



CANADIAN INSTITUTE FOR
ENVIRONMENTAL LAW AND POLICY

L'INSTITUT CANADIEN DU
DROIT ET DE LA POLITIQUE
DE L'ENVIRONNEMENT

130 Spadina Avenue Suite 305
Toronto, Ontario M5V 2L4

Tel: (416)923-3529
Fax: (416)923-5949
www.cielap.org
cielap@cielap.org

October 10, 2008

Greg Mouchian
Senior Policy Advisor
Ministry of the Environment
Integrated Environmental Planning Division
Strategic Policy Branch
135 St. Clair Avenue West, Floor 11
Toronto Ontario M4V 1P5

Fax: (416) 314-2976

Dear Mr. Mouchian,

**Re: Creating Ontario's Toxics Reduction Strategy – a Discussion Paper, EBR
Registry Number 010-4374**

I am writing on behalf of the Canadian Institute for Environmental Law and Policy (CIELAP) to provide comments on the Ministry of the Environment's proposed Toxics Reduction Strategy. CIELAP was founded in 1970, with the mission to provide leadership in the research and development of environmental law and policy that promotes the public interest and sustainability.

The purpose of the proposed legislation is to provide a framework for a strategy to reduce the exposure of the public to toxic chemicals in the air, water, land, and consumer products through reduced emissions of these substances and the introduction of new, less polluting substances. CIELAP sees the proposal for this legislation as an excellent first step toward lessening the exposure of Ontario residents to toxic substances. However, there are additional measures that should be taken to ensure that the public has minimal exposure to toxic substances. CIELAP fully endorses all of the recommendations of the Canadian Environmental Law Association (CELA) in their August 2008 report, *Our Toxic-Free Future: An Action Plan and Model Toxics Use Reduction Law for Ontario*. In particular, CIELAP would like to draw particular attention to the following CELA recommendations:

1. A requirement that safer alternatives be substituted for toxic substances once they are available and that all uses of specific priority toxic substances be eliminated as appropriate.
2. The inclusion of a broad range of sectors as well as small and medium facilities in reporting requirements and in pollution prevention planning and substitution requirements.

Advancing the Environmental Agenda

3. The establishment of an independent university-based research institute to advance toxic use reduction and safe substitution.

In addition, CIELAP recommends:

4. Support for the development of green chemistry.
5. Research on the potential risks of emerging toxic substances, including those found in pharmaceuticals, personal care products, and the products of nanotechnology.

1. A requirement that safer alternatives be substituted for toxic substances once they are available and that all uses of specific priority toxic substances be eliminated as appropriate

Using a system of priority setting, substances may be categorized into different priorities, such as the categories of high priority, medium priority, and low priority used in the *Canadian Environmental Protection Act*. Substances of high priority (those posing the greatest risk to the environment and health) should be targeted for assessment of safer alternatives and eventual replacement. Companies would then have to create a substitution plan for replacing the high priority substance with a safer, less toxic alternative. Similar plans are currently being developed in Europe and the United States.

2. The broad range of sectors as well as small and medium facilities in reporting requirements and in pollution prevention planning and substitution requirements

When toxic chemicals are being released, in particular those that are highly hazardous, it is important to realize that even small quantities may cause harm. In the case of some very toxic chemicals, any release is dangerous (for example, the case of dioxins, lead and mercury).

Release of these substances, whether from a large facility or a small one, may result in toxic exposures that do not significantly change depending of the size of the facility releasing them. Therefore it is important to ensure that small and medium facilities are subject to reporting, pollution prevention planning and substitution requirements.

3. The establishment of an independent university-based research institute to advance toxic use reduction and safe substitution

The establishment of an institution to support a toxic reduction program has been fundamental to the success of the Massachusetts program. Universities often have the knowledge and expertise to aid businesses in determining the toxins used or produced in their facilities, as well as methods for reduction of those toxins or substitution of safer alternatives.

Further, with appropriate funding, universities often have the expertise to engage in research on new methods that would result in a reduction in toxic substance use or emissions, as well as research on safer alternatives to substances currently in use.

4. Support for the development of green chemistry green chemistry

CIELAP supports provincial government engagement in the development of green chemistry to provide safer alternatives to toxic substances. In this regard, we wish to draw the Ministry's attention to the principles developed, and other research undertaken, on green chemistry by Clean Production Action. These can be found at <http://www.cleanproduction.org/Green.php>.

As with all innovative technologies, it is important to exercise precaution to ensure that any potential, unintended impacts on the environment and human health are researched and understood.

5. Research on the potential risks of emerging toxic substances, including those found in pharmaceuticals, personal care products, and the products of nanotechnology

When determining which substances must be included on any list of toxic or priority substances in the future, it is essential that the Ministry be aware of, and conduct research into, the potential risks of emerging toxic substances, including those found in pharmaceuticals, personal care products, and the products of nanotechnology.

CIELAP's recent work has brought attention to some of these potential risks. CIELAP's 2006 report, *There is No "Away" - Pharmaceuticals, Personal Care Products, and Endocrine-disrupting Substances: Emerging Contaminants Detected in Water* – available at <http://cielap.org/pdf/NoAway.pdf> – highlighted research revealing concerns about the effects of emerging contaminants such as antibiotics and endocrine-disrupting compounds on human health and the environment. The report recommended further research to better understand the environmental impacts of pharmaceuticals and related compounds.

In addition, CIELAP's has published two recent discussion papers addressing the need for a policy framework for nanotechnology in Canada – available at <http://www.cielap.org/pdf/NanoFramework.pdf> and <http://www.cielap.org/pdf/2008NanoUpdate.pdf>. CIELAP's reports have observed that, while the environmental and health effects of nanomaterials are largely unknown, in a number of studies nanoscale particles have been found to be substantially more toxic and reactive biologically than larger particles of the same material.

It is therefore essential that the Ministry monitor, and engage in assessments of, the potential risks of emerging toxic substances, such as those found in pharmaceuticals, personal care products, and of nanomaterials. Where appropriate these emerging substances should be included in lists of toxic substances and dealt with under the province's toxics reduction legislation.

In addition to endorsing the CELA's recommendations in its August 2008 report and model legislation, (available at http://cela.ca/uploads/f8e04c51a8e04041f6f7faa046b03a7c/609bToxic_FF_Model_Bill.pdf). CIELAP further supports the recommendations submitted by CELA in its September 2008 submissions to the Ministry of the Environment in response to the EBR registry notice on specific changes to address elements of the government's proposed strategy (available at http://cela.ca/uploads/f8e04c51a8e04041f6f7faa046b03a7c/628_Ont_TRS_Sub.pdf).

In conclusion, CIELAP strongly supports the creation of legislation reducing or eliminating the use of toxic substances in Ontario. CIELAP further submits that by implementing the above recommendations, as well as the full array of recommendations provided in CELA's August 2008 report and September 2008 submissions, Ontario will be in an excellent position to effectively reduce the use and emissions of toxic substances.

Thank you for the opportunity to provide input on this proposal. Please contact me or Maureen Carter-Whitney, CIELAP's Research Director, if you wish to discuss any of these comments further.

Yours sincerely,

A handwritten signature in black ink that reads "Anne Mitchell". The signature is written in a cursive, flowing style.

Anne Mitchell
Executive Director

Cc: Hon. John Gerretsen, Minister of the Environment
Gord Miller, Environmental Commissioner of Ontario