary movement of hazardous wastes and hazardous recyclable materials occurs in an environmentally sound manner.
- Provincial and territorial governments also play important roles:
  - o regulating the transportation of dangerous goods within their boundaries,
  - o regulating sites, design and operation of disposal and treatment facilities.
- CEPA 1999 and associated regulations require
  - o notification and consent from the receiving jurisdiction,
  - o compliance with various conditions and procedures.

CEPA 1999 helps implement Canada's obligations under the:

- *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;*
- *OECD Decision Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations; and*
- *Canada-U.S.A. Agreement Concerning the Transboundary Movement of Hazardous Waste.*

- The Act provides authority to require an exporter to prepare a plan "for the purpose of reducing or phasing out the export of hazardous waste or prescribed non-hazardous waste for disposal."
  - o The Minister has not used this provision to date.

Issues

- The terms of an import or export permit cannot be changed, once it has been issued, even if circumstances change, nor may conditions related to the duration of the permit or the conditions under which it may become invalid be included.
- Waste reduction plans are applied to the exporters of that waste and focus on reducing exports but do not affect or reduce the quantity of waste being generated.

Stakeholder comments

- Some industry groups have expressed support for removing the provisions for waste reduction plans.
- Most environmental groups would prefer to see the generators of the hazardous waste be responsible for reducing the waste.

- Some environmental groups have expressed support for revoking or changing the terms of a permit, while some industry representatives are not supportive.

9. Environmental Emergencies Officers

Approximately 10,000 reports of unplanned, uncontrolled, or accidental releases into the environment are received by Environment Canada annually.

- Many of these releases have a minor impact on the environment and public safety, however, some can pose a danger to the environment or human health.
- Effective response to these types of events requires teamwork among all levels of government, industry, communities and local organizations.

CEPA 1999 provides that

- when a release that can pose danger to the environment or human health occurs,
  - the person who owns or is in charge of the substance must take remedial measures to protect the environment and public safety.
- when a person fails to takes any measures,
  - a CEPA “enforcement officer" may take the appropriate measures or direct someone else to take those measures.

In these circumstances, the “enforcement officer” is in actual fact performing functions related only to environmental emergencies.

- Environment Canada has specific officers who are experts in responding to environmental emergencies.

Issues

- Environment Canada’s specific environmental emergencies officers have an important role to play in the response to unplanned pollutant releases:
  - however, CEPA 1999 does not recognize these environmental emergencies officers,
  - thus, in order to fulfill their functions, they must be designated as enforcement officers.

Stakeholder comments

- The regulated community has indicated that the designation of environmental emergencies officers as enforcement officers has led to some confusion.

10. Enforcement

Compliance with CEPA 1999 is achieved through both compliance promotion and enforcement activities.

- Compliance promotion activities include:
  - direct communication with the regulated community and members of the public;
  - distribution of fact sheets, guidelines, reports, and technical bulletins, as well as the CEPA 1999 Compliance and Enforcement Policy[10;]
  - provision of information on Environment Canada's Enforcement Website[11] and the CEPA Environmental Registry; and
  - promotion of environmental audits.
- Enforcement activities include:
  - inspections to verify compliance;
  - investigations of alleged offences;
  - other forms of intelligence gathering;
  - measures to compel compliance without resorting to formal court proceedings (e.g. warnings, tickets, environmental protection compliance orders, and orders by the Minister of the Environment); and
  - measures to compel compliance through court actions (e.g. environmental protection alternative measures, injunctions, prosecutions, court orders upon conviction, and civil suits for recovery of costs).
- Many of these powers and tools were first introduced in CEPA 1999.
- In addition, the enforcement function of Environment Canada underwent considerable public scrutiny in the late 1990s.
  - It was recognized that Environment Canada did not have adequate human and financial resources or effective administrative structures in place to secure compliance with the Act.
- Environment Canada continues to focus on increasing the effectiveness of its compliance promotion and enforcement programs.
  - Significant new resources for these activities were included in Budget 2003.
  - The department recently introduced a compliance assurance program to monitor, evaluate and help prioritize and target compliance promotion and enforcement initiatives.

[10] available at: www.ec.gc.ca/CEPARegistry/enforcement/
[11] http://www.ec.gc.ca/ele-ale/home/home_e.asp

Issues

Sharing of information among Enforcement Agencies

- Enforcement officers must gather information and intelligence in the course of their inspection, investigation and other enforcement activities.
- Some of this information can be useful to other law enforcement agencies, which often have their own information and intelligence that would be of use to CEPA 1999 enforcement officers.
- A memorandum of understanding is in place to allow for this sharing of information among agencies.
    - There is no explicit mention in CEPA 1999 of these types of information sharing agreements, except for the exchange of confidential information.

