

**Pollution Prevention (P2) / Promoting Safe Alternatives – Improving the CEPA  
ENGO Delegation to the Parliamentary Review of CEPA 1999  
October 2005**

**Summary**

- Common notions such as the three Rs - “Reduce, Reuse and Recycle”, “Don’t Litter”, and the “One-Tonne Challenge” for climate can describe pollution prevention (P2).
- In the CEPA context, pollution prevention is described as "the use of processes, practices, materials, products, substances or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health."
- In 1995, the Government of Canada committed to demonstrating continuous improvement towards pollution prevention as a means of achieving sustainability. This premise for the CEPA 1999 legislation was supposed to prevent pollution (proactive measures) instead of managing pollutants after they have been created (end-of-pipe).
- Governments and companies around the globe have embraced pollution prevention techniques because the combination of defined environmental objectives with efficient business practices leads to reduced costs and liabilities, and healthier populations.
- In Canada, despite government and industry efforts to control pollution, which are often based on voluntary, as opposed to regulatory, measures, the volume of dangerous chemicals released into the environment continues to increase.
- Specific measures are needed in the CEPA to better prevent pollution through a comprehensive mechanism that will promote the development of safe alternatives and techniques in a P2 strategy (Green Chemistry and ‘substitution’), and to ensure both action on and the accountability of P2 plans (monitoring and enforcement direction).

**Background**

- The CEPA is described as “An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development”, and that “Canada is committed to implementing pollution prevention as a national goal and as the priority approach to environmental protection”.
- The importance of pollution prevention (P2) in the CEPA is reflected by its prominence throughout the Act, including; in Section 2 as administrative guidance; in Part 3 requirements for information gathering, studies, research, and the basis for the National Pollutant Release Inventory (NPRI); Part 4 that is dedicated to both P2 and commitments to P2 planning; in Parts 5 and 6 the P2 priority in developing proposed regulations or instruments respecting preventive or control actions for Schedule 1 toxic substances, and matters related to New Substances; in Part 7 to allow P2 plans from Canadian sources of international air and water pollution; in Part 9 for regulations relating to federal departments and facilities; and in Part 10 authorizations for a judge to require CEPA 1999 violators to prepare and to implement a P2 plan.

**Considerations**

- To date, only five P2 plans are completed in Canada and one is near completion.
- The State of Massachusetts Toxic Use Reduction Planning approach, based on the material substitution and product reformulation principle, reduced stakeholder use of

toxic chemicals by 40%, by-product waste by 58% and toxic emissions by 80%; within a decade and with an overall cost savings benefit.

- ‘Substitution’ is described as “*the replacement or reduction of hazardous substances in products and processes by less hazardous or non hazardous substances or by achieving an equivalent functionality via technological or organizational measures.*”
- In Canada, P2 plans are non-regulatory tools, although they may contain elements that are covered under regulation. This problem is compounded by a reliance on Harmonization and the CCME Canada Wide Standards (CWS) approach to P2.
- Green Chemistry is a rapidly emerging component of P2 efforts worldwide, with the U.S. in particular dedicating resources since 1991 towards research and capacity that includes The Presidential Green Chemistry Challenge and Awards program.
- Less talk and more P2 action would provide substantive encouragement to Canada’s environmental sector, which comprises some 6,000 companies with annual revenues exceeding \$12 billion; and increase also environmental and human health benefits.
- The *Formative Evaluation of CEPA 1999: Environment Canada* determined that “the full potential of CEPA 1999 has yet to be realized”, and recommends that a set of environmental outcomes, with a monitoring and reporting framework, be developed.

### **Recommendations**

Under CEPA, pollution prevention (P2) provides the basis for protecting the environment and human health. ***Improvements to the P2 foundation found in the CEPA 1999 would better protect environmental and human health, leading to cleaner air, waters and lands.***

- The CEPA P2 approach should include specific focus on and mechanisms for the ‘substitution’ principle, thus encouraging prevention at source vs. end-of-pipe control.
- The CEPA should expand the list and scope of substances requiring P2 plans.
- The CEPA should improve public access to P2 plan contents, goals and objectives.
- The CEPA must establish monitoring, enforcement, and an annual audit direction for P2 plans, and include limits to waivers or time extensions that may be granted.
- The CEPA should eliminate “release limits” for substances requiring P2 plans.

The Commissioner of the Environment and Sustainable Development Report in 1999, Chapters 3 and 4, illustrates profound Government of Canada deficiencies in managing toxic substances, and provides a reference point to determine CEPA 1999 effectiveness.

[http://www.oag-bvg.gc.ca/domino/reports.nsf/html/c9menu\\_e.html](http://www.oag-bvg.gc.ca/domino/reports.nsf/html/c9menu_e.html)

Additional information related to pollution prevention is found at:

*Shattering the Myth of Pollution Progress in Canada: A National Report*

<http://www.pollutionwatch.org/pub/natreport2004.jsp>

*The Substitution Principle: How to Really promote safer chemical use*

<http://www.cleanproduction.org/BioSociety/green.htm>

The U.S. Environmental Protection Agency (EPA) link for Green Chemistry is:

<http://www.epa.gov/greenchemistry/presgcc.html>