Government of Canada

BACKGROUNDER

Persistent Organic Pollutants

Persistent Organic Pollutants, known as POPs, are toxic substances released into the environment through a variety of human activities. They have adverse effects on the health of ecosystems, wildlife and people. POPs tend to concentrate in colder climates such as Canada's North, as well as in the Great Lakes Basin and St. Lawrence River.

As chemical compounds, POPs are very stable and consequently can last in the environment for years or decades. POPs are also bio-accumulative, meaning they can concentrate in living organisms and accumulate up the food chain through fish, predatory birds, mammals and humans. POPs can enter the human system through traditional foods such as beluga muktuk (skin) and seal blubber. Aboriginal peoples, who rely heavily on such country foods, are particularly affected. Some POPs can be passed on from mother to child across the placenta, or through breast milk.

POPs can travel great distances around the globe through the atmosphere. Touching down on oceans and freshwater bodies, they then evaporate into the atmosphere once again, and travel further to touch down in another spot until they ultimately gather in the colder climates. This is known as the grasshopper effect.

Through the United Nations Environment Programme sponsored international negotiations, 12 POPs are targeted by the draft agreement reached in Johannesburg, South Africa, December 10, 2000. These 12 fall into three broad categories:

- Pesticides - DDT, chlordane, toxaphene, mirex, aldrin, dieldrin, endrin, heptachlor
- Industrial chemicals - PCBs, hexachlorobenzene
- By-products and contaminants - dioxins and furans

The role of Canadian science

Canada is a leader in the science of identifying and assessing past and current sources of POPs, and in predicting global movement through the atmosphere. Canadian scientists have improved the ability to detect POPs in rain and snow and have contributed to tracking the accumulation of these chemicals up the

food chain and into humans. These developments are the basis for policy decisions and action both in Canada and on the international scene.

International Action

Most POPs substances of concern have been banned or severely restricted in Canada for years, but they are still produced, used and stored as waste in a number of other countries. The vast majority of POPs entering Canada's environment, as a result of transport through the atmosphere, come from foreign sources, in particular: the United States, Mexico and Central America, certain eastern European countries, including Russia, and certain southern and southeastern Asian countries. As a result, reductions of international releases of POPs are required to ensure continued environmental progress in Canada.

Negotiations to reduce or eliminate emissions of twelve POPs on a global scale began under the auspices of the United Nations Environment Programme (UNEP) in Montreal in June of 1998. The intent of the UNEP POPs Convention is to bring all countries under the umbrella of a single global agreement. The fifth and final negotiating session took place in Johannesburg, South Africa from December 4-10, 2000.

Canada has worked diligently to create an effective global POPs Convention. In March of 2000, Canada became the first country to make a specific funding commitment, $20 million, for POPs capacity building in developing countries and countries with economies in transition. This funding will help those countries find alternatives to the use of POPs, such as DDT. This commitment was well received by the developing world, and helped the final negotiating session to reach agreement to provide new and additional funding and technical assistance to developing countries and countries in transition to meet their obligations to minimize and eliminate POPs.

The UNEP global initiative complements an earlier protocol on POPs developed by the countries of the United Nations Economic Commission for Europe, which includes Canada, the United States, and countries in Eastern and Western Europe. Canada was the first country to ratify this protocol which requires control of sixteen POPs.

Canada has also developed regional action plans with Mexico and the United States on chlordane, DDT and PCBs under the North American Free Trade Agreement's Commission on Environmental Cooperation. Regional action plans are being considered for lindane as well as for dioxins, furans and hexachlorobenzene.

Canadian consensus

Canada has a strong history of consultation on the management of toxic substances in general, and POPs in particular. The federal government has worked with provincial and territorial governments, Aboriginal, environmental and

health groups, industries such as the Canadian chemical manufacturers and other interested stakeholders to develop our negotiating strategy. Representatives of these governments and organizations were members of Canada's negotiating team.

Domestic Action

The Government of Canada is leading the way in emission reductions on the domestic front. Under the Toxic Substances Management Policy (TSMP), toxic substances that are determined to be persistent, bioaccumulative and resulting primarily from human activity are known as Track 1 substances, and targeted for virtual elimination from the environment. The twelve substances subject to the draft POPs Convention are being managed under the TSMP. For more information on these substances and on TSMP, please visit www.ec.gc.ca/pollut/toxic_e.htm

The key pieces of federal legislation used to implement the objectives outlined in the TSMP include the *Canadian Environmental Protection Act* (CEPA), the *Pest Control Products Act*, the *Fisheries Act* and the *Hazardous Products Act* .

The Canadian Council of Ministers of the Environment (CCME), representing all federal, provincial and territorial governments, has also identified the management and reduction of toxic substances in the environment as a national priority through the CCME Policy for the Management of Toxic Substances. The CCME Policy supports the coordination of government actions on the management of toxic substances, ensuring that the approach is complementary to the TSMP and other activities nation-wide.

The Canada-Wide Standards process is a framework for the CCME to work together in addressing key environmental protection and health risk reduction issues that require common environmental standards across the country. In June of 2000, standards were approved in principle by the Ministers for two priority sectors emitting dioxins and furans: incineration and coastal boilers burning salt laden wood.

In response to scientific studies which showed the presence of contaminants in the Arctic ecosystem, the Northern Contaminants Program (NCP) was established in 1991. The NCP aims at reducing, and where possible, eliminating contaminants in country foods harvested in the North, while providing information that assists decision-making by individuals and communities in their food use.