Authority to rely on labels during hearings

- The Act authorizes enforcement officers to present documented evidence during a prosecution to describe the contents of a container or means of transport, in cases where there are no samples of the contents.
- Generally, if a person represents something in a container or means of transport to be a particular toxic substance, hazardous waste or hazardous recyclable material by means of a label or symbol, then for the purposes of a prosecution, the substance is deemed to be as identified by that label or symbol.
- This same explicit deeming provision does not exist for an Environmental Protection Compliance Order (EPCO) hearing.

Penalty provisions to support tradeable units systems

- Tradeable units systems provide a means of internalizing the cost of pollution. In order for an adequate incentive structure to be in place for a company to comply with the system, the penalty for non-compliance must be higher than the cost of purchasing units.
- A current challenge with establishing tradeable units systems under CEPA 1999 is having penalty provisions to support their efficient implementation. This is a particularly evident in attempting to establish a cross-border trading system with the United States. The US relies on a penalty system that differs from that available under CEPA 1999.

11. Economic Instruments

CEPA 1999 authorizes three types of economic instruments:

- Deposit refund schemes
- Tradeable units
- Regulations prescribing fees

The program evaluation of Environment Canada's implementation of CEPA 1999 observed that

- There has been little use of the economic instruments authorized under the Act.
- The limitations associated with tradeable units and fees restrict the ability of the federal government to manage risks as efficiently as possible.

A 2004 report from the OECD[12] recommended that the Government of Canada increase the use of economic instruments as a matter of urgency for seeking affordable solutions and appropriate cost sharing to reduce environmental degradation.

Issues

Deposit refund schemes

- Deposit refund schemes are currently used primarily by the provinces and municipalities for waste management issues.

Tradeable units

- Two regulations under CEPA 1999 currently provide for tradeable units to encourage the reduction of ozone depleting substances and solvents used for degreasing processes.

Regulations prescribing fees

- Regulations may prescribe fees for a variety of services, the use of a facility, for any process or approval, or for a right or privilege.
  - fees are generally restricted to administrative costs.

[12] 2004 **OECD Environmental Performance Reviews: Canada,** pg. 125

Stakeholder comments

- Some civil society groups have indicated that additional authority for economic instruments under CEPA 1999 should be pursued, and have called for the government to make better use of the polluter pays principle.
- Some industry groups have indicated support for increasing the use of economic instruments to provide more incentives but were cautious until the impacts on competitiveness and other factors were better understood.

12. The Mandatory Review Period

Under Section 343 of CEPA 1999, a Parliamentary Review of "the provisions and operation" of the Act is required every five years.

Issues

- A reasonable review period needs to balance the need to keep legislation current against the need to have adequate implementation experience with the legislation.
- Legislative reviews are a time and labour-intensive process involving parliamentarians, departmental officials and stakeholders.
- More recently, review periods of seven years have been set for some federal legislation. (e.g., the *Canadian Environmental Assessment Act*, as amended in 2003).

Stakeholder comments

- Participants in the departmental consultations commented that:
  - the Parliamentary Review should not distract from continuing to improve the implementation of the Act, and
  - a review after five years may be too soon, particularly given the substantial changes that had been made to CEPA 1999.

Section 3

Broader Challenges

– BROADER CHALLENGES –

Three broad challenges which relate to the Act's mandate have been identified through consultations.

1. Environmental protection on federal operations and activities on federal lands;
2. Environmental protection on Aboriginal lands; and
3. Horizontal governance of biotechnology and other emerging technologies

CEPA 1999 could continue to have a role in the future policy responses to these broader challenges.

- The effective governance of each of these issues, however, will continue to require consideration of a wide range of roles, not only within the federal government but also among different jurisdictions and other interests.

Context for Federal and Aboriginal Lands

- Under Canada's Constitution, federal laws of general application, including CEPA 1999, apply on all lands in Canada, including federal and Aboriginal lands.
- Provincial, territorial and municipal environmental laws generally do not apply to federal operations or to activities on federal and Aboriginal lands. As a result there is a "regulatory gap".

This regulatory gap on federal and Aboriginal lands extends beyond the scope of CEPA 1999, encompassing a broad range of environmental management issues, such as potable water and resource management.

- Under Part 9 of CEPA 1999, nationally applied regulations and other measures can be developed to manage many, but not all, of the environmental protection risks on federal and Aboriginal lands that would otherwise be addressed by provincial and territorial legislation.
  - Activities such as natural resource management, land use management and drinking water quality are some of the activities

managed by provincial governments that are **not** within the mandate of CEPA 1999.

- Instruments developed under Part 9 of CEPA 1999 must have the same level of protection for federal and aboriginal lands across the country.
  - As many environmental protection standards tend to vary province by province, commercial and industrial activity on federal and Aboriginal land operating under a Part 9 regulation may have different standards and processes to follow than their competitors on provincial land.
- Environment Canada's independent Program Evaluation found that more work needs to be done to create a strategic risk-based and cooperative approach to the establishment of environmental protection standards for federal operations and activities on federal and Aboriginal lands.

1. Federal Operations and Activities on Federal Lands

The issues have been organized into the following categories:

(1.1) Federal lands and activities south of 60°

Background

- The Government of Canada engages in a wide variety of activities and operations on and off federal lands throughout the country including:
  - industrial and commercial facilities such as ports and airports,
  - industrial activities such as shipbuilding,
  - aircraft maintenance,
  - laboratory research,
  - agricultural activities, and
  - handling of hazardous materials.
- Some federal lands have commercial activities that are managed by non-government third parties.
- The federal government has a long-standing policy commitment to hold its operations on federal lands to at least the same environmental standards as apply on neighbouring lands.
  - For example, the 1992 Federal Code of Environmental Stewardship and the 1995 Guide to Green Government and Directions on Greening Government Operations.
  - A number of federal departments have developed environmental management systems to manage risks from their activities.
- The Canadian Council of Ministers of the Environment (CCME) has stated that Ministers would like to see at least the same level of environmental protection on federal lands as exists on neighbouring lands.
  - They have expressed an interest in being engaged on this issue, as they are concerned about the risks to provincial lands from unregulated activities on neighbouring federal lands.

Examples of federal actions to manage risks on federal lands

- For federal government operations, Public Works and Government Services Canada promotes a "good neighbour" policy, environmental management systems and green procurement.
- The government has committed $3.5 Billion to address federal contaminated sites.
- There are three regulations under CEPA Part 9, relating to halocarbons, PCBs and petroleum storage tanks on federal lands.

Issues

- The government has made limited use of Part 9 to address federal activities and lands.
- The government's ability to manage risks from third party commercial activity on federal lands is quite limited.
  - The federal policy commitments for federal operations are not binding on third party commercial activity on federal lands.
  - Provincial environmental laws do not generally apply to these activities, because they occur on federal lands.
  - Part 9 instruments cannot be adjusted to match the different standards in provinces.

(1.2) Federal lands north of 60°

Background

- The environmental regulatory regime for lands north of the 60° parallel is quite different from the regime for lands south of 60°.
- In the Yukon, the federal government has devolved its authorities over land, water and resources to the Territorial Government.
  - Part 9 of CEPA 1999 was amended so that it no longer applies to public lands in the Yukon that are under the control of the Commissioner of the Yukon.
  - It was decided that the authorities available to the Yukon Government are better-situated to manage the provincial type of environmental management tasks on those lands.
  - The provisions of Part 9 still apply to federal lands in the Yukon, such as federal parks.
- Similar authorities have not been devolved to the Northwest Territories and Nunavut, though the devolution process is underway.

Examples of Indian and Northern Affairs Canada authorities North of 60

- *Territorial Lands Act* regulations over subjects such as land alterations, mining; oil and gas, coal, dredging, and quarrying.
- *NWT Waters Act* and its water regulation provide authority over water use and disposal and is administered regionally by water boards.
- *Mackenzie Valley Resource Management Act* and its regulations governs land and water use in Mackenzie Valley. The Mackenzie Valley Environmental Impact Review Board is the main instrument for the environmental assessment and environmental impact review of developments.
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act* governs water and surface land use in Nunavut.

  - Currently, in most parts of the Northwest Territories (NWT) and Nunavut, the Minister of Indian and Northern Affairs continues to have a role as manager of lands, waters and resources.

- The Governments of NWT and Nunavut have province-like law-making authority over land, water and air issues on Commissioner's lands.
  - These are territorial lands whose administration and control of surface lands have been transferred from the federal government to these territorial governments for community settlement purposes.
  - Commissioner's lands represent approximately 3% of the land in the north but a relatively high proportion of land use activity occurs on these lands.
  - The federal Minister of Indian and Northern Affairs' water and land authorities still generally apply to Commissioner's lands,
    - these authorities are often delivered through regional land and water boards.
- The Government of Canada has the direct responsibility for management and use of the remaining 97% of the non-Commissioner lands in the NWT and Nunavut.

Issues

- Territorial governments have authority to regulate matters, similar to CEPA Part 9, on Commissioner's lands, creating the potential for regulatory overlap.
- While the potential exists, there is currently very little regulatory overlap.
  - There are currently only three regulations under Part 9. They address issues related to halocarbons, PCB (polychlorinated biphenyls) destruction and petroleum storage tanks.
  - Both the NWT and Nunavut have regulations related to aspects of petroleum storage tanks (spill contingency planning and reporting and fire prevention).
    - Neither has regulations relating to the release of halocarbons or PCB treatment and destruction.
- Under CEPA 1999, regulatory overlap can be avoided through the use of equivalency or administrative agreements.
  - Under an equivalency agreement, only the territorial regulation would be in force in that jurisdiction
  - Under an administrative agreement, both regulations would be administered by the territorial government.

2. Aboriginal Lands

The issues have been organized into the following categories:

(2.1) First Nation Reserves

Background

- Authorities under the *Indian Act*, as well as First Nations' interest in self-government, differentiate *Indian Act* reserves[13] from other federal lands.
  - First Nation reserves are federal lands that are held solely for use and benefit of First Nations people.
- Residential, institutional, commercial, industrial and municipal-like activities occur on First Nation reserves.
  - These activities include
    - gas stations and repair garages,
    - mining operations and pits and quarries,
    - dry cleaning plants,
    - asphalt plants,
    - electric power plants,
    - agricultural activities,
    - tanneries, and
    - at least one plastics plant.

Some large industrial activities on reserves are managed by two laws which are now in force,
- the *First Nations Oil and Gas and Moneys Management Act* (FNOGMMA) and
- the *First Nations Commercial and Industrial Development Act* (FNCIDA).

Issues

- The limited authorities of First Nation governments for environmental protection under the *Indian Act* and their aspirations towards greater environmental management control and capacities in a manner consistent with the transition to self-government represent a key challenge in reducing the environmental protection regulatory gap on reserve.
- Under the *Indian Act*, Band Councils and the government of Canada both have land management and limited environmental authorities on reserves.

[13] To be called First Nation reserves for remainder of document.

  - At present, these authorities provide an incomplete environmental protection regulatory regime.

- Part 9 of CEPA 1999 has authorities to develop regulations and other measures to manage many, but not all, of the environmental risks on First Nation reserves that would otherwise be addressed by provincial laws. There are two main limitations with these authorities, however.
  - First, instruments developed under Part 9 must be applied uniformly and have the same environmental protection standards throughout Canada.
    - This means that economic activities on a First Nation reserve operating under a Part 9 regulation may have different standards and processes than off-reserve activities operating under the neighbouring provincial regime.
  - Second, the environmental regulatory gap on many reserves extends to matters beyond the scope of authority of CEPA 1999.
    - The broader regulatory gap comprises the full range of environmental management issues, such as potable water and natural resource management and cannot be addressed by CEPA 1999 alone.

- The reserve land base is expected to double over the next 15 to 20 years through Treaty Land Entitlement and Additions to Reserve processes leading to a likely increase in residential, institutional, commercial, industrial and municipal-like activities.
- The environmental regulatory gap may be limiting, in part, the potential for economic activity on reserves.

Some Current Approaches to Addressing Legal Authorities and Governance Capacity on Aboriginal Land

- The *First Nations Land Management Act* and some self-government agreements (Nisga'a, Nunatsiavut, Tlicho) provide for self-government over environmental management. These approaches can address some regulatory gap issues for participating First Nations, but do not address the gap with respect to a majority of the activities on most First Nation reserves.

Stakeholder comments

- The Assembly of First Nations and the CCME have expressed strong interest in being engaged in discussions on the environmental management regulatory gap on First Nation reserves.

(2.2) Aboriginal Self-government

Issue

- The environmental protection regulatory gap can potentially be filled when First Nation governments have authorities for environmental protection in a comprehensive self-government agreement or in a sectoral self-government agreement, as are authorized in the *First Nations Land Management Act* for example.
- CEPA 1999 requires the inclusion of Aboriginal governments on the CEPA NAC.
  - An Aboriginal government is defined as a body established by an agreement between the Crown and Aboriginal people that has the authority to enact environmental protection laws.
  - This definition was used to ensure that these Aboriginal governments were included in intergovernmental discussions on environmental and human health protection.
  - To date there are few self-government agreements or environmental management regimes under the *First Nations Land Management Act*.
- There are currently only two Aboriginal representatives on CEPA NAC.
  - This is the result of the limited number of self-government agreements.
  - Consequently, the use of the CEPA NAC as a government-to-government forum for cooperative approaches between the federal and Aboriginal governments has been very limited to date.

Stakeholder comments

- Aboriginal organizations have raised concerns about the effectiveness of the CEPA NAC along with concerns regarding their involvement in work under CEPA 1999.

3. Managing the Risks of Products of Biotechnology and Emerging Technologies

Background

- CEPA 1999 was designed to support an approach in which each federal department and agency with expertise related to specific classes of products of biotechnology takes responsibility for assessing and managing new living organisms within its area of expertise.
- Part 6 of CEPA 1999 establishes the federal benchmark for the notification and assessment of environmental and health risks from biotechnology products.
- Any federal law and its regulations that Cabinet determines provides for equivalent notification and assessment procedures and standards equivalent to those in Part 6 of CEPA 1999 can take full responsibility for assessing and managing these risks.
    - As is the case with new chemicals and polymers, any new animate product of biotechnology that is not covered by another equivalent law is covered by the new substances provisions of CEPA 1999.

Schedule 4 lists five statutes and related regulations that meet the CEPA 1999 benchmark for living organisms:

- four Canadian Food Inspection Agency Acts (*Fertilizers Act*, *Seeds Act*, *Health of Animals Act* and *Feeds Act*) and
- the Pest Management Regulatory Agency's *Pest Control Products Act*.

Living organisms covered under these Acts are exempt from CEPA 1999's notification and assessment provisions.

In the case of other federal legislation that do not meet the CEPA benchmark, Environment Canada and Health Canada have negotiated arrangements to ensure that those departments provide their expertise to support assessments under CEPA 1999.

Issues

- Industry Canada is leading a multi-year interdepartmental initiative to renew the Canadian Biotechnology Strategy.
    - An objective of this initiative is to clarify the federal policy and regulatory framework for biotechnology.
    - Once this federal policy framework has been developed, an action plan to strengthen interdepartmental cooperation, better define regulatory responsibilities and enhance capacity will be developed.
    - Development of the action plan will involve those that have regulatory responsibilities for products of biotechnology, namely the Canadian Food Inspection Agency, Fisheries and Oceans Canada, Health Canada and Environment Canada.

- An important element of the action plan is the development of mechanisms to facilitate the notification and assessment of new biotechnology products.
- Federal officials also are considering how existing regulatory regimes may need to be adapted to better address emerging technologies, such as nanotechnology and bio-based molecular production systems (which use plants and animals to produce pharmaceuticals and other products).

Although Environment Canada and Health Canada are required under CEPA 1999 to assess any new living organism that is not adequately covered under another federal law, the challenge, of responding to new living organisms demands expertise that is often found only in other departments.

Stakeholder comments

- Several external expert groups, including the Royal Society of Canada, the External Advisory Committee on Smart Regulations, and the Canadian Biotechnology Advisory Committee, have identified a growing need for a more comprehensive and coherent federal framework for biotechnology.

Section 4

Conclusion

– CONCLUSION –

- This Paper seeks to contribute to the Parliamentary Review by providing background information on key issues.
- Environment Canada and Health Canada have prepared this Issues Paper based on their experience in implementing CEPA 1999 and on a series of consultations conducted with interested Canadians.
- The consultations indicated that CEPA is a fundamentally sound Act, and that the Reviews provide opportunities to make a good Act even better.
- The independent program evaluations commissioned by Environment Canada and Health Canada and the results of consultations in preparation for the Review indicate that considerable progress has been made during the last six years of implementing the Act. It was also recognized that further improvements could be made in implementing the full range of authorities currently provided by CEPA 1999.

Appendices

APPENDIX A

Activities Undertaken By Environment Canada and Health Canada to Prepare for the Review

This Issues Paper reflects the extensive work undertaken by Environment Canada and Health Canada to prepare for the Parliamentary Review and to provide opportunities for the public to comment on the experience with CEPA 1999.

The work of the departments included the following activities:

- In 2001, Environment Canada assessed its implementation of each of the main elements of the Act.
  - Following the identification of legal obligations, best practices and external challenges, these assessments helped the department develop strategic directions to guide its implementation of the Act.
  - In 2003, Environment Canada received additional funds to help implement some of the new directions identified by these reviews.
- Health Canada undertook a review of its operational activities under the Act in 2001, and received additional funding in 2003 to help offset funds from a previous allocation that were ending.
  - More recently, Budget 2005 provided an additional increase of $89.9 M over 5 years to ensure that they would be better able to meet their legislative obligations under the Act.
- A group of officials from Environment Canada and Health Canada participated in an exercise in fiscal year 2003-2004 to review the process and apply lessons learned from the Parliamentary Review of the 1988 CEPA.
- In fiscal year 2004-2005, each department commissioned independent evaluations of their implementation of the Act. (available at www.ec.gc.ca/CEPARegistry/)
- During 2004 and 2005, a sub-committee of the Canadian Council of Ministers of the Environment (CCME) provided its views and advice to Environment Canada and Health Canada on challenges in the implementation of CEPA 1999 and with some of its provisions.
- Starting in the spring of 2004, Environment Canada and Health Canada began to collect the views of the Canadians affected by CEPA 1999.
  - The departments benefited from the advice of a committee representing a broad cross-section of federal, provincial and municipal

governments, Aboriginal organizations, industry and business interests and civil society (including environmental, public health and labour groups).

- The committee provided advice on the public participation process, including issues to address in preparing for the Parliamentary Review.
- Departmental officials then prepared a "Scoping the Issues" paper identifying the issues that could benefit from public input.
- The scoping paper was made available for comment on the CEPA Environmental Registry (www.ec.gc.ca/CEPARegistry/).
- Environment Canada and Health Canada also conducted six regional public workshops across Canada in early 2005 to receive input on key issues identified by the public.

- In parallel with the public consultation efforts, Environment Canada funded the Assembly of First Nations, the Inuit Tapiriit Kanatami and the Métis National Council to raise awareness of CEPA 1999 among their members and to identify relevant issues.
- The interactions with Aboriginal organizations, as well as the comments received from the web-based consultations and the public sessions, were particularly helpful in shaping the issues outlined in this Paper.

A summary report of the public consultations and the web-based consultations is available at www.ec.gc.ca/CEPARegistry/.

APPENDIX B

Progress in Assessing and Managing Risks from Existing Substances

The requirements in CEPA 1999 for the risk assessment of existing substances are unique, and make Canada a world leader.

Environment Canada and Health Canada have made significant progress in implementing these requirements:

Priority Substances List:

- All but two of the Priority Substances Lists 1 and 2 assessments established under the 1988 CEPA are finished.
- Of the 69 substances on Priority Substances Lists 1 and 2, 46 have been found to meet the criteria in section 64, 21 do not meet the section 64 criteria and two assessments have been suspended to collect necessary data.
- These assessments represent about 550 substances, because some Priority Substances Lists assessments addressed groups of substances.

Decisions of other jurisdictions:

- In order to develop procedures to implement the requirement to review decisions of other jurisdictions, the departments have reviewed about 80 foreign decisions to prohibit or restrict substances.

Categorization:

- The departments are on track to complete the categorization process by the 2006 deadline.
- They have developed and consulted on approaches for applying the categorization criteria to different types of substances (for example, organics, inorganics) and are seeking public comments on preliminary categorization decisions regarding about 15,000 Domestic Substances List substances.

Screening assessments:

- A pilot project for 123 substances will test screening assessment procedures. In 2004, the departments published draft screening assessments on two groups of compounds (representing almost 60 substances).

Canada's approach to risk management has emphasized pollution prevention.

- The numerous risk management activities taken under CEPA 1999 include
  - the development of regulations, guidelines, and codes of practice, and
  - new, innovative types of risk management measures, such as extended producer responsibility, pollution prevention planning and environmental emergency regulations that mandate provision of information and preparation and implementation of environmental emergency plans.
- A wide range of non-statutory measures have also been used, including
  - challenge, recognition and technical assistance and training programs, such as the highly successful EnviroClub.
- Environment Canada is also working through the Canadian Council of Ministers of the Environment on Canada-wide Standards (12 such standards developed to date) and through other federal-provincial-territorial cooperative initiatives, including
  - a Canada-wide strategy on municipal wastewater effluents
  - industry-federal-provincial cooperative projects to reduce air emissions from oil refineries and pulp and paper mills.
- Following the development of the Policy Framework on Environmental Performance Agreements, the Minister of the Environment has also made increased use of such industry-government agreements.